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**HCC CATALOG**

2022-2023

[hccfl.edu](http://hccfl.edu)

# 2022-2023 CATALOG

## Hillsborough Community College

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Hillsborough Community College reserves the right to make changes in the regulations, offerings, requirements and any provision announced in this catalog at any time as circumstances require.

**President**

Dr. Ken Atwater

**Board of Trustees 2022-2023**

Hillsborough Community College is governed by a Board of Trustees appointed by the Governor.

Mr. Arthur "Chip" Diehl III –Chair  
 Ms. Nancy Watkins – Vice Chair  
 Mr. Gregory Celestan  
 Mr. Brian Lametto  
 Ms. Dalia McCloud– Student  
 Mr. Aakash M. Patel

**Vision**

To promote a thriving community in which students achieve their full potential by providing access to an affordable, innovative, high quality, and lifelong education.

**Mission**

To transform lives by providing open access to an exceptional teaching and learning environment that inspires students to contribute to the local community and global society.

**Values**

As one college, we dedicate ourselves to:

- **Student Success**  
Helping our students achieve their full potential by providing exceptional teaching and support services.
- **Service**  
Supporting the economy and cultural vitality of Tampa Bay through dynamic programming and partnerships.
- **Inclusion**  
Building a diverse environment where all backgrounds, beliefs and experiences are welcomed.
- **Sustainability**  
Embracing our role as a responsible steward of the social, environmental and economic resources that have been entrusted to us.
- **Integrity**  
Operating with transparency, accountability and the highest level of professionalism.
- **Innovation**  
Fostering a culture that welcomes the exploration of new ideas and creative endeavors.

**Equal Access/Equal Opportunity and Educational Equity**

Hillsborough Community College is an equal access/equal opportunity employer that makes employment and education-related decisions without regard to race, color, gender, religion, national origin, age, disability, sexual orientation, marital status or any other bias that is or may be prohibited by law. In addition, the college does not discriminate in employment practices or in the admis-

sion and treatment of students. HCC is committed to equitable treatment of all students and employees and to a learning and working environment free of discrimination and harassment for current as well as future students and employees. The college provides equal educational opportunities to qualified individuals with disabilities and complies with, as well as, supports the Americans with Disabilities Act.

HCC's equity officer ensures compliance with federal and state laws prohibiting discrimination and sexual harassment.

Employees and students who believe they have been a victim of discrimination or sexual harassment should contact:

Annazette Houston, Chief Diversity Officer  
 GWS District Administration Center  
 39 Columbia Drive  
 Tampa, FL 33606  
 Telephone: 253-7043  
 Email: [ahouston14@hccfl.edu](mailto:ahouston14@hccfl.edu)

## Accreditation

Hillsborough Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate and baccalaureate degrees. Questions about the accreditation of Hillsborough Community College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website ([www.sacscoc.org](http://www.sacscoc.org)).



Hillsborough Community College also meets the requirements of the following:

- The Florida Department of Education
- The Joint Review Committee on Education in conjunction with the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association
- Committee on Accreditation of the National Association of Schools of Music (NASM). The Florida Department of Education will accept credit earned at HCC to satisfy various teacher certification requirements. In addition:
  - The State of Florida approves HCC for veteran's training.
  - The State of Florida recognizes HCC as a training center for Emergency Medical Services.
  - The Florida Department of Law Enforcement certifies HCC as a regional training center for law enforcement, corrections, and correctional probation officers. Multiple national organizations accredit or approve HCC's health sciences and career programs:
- The Cardiac Catheterization (Invasive Cardiovascular) by the [Joint Review Committee on Education In Cardiovascular Technology](http://www.jrcert.org) (JRCCVT) 1449 Hill Street Whitinsville, MA 01588, (978) 456-5594.
- The Counseling and Human Services program by the [Council for Standards in Human Service Education](http://www.cshse.org), 3337 Duke Street, Alexandria, VA 22314, <https://www.cshse.org>, (571) 257-3959.
- The Culinary Management and Restaurant Management programs by the Accrediting Commission of the American Culinary Federation's Foundation (ACFF)
- The Dental Hygiene and Dental Assisting programs by the [Commission on Dental Accreditation](http://www.coarc.com/), 211 East Chicago Avenue, Chicago, IL 60611, <https://www.eatrightpro.org/acend/accreditation-standards-fees-and-policies/2017-standards>, (312) 440-4653.
- The Diagnostic Medical Sonography program by the [Commission on Accreditation of Allied Health Education Programs](http://www.caahep.org) (CAAHEP), 25400 US Highway 19 North, Suite 158, Clearwater, FL 33763, [www.caahep.org](http://www.caahep.org) upon the recommendation of the Joint Review Committee for Diagnostic Medical Sonography (JRCDMS).
- The Dietetic Technician AS degree by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 S Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, (312) 899-0040.
- The HCC Emergency Medical Services (EMS) Programs is fully accredited by the Florida Department of Health, Bureau of Emergency Medical Services. In addition, the Paramedic program is accredited by the [Committee on Accreditation of Educational Programs](http://www.caahep.org/), <https://www.caahep.org/>, upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).
- The Medical Laboratory Science program by the [National Accrediting Agency for Clinical Laboratory Sciences](http://www.nacls.org) (NAACLS) 5600 N. River Road, Suite 720 Rosemont IL 60018-5119; (773) 714-8880.
- The Nuclear Medicine Technology program is accredited by the [Joint Review Committee on Educational Programs in Nuclear Medicine Technology](http://www.jrcnmt.org), 2000 130, #203, Edmond, OK 73003, (405) 285-0546, <https://jrcnmt.org>
- The Nursing (Associate Degree) R.N. program by the [Accreditation Commission for Education in Nursing](http://www.acenursing.org/) (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; (404) 975-5000, fax (404) 975-5020, <https://www.acenursing.org/>
- The Opticianry program by the [Commission on Opticianry Accreditation](http://www.coaaaccreditation.com), P.O. Box 592, Canton, New York, Attention: Debra White, Director of Accreditation, (703) 468-0566, [director@COAAccreditation.com](mailto:director@COAAccreditation.com).
- The Radiography program by the [Joint Review Committee on Education in Radiologic Technology](http://www.jrcert.org) (JRCERT), 20 North Wacker Drive, Suite 900, Chicago, IL 60606-2901, (312) 704-5300, <https://www.jrcert.org>, [mail@jrcert.org](mailto:mail@jrcert.org)
- The Radiation Therapy program by the [Joint Review Committee on Education in Radiologic Technology](http://www.jrcert.org) (JRCERT), 20 North Wacker Drive, Suite 2850, Chicago, IL 60606-3182, (312) 704-5304, <https://www.jrcert.org>, [mail@jrcert.org](mailto:mail@jrcert.org)
- The Respiratory Care program is accredited by the [Commission on Accreditation for Respiratory Care](http://www.coarc.com/), 1248 Harwood Road, Bedford, TX 76021-4244, (817) 283-2835, <https://www.coarc.com/>
- The Surgical Technology program by the [Accreditation Review Council on education in Surgical Technology](http://www.jrcert.org)

[and Surgical Assisting](#) (ARC/STSA), 19751 East Main-street, Suite #339 Parker, CO 80138, (303) 694-9262.

- The Veterinary Technology program is accredited by the American Veterinary Medical Association (AVMA) Committee on Veterinary Technician Education and Activities (CVTEA), 1931 North Meacham Road, Suite 100, Schaumburg, IL 60173-4360, (800) 248-2862.

**HILLSBOROUGH COMMUNITY COLLEGE**  
**Student Services Important Calendar Dates for Students**  
**Fall 2022, Spring 2023, Summer 2023**

For program specific dates, please see the program [websites](#).

	FALL 2022	SPRING 2023	SUMMER 2023
<b>FINANCIAL AID PRIORITY DEADLINE</b> <b>NOTE:</b> Due date for submitting all financial aid documents to ensure financial aid awarding by the payment due date.	6/20/22	11/15/22	3/21/23
Financial Aid Refunds Begin** or visit <a href="https://www.hccfl.edu/paying-college/refunds">https://www.hccfl.edu/paying-college/refunds</a>	9/14/22	2/8/23	6/13/23
First Time Loan Borrow Refunds Begin*** or visit <a href="https://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information">https://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information</a>	9/28/22	2/22/23	6/27/23
<b>PRIORITY REGISTRATION PERIOD</b>			
Honor/Athletes/Veteran	4/11/22	10/31/22	3/20/23
Current and former students w/30+ credit hours	4/12/22	11/1/22	3/21/23
Current and former students w/1-29 credit hours	4/18/22	11/7/22	3/27/23
New students/Non-degree/Dual Enrollment/Transient	4/25/22	11/14/22	4/3/23
State Employee and Senior Citizen	First Day of Class	First Day of Class	First Day of Class
<b>PAYMENT DUE DATES *****</b> <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	4/14/23
<b>REGULAR TERM BEGINS/ENDS</b>	8/15/22 – 12/6/22	1/9/23 - 5/8/23	5/15 – 8/8/23
<b>16-Week Classes Begin/End</b>	8/15/22 - 12/6/22	1/9/23 - 5/8/23	N/A
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	N/A
Drop/Add	8/15-19/22	1/9-13/23	N/A
Deadline for Refund	8/19/22	1/13/23	N/A
Financial Aid Refunds Begin or visit <a href="https://www.hccfl.edu/paying-college/refunds">https://www.hccfl.edu/paying-college/refunds</a>	9/14/22	2/8/23	N/A
First Time Loan Borrow Refunds Begin or visit <a href="https://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information">https://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information</a>	9/28/22	2/22/23	N/A
Last Day to Withdraw "W" grade	10/24/22	3/27/23	N/A
<b>12-Week Classes Begin/End</b>	9/13 – 12/6/22	2/6 – 5/8/23	5/15 – 8/8/23
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	4/14/23
Drop/Add	9/13-17/22*	2/6-10/23	5/15-19/23
Deadline for Refund	9/17/22*	2/10/23	5/19/23

Financial Aid Refunds Begin <b>or</b> visit <a href="https://www.hccfl.edu/paying-college/refunds">https://www.hccfl.edu/paying-college/refunds</a>	9/14/22	2/8/23	6/13/23
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="https://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information">https://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information</a>	9/28/22	2/22/23	6/27/23
Last Day to Withdraw with "W" Grade	11/2/22	4/3/23	7/5/23
<b>10-Week Classes</b> Begin/End	9/20/22 - 12/6/22	2/14 - 5/8/23	5/15 - 7/25/23
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	4/14/23
Drop/Add	9/20-24/22*	2/14-18/23*	5/15-19/23
Deadline for Refund	9/24/22*	2/18/23*	5/19/23
Financial Aid Refunds Begin <b>or</b> visit <a href="https://www.hccfl.edu/paying-college/refunds">https://www.hccfl.edu/paying-college/refunds</a>	9/14/22	2/8/23	6/13/23
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="https://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information">https://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information</a>	9/28/22	2/22/23	6/27/23
Last Day to Withdraw with "W" Grade	11/4/22	4/4/23	6/26/23
<b>8-Week Classes</b> Begin/End	8/15/22 - 10/10/22	1/9 - 3/6/23	5/30 - 7/25/23
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	4/14/23
Drop/Add	8/15-19/22	1/9-13/23	5/30-6/3*
Deadline for Refund	8/19/22	1/13/23	6/3/23*
Financial Aid Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/paying-for-college/refunds">www.hccfl.edu/paying-for-college/refunds</a>	9/14/22	2/8/23	6/13/23
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/financial-aid/loan-information">www.hccfl.edu/financial-aid/loan-information</a>	9/28/22	2/22/23	6/27/23
Last Day to Withdraw with "W" Grade	9/19/22	2/13/23	7/3/23
<b>8-Week Classes</b> Begin/End	10/11/22 - 12/6/22	3/7 - 5/8/23	N/A
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	N/A
Drop/Add	10/11-15/22*	3/7-11/23*	N/A
Deadline for Refund	10/15/22*	3/11/23*	N/A
Financial Aid Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/paying-for-college/refunds">www.hccfl.edu/paying-for-college/refunds</a>	9/14/22	2/8/23	N/A
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/financial-aid/loan-information">www.hccfl.edu/financial-aid/loan-information</a>	9/28/22	2/22/23	N/A
Last Day to Withdraw with "W" Grade	11/14/22	4/13/23	N/A
<b>6-Week Classes</b> Begin/End	N/A	N/A	5/15 - 6/26/23
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	N/A	N/A	4/14/23
Drop/Add	N/A	N/A	5/15-19/23
Deadline for Refund	N/A	N/A	5/19/23
Financial Aid Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/paying-for-college/refunds">www.hccfl.edu/paying-for-college/refunds</a>	N/A	N/A	6/13/23
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/financial-aid/loan-information">www.hccfl.edu/financial-aid/loan-information</a>	N/A	N/A	6/27/23
Last Day to Withdraw with "W" Grade	N/A	N/A	6/8/23

<b>6-Week Classes Begin/End</b>	N/A	N/A	6/27 – 8/8/23
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	N/A	N/A	4/14/23
Drop/Add	N/A	N/A	6/27 – 7/1/23*
Deadline for Refund	N/A	N/A	7/1/23*
Financial Aid Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/paying-for-college/refunds">www.hccfl.edu/paying-for-college/refunds</a>	N/A	N/A	6/13/23
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/financial-aid/loan-information">www.hccfl.edu/financial-aid/loan-information</a>	N/A	N/A	6/27/23
Last Day to Withdraw with “W” Grade	N/A	N/A	7/21/23
<b>5-Week Classes Begin/End</b>	8/15/22 – 9/19/22	1/9– 2/13/23	5/15 – 6/19/23
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	4/14/23
Drop/Add	8/15-19/22	1/9-13/23	5/15-19/23
Deadline for Refund	8/19/22	1/13/23	5/19/23
Financial Aid Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/paying-for-college/refunds">www.hccfl.edu/paying-for-college/refunds</a>	9/14/22	2/8/23	6/13/23
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/financial-aid/loan-information">www.hccfl.edu/financial-aid/loan-information</a>	9/28/22	2/22/23	6/27/23
Last Day to Withdraw	9/6/22	1/30/23	6/5/23
<b>5-Week Classes Begin/End</b>	9/20/22 – 10/26/22	2/14 – 3/29/23	6/20 – 7/25/23
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	4/14/23
Drop/Add	9/20 - 9/24/22*	2/14-18/23*	6/20-24/23*
Deadline for Refund	9/24/22*	2/18/23*	6/24/23*
Financial Aid Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/paying-for-college/refunds">www.hccfl.edu/paying-for-college/refunds</a>	9/14/22	2/8/23	6/13/23
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/financial-aid/loan-information">www.hccfl.edu/financial-aid/loan-information</a>	9/28/22	2/22/23	6/27/23
Last Day to Withdraw with “W” Grade	10/11/22	3/10/23	7/10/23
<b>5-Week Classes Begin/End</b>	10/27/22 – 12/6/22	3/30/23 – 5/8/23	N/A
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	12/9/22	N/A
Drop/Add	10/27 -31/22	3/30 – 4/3/23	N/A
Deadline for Refund	10/31/22	4/3/23	N/A
Financial Aid Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/paying-for-college/refunds">www.hccfl.edu/paying-for-college/refunds</a>	9/14/22	2/8/23	N/A
First Time Loan Borrow Refunds Begin <b>or</b> visit <a href="http://www.hccfl.edu/financial-aid/loan-information">www.hccfl.edu/financial-aid/loan-information</a>	9/28/22	2/22/23	N/A
Last Day to Withdraw with “W” Grade	11/21/22	4/24/23	N/A
<b>Winter Intersession Classes Begin/End</b>	12/7-22/22	N/A	N/A
Payment Due Date <b>NOTE:</b> After payment due date, course fees are due at time of registration.	7/15/22	N/A	N/A
Drop/Add	12/7/22	N/A	N/A



Deadline for Refund	12/7/22	N/A	N/A
Last Day to Withdraw "W" grade	12/15/22	N/A	N/A
<b>Deadline to Apply for Commencement Program</b>		<b>2/15/23</b>	
<b>Deadline to Apply for Degree</b>	<b>11/15/22</b>	<b>4/15/23</b>	<b>7/15/23</b>
<b>Last Day to Remove "I" Grade</b>	<b>3/3/23</b>	<b>7/7/23</b>	<b>10/6/23</b>
<b>COLLEGE CLOSED</b>			
	Labor Day 9/3 - 9/5/22	MLK Day 1/16/23	Memorial Day 5/27-29/23
	Veterans Day 11/11/22	President's Day 2/20/23 (YB/MD/ BR/DM/SS/GWSC only) (PC Open for all staff and classes)	Independence Day 7/4/23
	Thanksgiving Break 11/24 - 11/27/22	Strawberry Festival (Plant City only) 3/6/23	
	Winter Break Faculty 12/21/22 - 1/3/23	Mid-term Break 3/13-19/23	
		Spring Day 4/7-9/23	
<b>Non-Class Days</b>	Faculty In-Service 10/18/22	All College Day 3/28/23	
*Must Add/Drop/Withdraw classes online only if the last day to drop/add or deadline to withdraw date falls on a day the college is closed.			
**For additional information visit <a href="http://www.hccfl.edu/paying-for-college/refunds">www.hccfl.edu/paying-for-college/refunds</a>			
***For additional information visit <a href="http://www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information">www.hccfl.edu/paying-college/financial-aid-and-scholarships/student-loan-information</a>			
****After payment due date, course fees are due at the time of registration			

**Note: Commencement is Friday, May 5, 2023**

**Academic Year**

**JULY 2022**

SU	M	T	W	TH	F	SA
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

**AUGUST 2022**

SU	M	T	W	TH	F	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

**SEPTEMBER 2022**

SU	M	T	W	TH	F	SA
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

**OCTOBER 2022**

SU	M	T	W	TH	F	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

**NOVEMBER 2022**

SU	M	T	W	TH	F	SA
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

**DECEMBER 2022**

SU	M	T	W	TH	F	SA
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

**JANUARY 2023**

SU	M	T	W	TH	F	SA
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

**FEBRUARY 2023**

SU	M	T	W	TH	F	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

**MARCH 2023**

SU	M	T	W	TH	F	SA
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

**APRIL 2023**

SU	M	T	W	TH	F	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

**MAY 2023**

SU	M	T	W	TH	F	SA
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

**JUNE 2023**

SU	M	T	W	TH	F	SA
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

**JULY 2023**

SU	M	T	W	TH	F	SA
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

## HCC Locations

### **Dr. Gwendolyn W. Stephenson District Administration Center**

39 Columbia Drive (Davis Islands)  
Tampa, Florida 33606

### **Brandon Campus**

10451 Nancy Watkins Dr.  
Tampa, FL 33619

### **Dale Mabry Campus**

4001 W. Tampa Bay Blvd.  
Tampa, Florida 33614-7820  
Dale Mabry Hwy. & Tampa Bay Blvd.

### **Plant City Campus**

1206 North Park Road  
Plant City, FL 33563

### **South Shore Campus**

551 24th Street North East  
Ruskin FL 33570

### **Ybor City Campus**

2112 N. 15th Street  
Tampa, Florida 33605-3648

### **Ybor City Campus Training Center**

5610 E. Columbus Drive  
Tampa, Florida 33619

### **HCC-MacDill Center**

HCC-MacDill Center  
8102 Condor Street  
MacDill AFB, FL 33621

### **HCC-The Regent**

6437 Watson Road  
Riverview, FL 33578

## Admissions and Registration Steps for Admission

1. Application
2. Financing your education
3. Transcripts / Academic Evaluation
4. Orientation and Registration

For more information and to apply online, go to [www.hccfl.edu](http://www.hccfl.edu).

### International Students (F-1 Student Visa Status)

Students planning to attend the College on an F-1 student visa must submit an International Student Application. For more information and to apply online, students should refer to the section below or go to the Center for International Education (CIE) website at [www.hccfl.edu/international](http://www.hccfl.edu/international).

## Admissions Policies

HCC maintains an “open-door” policy. Students may be admitted if they meet one of the following criteria:

- Graduated with a standard diploma from a secondary school
- Earned a high school equivalency certificate or diploma through any state Department of Education or through the military
- Earned a Certificate of Completion, Eligible for College Placement Test (W8A) (graduating class of 2003 forward)
- Completed a home education program pursuant to the requirements of F.S. 1002.41
- Applied as a transfer student
- Applied as a transient student

The graduation requirements of the catalog year in which a student initially enrolls will be valid for six years. Students who graduate after six years from the time of their initial enrollment will graduate under the requirements of the catalog in effect during the academic year in which they wish to graduate.

Exceptions:

- Programs deleted from the College inventory have a two-year teach-out time period, and students must complete a deleted program within the two-year teach-out period;
- State Framework changes or other changes coming from the state supersede the six-year time period.

In order to maintain the college ideals of scholarship and deportment, the right is reserved to deny admission to applicants for any reason, deemed to be in the best interest of the college.

## Admissions Requirements

### Associate Degree, College Credit Certificate Programs, and Applied Technology Diploma

To be eligible for admission to an associate degree program, college credit certificate, or applied technology diploma (F.S. 1007.263), applicants must have one of the following:

- Associate or higher degree or a standard high school diploma.
- Florida public high school graduates must have met Florida graduation requirements (F.S. 1003.43).
- A high school equivalency diploma, or
- Completion of a home education program pursuant to the requirements of F.S. 1002.41.
- Some PSAV programs are excluded from this requirement.

**NOTE:** If the applicant received a special high school diploma such as the Certificate of Completion (W08) or another special high school diploma and wishes to apply for admission as a regular student, a high school equivalency diploma must be earned by successfully completing the GED exam offered through the Florida Board of Education.

There may be additional requirements for limited access programs. Check the webpage at <https://www.hccfl.edu/academics> or in the associate degrees/technical programs section of this catalog.

**IMPORTANT:** Students who hold education certificates from countries other than the United States should refer to the International Students section in this catalog.

### Distance Learning Students

#### Declaration of Current Location

Every student is required to report a current location address at the time of application. Any change of current address should be reported to the Office of the Registrar immediately after the effective date. To comply with federal and state regulations and reciprocity agreements, currently enrolled students are required to confirm their address every 120 days. The physical location of the student during an educational activity may impact HCC's authorization to offer on-line education to the student.

### SARA for State Authorization Distance Education Compliance

Hillsborough Community College has been approved to participate in the National Council for State Authorization Reciprocity Agreements. NC-SARA which is a voluntary, regional approach to state oversight of postsecondary distance education. NC-SARA allows students located outside of the State of Florida to enroll in HCC's distance learning courses. Reciprocity agreements allow for the open delivery of distance learning courses and other academic pursuits including field experiences such as internships or practicums, within participating states.

**Non-SARA Participating States/Territories:**

The Commonwealth of Mariana Islands (CNMI) is currently not a member of SARA. Due to authorization requirements specific to each state, residents of the CNMI are not allowed to participate in distance learning classes at HCC at this time. To learn more about SARA, please visit <https://www.fldoe.org/sara>.

**Students Located Outside of Florida and Professional Licensure-NC-SARA**

Hillsborough Community College offers various programs and certificates designed to prepare students to sit for licensure in Florida. Licensure requirements in other states may vary. If you are currently pursuing a program or certificate that leads to professional licensure, your program administrator will provide another communication with information on your particular state. If you have not yet declared a program of study, please contact the academic program of interest. You will then be provided with information specific to the program and your state of location.

**Former Student Returning**

Students maintain an active application status by attending HCC at least one term in an academic year. A new HCC application must be competed once a student has broken enrollment or has not attended classes for three consecutive terms. Former students do not have to pay additional application fees. A former student returning to the college and pursuing a degree or certificate must meet the graduation requirements of the catalog in effect at the time the student returns to continuous enrollment at HCC.

**NOTE:** Since the college strives to provide the community with up-to-date, postsecondary educational opportunities, HCC's curriculums are constantly reviewed and are often revised. HCC does not guarantee that the college will continue to offer previously required courses or their prerequisites made unnecessary by changes in programs.

**Transfer Students**

If students have attended other postsecondary institutions, they may be admitted as a transfer student. Students must provide their high school and or previous college transcripts prior to attendance.

**Transient Students**

Students attending other colleges or universities who wish to take courses at HCC in order to fulfill degree requirements at their home institutions may be admitted as transient students. Prior to registration, if students wish to apply as transient, they must submit, at least 30 days prior to the applicable registration deadline, a transient application and documentation from the home institution that:

- Certifies they are in good academic standing.
- Indicates the HCC courses in which students may enroll.

- Affirms that they may use the courses completed and credits earned at HCC to meet the program requirements at the home institution.

Students attending a Florida postsecondary institution must submit this information via the transient application at [www.floridashines.org](http://www.floridashines.org).

Transient students are not required to provide official transcripts of their previous college coursework. However, if the documentation from their home institution does not indicate the HCC courses in which the students may enroll, applicants must provide unofficial transcripts to verify they meet HCC course prerequisites.

**NOTE:** HCC students who wish to attend another college as transient students must have a minimum cumulative grade point average of 2.0. Students attending a Florida postsecondary institution must submit this information via the transient application at [www.floridashines.org](http://www.floridashines.org).

**Dr. Lydia R. Daniel Honors Program**

The Dr. Lydia Daniel Honors Program is designed to provide a rigorous academic program for talented and motivated students. The HCC Honors Program reflects a mutual commitment by students and faculty.

In addition to completing the HCC application, students must submit an Honors Program application, along with supporting documents. Students should visit the Honors website ([www.hccfl.edu/honors](http://www.hccfl.edu/honors)) for the most up to date admissions process information.

Applicants must meet at least one of the following criteria to qualify for the Honors Program:

- A high school GPA of 3.4 (unweighted) or higher and college level in verbal of SAT/ACT or
- An SAT combined score of 1230 (old SAT 1160) or higher in Critical Reading and Math
- An ACT composite score of 26 or higher or
- Top 10% of graduating class with SAT combined score of 1130 (old SAT 1050) or ACT composite score of 25 or higher,
- Completion of 12 credit hours of dual enrollment courses with a 3.8 GPA or
- A cumulative GPA of 3.6 or higher with a minimum of six semester hours of college-level courses (for university or college students).

To graduate from the Honors Program, students must complete a minimum of 24 credit hours of Honors courses (including IDH 2931H) with a minimum overall GPA of 3.0.

For more information about the HCC Honors Program, call 813-253-7974 or 813-253-7986 or email [honors@hccfl.edu](mailto:honors@hccfl.edu).

**International Students**

HCC welcomes students from all over the world. International students include students with non-immigrant visa classifications, such as A, F, H, J, or M.

The Center for International Education (CIE) provides services to all international students attending HCC on F-

1, F-2, and M-1 student visas. Students in other visa categories should contact the office of admissions, registration, and records at the campus they plan to attend for assistance in enrolling at HCC, unless they are planning to change their status to F-1.

The admission procedures specified below are for international students intending to study at HCC on an F-1 student visa. To be considered for admission, an F-1 student must (1) demonstrate competency in the English language; (2) document sufficient funds to cover educational and living costs; (3) provide proof of graduation from a secondary school; and (4) submit an International Student Application by the given application deadline.

Specifically, the student must meet the following admissions criteria:

- Completed International Student Application (initial or transfer student) at [www.hccfl.edu/international](http://www.hccfl.edu/international).
- \$50 international student application fee (non-refundable). This may be paid online, by cashier's/certified bank check or money order (made payable to "Hillsborough Community College"), international wire transfer through [www.flywire.com](http://www.flywire.com), or in person at the Campus Bursar Office.
- Statement of financial responsibility, which documents sufficient funds to cover the cost of tuition, room and board, books, personal expenses, health insurance and travel for at least one academic year (two semesters). Financial documentation (Affidavit of Financial Support and bank letter) must be issued within six months of the term the student plans to enroll. Please visit the CIE website at [www.hccfl.edu/international](http://www.hccfl.edu/international) for more detailed financial documentation requirements.
- Proof of English language or proficiency by meeting one of the following conditions: A score of 61 or higher on the internet-based TOEFL (Test of English as a Foreign Language); an overall band score of 5.5 on the IELTS (International English Language Testing System); a score of 4.0 or higher on the iTEP (International Test of English Proficiency); a score of 90 or higher on the Duolingo English Test; successful completion of Kaplan High-Intermediate Level; successful completion of Level 6 at Tampa Language Center; successful completion of Level 4 at INTO USF or Level 109/Advanced Levels at an English Language Center (ESL); graduation from a U.S. high school with a standard high school diploma after having attended that school for at least two years (not including ESOL classes) and attaining a grade of "C" or higher in English; or an official transcript proving successful completion of ENC 1101 at a regionally accredited post-secondary institution. For additional ways to prove English language proficiency, go to [www.hccfl.edu/international](http://www.hccfl.edu/international).
- Documentation of high school graduation or an equivalent level of education. Students who have completed high school and/or post-secondary coursework outside of the United States should refer to the section below regarding translation and evaluation of foreign credentials.
- Copy of passport photo page.

#### **F-1 students transferring from a U.S. institution must submit additional documentation:**

- Copy of current Form I-20, copy of F-1 visa; transfer clearance form completed by current school's International Student Advisor.

After being admitted as an F-1 international student at HCC, students must submit proof of health insurance, attend a New International Student Orientation and, if applicable, take a placement test before registering for classes.

- **Proof of health insurance.** HCC requires all F-1 visa students to maintain adequate health insurance throughout their studies at the College. Proof of insurance is mandatory for each year of enrollment. Visit [www.insuranceforstudents.com](http://www.insuranceforstudents.com) for more information and to enroll in the HCC-endorsed health insurance plan.

#### **Important information for students who have completed high school and/or postsecondary work outside the United States:**

Transcript(s) in English (original document in the original language and a certified English translation) from high school and from all previously attended colleges and universities must be evaluated by an agency accredited by NACES (National Association of Credential Evaluation Services) at [www.naces.org](http://www.naces.org). A document-by-document evaluation is required for high school transcripts. Certain countries are exempt from the high school transcript evaluation requirement. Refer to the admission requirements on the CIE website at [www.hccfl.edu/international](http://www.hccfl.edu/international) for a list of exempt countries. A course-by-course evaluation is required for all foreign college and university transcripts. Foreign transcripts in original English do not need to be translated. Students can obtain the names and addresses of approved evaluation service providers at [www.naces.org](http://www.naces.org).

**NOTE:** Students are responsible for all costs associated with obtaining translations and evaluations of their transcript(s).

#### **Articulated Acceleration for High School Students**

High school students may earn college credits through articulated acceleration, ([Florida Statute 1007.271](http://www.flsenate.gov/legislation/statutes/html/pubstatute.cfm?id=1007.271)). These acceleration options are dual enrollment and early admissions. Students who satisfy the following requirements may qualify for admission as a student in one of these categories:

#### **Dual Enrolled High School Students** (Florida Statute [1007.271](http://www.flsenate.gov/legislation/statutes/html/pubstatute.cfm?id=1007.271))

Students who enroll as a dual enrolled student can earn college credit by attending college-level courses taught by HCC instructors at an HCC campus before, during, or after high school and during the summer, or at an identified high school during the regular class day. Credits for the courses satisfactorily completed will apply toward both the high school diploma and toward an associate or baccalaureate degree. Dual enrollment courses

will not count as excess hours in the 60-hour requirement of an associate in arts or an associate in science degree.

Application fees and tuition are waived and textbooks are provided for Hillsborough County public school students accepted through the dual enrollment program.

Students attending college classes must be mindful that they will be in a learning environment that explores a diverse and open range of ideas that requires a mature understanding of multiple perspectives. All students, including dual enrolled students, must be able to engage in discussions in a mature and responsible manner.

To be eligible for consideration for admission as a dually enrolled high school student, one must meet the following requirements:

- Be in high school.
- Provide a high school transcript showing an unweighted cumulative grade point average of 3.0.
- Provide written authorization from the high school principal or his/her designee.
- Achieve appropriate placement scores on the SAT, ACT, or the written or computerized version of the PERT (Postsecondary Education Readiness Test).
- Submit a Special Category Student form (Home Education Students).
- Submit an HCC application for admission.
- Meet with an HCC counselor to complete the registration process.

No student will be permitted to participate in dual enrollment classes without having met eligibility and application requirements. Dual enrollment students are allowed one attempt per dual enrollment course.

To remain eligible as a dually enrolled high school student, one must maintain a 3.0 high school GPA and a 2.0 HCC GPA.

### Early Admission

Early admission is a form of dual enrollment. Students are admitted through the early admission option of dual enrollment when they register at HCC as a full-time student (12 or more credits) during their senior year of high school.

Credits for the courses completed satisfactorily at HCC will apply toward the high school diploma and toward an associate or baccalaureate degree. Application fees are waived for students accepted through the early admission program. Tuition is waived for early admissions students for all courses taken through this program while they are still in high school.

**NOTE:** To be eligible for consideration for admission through the early admission program a student must meet the following requirements:

- Be a high school senior.
- Provide written authorization from the high school principal or designee.
- Provide a high school transcript showing an unweighted cumulative grade point average of 3.5.

- Achieve appropriate placement scores on the SAT, ACT, or the written or computerized version of the PERT (Postsecondary Education Readiness Test).
- Submit a Special Category Student Form (Home Education Students).
- Submit an HCC application for admission.
- If approved for early admission, meet with an HCC counselor to complete the registration process.

For additional eligibility requirements visit our website <https://www.hccfl.edu/admissions/dual-enrollment-and-early-admissions>.

**NOTE:** Home-educated students may take advantage of the dual enrollment and early admissions acceleration options and must be in compliance with applicable Florida laws. In addition to the above requirements, a parent of home-educated students must submit a sworn Affidavit for Compliance in accordance with F.S. 1002.41. Home-educated students should submit an academic plan that identifies the courses they have taken through home Education and the courses they intend to take at HCC as a dually enrolled student.

**NOTE:** Private schools must meet requirements for F.S. 1002.42 and 1003.43 and have an articulation agreement on file with HCC in order for their students to participate in dual enrollment and early admissions programs.

**NOTE:** Public and private high school students interested in participating in the dual enrollment program must contact their high school counselor for information and to determine eligibility. Students enrolled in home education programs may contact the HCC dual enrollment office for information.

**NOTE:** When calculating Satisfactory Academic Progress for Title IV, Student Financial Assistance and adherence to any state maximum-hour requirement(s) for an AA or AS degree, HCC will not include any courses students complete while they are dually enrolled.

### Concurrent Admissions Program (ConAP)

HCC participates in the United States Army Concurrent Admissions Program (ConAP). As a ConAP member, HCC will admit eligible new soldiers upon their enlistment. Moreover, the college guarantees full admission during the soldier's entire enlistment and for two years after the applicant completes active military service.

Soldiers enlisting in the Army Reserve are also eligible for consideration under the ConAP program. However, the admission guarantee for qualified Reservists is deferred until the Reservists complete their initial period of active duty training (about six months).

## Admissions Procedures

### Application

**NOTE:** HCC reserves the right to guide the enrollment of its students on the basis of placement tests, pre-registration interviews and past academic performance.

Applications for admission can be obtained and submitted on-line at <https://www.hccfl.edu/admissions/apply-online>. Applicants must attend within one year of admission. Otherwise, a new application and possibly transcripts will be required.

**International Students (F-1 Student Visa Status)**

Students planning to attend the College on an F-1 student visa must submit an International Student Application. For more information and to apply online, students should refer to the section above or go to the Center for International Education (CIE) website at <https://www.hccfl.edu/international>.

**Transcripts**

Students whose transcripts do not arrive prior to the start of the semester, will not be eligible for financial assistance or veterans, or other benefits.

Applicants are responsible for ensuring that official copies of high school transcripts, GED scores, or copy of degree earned and official transcript(s) from all postsecondary schools attended are submitted to the college.

Applicants who completed a home education program must provide a signed affidavit affirming completion.

**NOTE:** A final, official high school transcript is one that includes the official graduation date.

**NOTE:** For transcripts outside the United States refer to the International Students section of this catalog (Important information for students who have completed high school and or postsecondary work outside the United States).

**Fraudulent Credentials**

If a student knowingly:

- Makes a false statement,
  - Conceals material information,
  - Provides inaccurate information on any document submitted to the college,
  - Alters a transcript or other academic credential
- He or she may be denied admission, suspended or dismissed.

**Enrollment Restrictions**

Under normal conditions, all students who meet the college’s entrance requirements will be admitted. At times, state enrollment and funding limitations may preclude enrollment of out-of-state and international students. At those times, students will be admitted according to the following priorities:

- Returning students/Veterans
- New students who are Florida residents
  - a. First-time-in-college students
  - b. Transfer students
- New out-of-state students
  - a. First-time-in-college students
  - b. Transfer students
- International students

**NOTE: HCC participates in priority registration. Depending on your status, HCC will determine your registration dates. These dates are advertised on the Web and the college calendar.**

The college reserves the right to deny admission to applicants whose past actions were disruptive to or interfered with the orderly processes, functions, or programs of another postsecondary institution. In addition, HCC may deny admission to students who are ineligible, for any reason, to resume their studies at another postsecondary institution.

**Orientation and Testing**

Students attending HCC for the first time must attend orientation and, if applicable, take a college placement test. Once the student has been admitted, the appropriate testing, admissions and records, or advising office will provide information about orientation and testing. The college will provide reasonable accommodations to disabled students taking the placement test.

Degree-seeking students must provide assessment/ placement test scores from PERT, ACT, or SAT prior to registering for classes. Test scores may be no more than two years old. If the scores are older than two years or if the student has not previously taken one of the aforementioned placement tests, the student may take the test at the appropriate HCC testing office.

**The following test scores are required for college-level courses:**

	ACT Enhanced	PERT	SAT I
Reading	19	106	24 (Verbal)
English	17	103	n/a
Mathematics	19	114	24

**NOTE:** The minimum required scores on the PERT (Postsecondary Educational Readiness Test) are subject to change. Students testing into college preparatory course work are subject to certain regulations regarding registration.

Students who have earned a four year degree or completed college-level English and mathematics courses will be exempt from the testing requirement. The college strongly recommends that students who have completed postsecondary work at other institutions bring unofficial transcripts or grade slips with them for advising and registration purposes.

**Student**

For the purpose of assessing registration fees in public community colleges and universities, students are classified as Florida residents or non-Florida residents per Florida Statute [1009.21](#) and State Board of Education Rule [6A-10.044](#).

According to Florida statute, in order to pay in-state tuition, students must complete a declaration of residency (included in the application for admission) prior to the drop and add period of the term for which Florida Residency is sought. To qualify for in-state tuition, a student



must be a U.S. citizen, permanent resident alien or legal alien.

For other eligible non-citizen categories or for a list of exemptions from the residency process, refer to the **[Guidelines on Florida Residency for Tuition Purposes](#)**. Exempt students are required to provide documentation of exemption eligibility.

For current and detailed information about Florida residency for tuition purposes visit [Florida Shines](http://www.floridashines.org/) at <https://www.floridashines.org/>, click on Apply, click on Residency Guidelines or visit HCC's student services website at <https://www.hccfl.edu/admissions/proof-residency-tuition-purposes>. When applying through the [Florida Shines](http://www.floridashines.org/) website, documentation to support an application for in-state tuition on the basis of legal residence for statutory exemption is required.

### Residency Criteria

The HCC application includes a Florida residency affidavit which must be completed. An applicant who does not complete the residency affidavit or provide incomplete documentation on or in conjunction with the residency affidavit will not be classified as a resident for tuition purposes, and will be required to supply information prior to the end of drop and add.

***If a student indicates his or her status as non-resident, they are not required to prove such status or to submit supporting documentation. The student is automatically considered out-of-state for tuition purposes.***

### Independent Student

An applicant who provides evidence of any one of the following criteria shall be classified as an independent student for the determination of residency for tuition purposes.

- The student is 24 years of age or older by the first day of classes of the term for which residency status is sought as a Florida institution; or
- The student is married; or
- The student has children who receive more than one-half of their support from the student; or
- The student has other dependents who live with and receive more than one-half of their support from the student; or
- Both of the student's parents are deceased or the student is or was until age 18 one of the following: a ward/dependent of the court or in foster care; or
- The student is determined an unaccompanied homeless by a school district homeless liaison, emergency shelter or transitional housing program; or
- The student is working on a master's or doctoral degree during the term for which residency status is sought at a Florida institution; or
- The student is employed and provides a tax transcript of income equal or exceeding 50% of annual cost of attendance stipulated by financial aid.

### Dependent Student

All students who do not meet the definition of an independent student shall be classified as dependent students for the determination of residency for tuition purposes.

Dependent students will be granted in-state residency for tuition purposes if the residency affidavit on the college application indicates that **all of the following criteria are met**. Further documentation will not be required for these students.

- The student is eligible to be claimed by his or her parent or legal guardian as a dependent under the federal income tax code;
- The student's nation of citizenship is the United States;
- The student is under 24 years of age;
- The student's mother, father or legal guardian is the person claiming Florida residence;
- The student's mother, father or legal guardian claiming Florida residence has a Florida permanent legal address; and
- The student's mother, father or legal guardian claiming Florida residence provides written or electronic verification that he or she has been issued two or more of the acceptable documents in the following Acceptable Documents for in-State Tuition Application section. Such documentation must demonstrate that the applicant has maintained legal residence in Florida for at least 12 consecutive months prior to his or her initial enrollment in a university or college.

### Acceptable Documents for In-State Tuition Application

Applicants will have to submit documentation that they or a parent or legal guardian have been a Florida resident for at least 12 months prior to the first day of the classes for which they are enrolling. At least two of the following documents must be submitted with dates that evidence the 12-month qualifying period.

Documentation submitted after the drop/add period will not become effective until the following semester. There must be no information contradicting the applicant's claim of residency.

**At least one of the two documents submitted must be from the following:**

- Florida driver's license;
- State of Florida identification card;
- Florida voter registration card;
- Florida vehicle registration;
- Proof of a permanent home in Florida occupied as the primary residence of the student or by the student's parent if the student is a dependent child;
- Proof of homestead exemption in Florida;
- Transcripts from a Florida high school for multiple years if Florida high school diploma or GED was earned within last 12 months;
- Proof of permanent full-time employment in Florida (one or more jobs for at least 30- hours per week for a 12-month period).

The following documents may be used in conjunction with one of the documents listed above:

- A declaration of domicile in Florida;

- A Florida professional or occupational license;
- Florida incorporation;
- Documents evidencing family ties in Florida;
- Proof of membership in Florida-based charitable or professional organizations;
- Any other documentation that supports the student's request for resident status including but not limited to utility bills and proof of 12 consecutive months of payments, a lease agreement and proof of 12 consecutive months of payments, or official state, federal or court documents evidencing legal ties to Florida.

#### Unacceptable Documents for Proof of Residency

- Hunting/fishing license
- Library card
- Shopping club/rental card
- Birth certificate
- Passport

Active duty military personnel assigned for duty within the state, as well as their sponsored dependents (spouse/children) are automatically Florida residents for tuition purposes. For verification, they need to submit a copy of their assignment orders and have their military ID card showing their status visually verified.

#### Information Resources

DHSMV Database-Access to the Division of Highway Safety and Motor Vehicle Database can be used exclusively for the purpose of verifying driver's license, vehicle registration for students and their parents.

#### Requirements for Reclassification of Florida Residency for Tuition Purposes

Except as otherwise stated, a student who is classified as a non-resident for tuition purposes may become eligible for reclassification as a Florida resident for tuition purposes by presenting a minimum of three (3) documents, one of which must be from the first group of documents and two (2) documents can be from either of the two groups previously identified under "Acceptable Documents for In-State Tuition Application" that demonstrate the establishment of permanent legal residence in Florida other than for the sole purpose of pursuing a postsecondary education.

In addition, documentation must demonstrate that the independent student has, or the dependent student's parents have, maintained legal residency in Florida for at least twelve (12) consecutive months prior to the student's request for reclassification.

Students interested in pursuing residency reclassification or to appeal an initial residency classification decision may do so by contacting the dean of student services at any HCC campus. Requests for reclassification will be reviewed by HCC's Residency Appeals Committee.

#### Transfer Credit

HCC will accept transfer credit from other institutions if they are accredited by one of the following regional accreditation agencies:

HLC: Higher Learning Commission

MSA: Middle States Commission on Higher Education  
NECHE: New England Commission of Higher Education  
NWCCU: Northwest Commission on Colleges and Universities

SACS: Southern Association of Colleges and Schools, Commission on Colleges

WASC-JR: Western Association of Schools and Colleges, Accrediting Commission for Community and Junior Colleges

WASC-SR: Western Association of Schools and Colleges, Senior Colleges and University Commission

HCC conducts transcript evaluations for all lower division credit course work even when a prior degree has been earned. Applicants must provide official transcripts from each postsecondary institution they have attended.

For courses taken at accredited institutions, transfer credit will be awarded for courses in which a grade of "D" or better has been earned. Transfer courses taken at an institution where a plus/minus system was used will be rounded up or down to the corresponding whole letter grade.

Since certain HCC curricula and programs require that students earn a grade of "C" or better in specific courses, transfer students should meet with advisors to determine if courses taken elsewhere meet degree requirements. All students must complete 25 percent of their degree at HCC.

HCC reviews the content and objectives of courses completed at non-regionally accredited institutions on a course-by-course basis. Applicants must provide HCC with all required documents before the college will consider awarding transfer credit.

The transcript office notifies students when evaluations are complete.

## Registration

Registration is held each semester. Students register through MyHCC Self-Service which is covered in detail during orientation. Students may seek assistance from any campus admissions, registration, and records office. The dates for registration are published in the college operational calendar in the front of this publication, and on the HCC Website.

**HCC may withhold registration privileges from students who have unpaid fees; who have overdue student loans; who have overdue library materials, audiovisual equipment, or physical education equipment; who have failed to provide transcripts or other documents required for admission purposes; and who have been disqualified for academic or disciplinary reasons.**

#### Audit Registration

Students who have been admitted to HCC but who wish to take courses without receiving credit may register as audit students. The following guidelines apply:

- Students must make the choice to audit when they register.
- Students may change from audit to credit or credit to audit only during the drop/add period.
- Fees for audit and credit courses are the same.

- Students should confirm their audit status with the instructor on the first class date.
- Students auditing classes are not eligible to receive veterans' benefits or financial aid for those classes.
- Students receiving senior citizen fee waivers are registered as auditing students.
- Students auditing classes must meet all course prerequisites including appropriate test scores.
- College preparatory courses follow state-mandated guidelines and requirements. Auditing these classes might not be an available option. (For details, see the college preparatory section in this catalog.)
- Attendance is optional.

### Course Load and Enrollment Status

All courses carry a specified number of credits. The unit of credit is the semester hour. Courses requiring laboratory work or skill practice may meet for more minutes each week than the credits they confer.

The college strongly recommends that students enrolled for 12 or more credits limit their employment to a maximum of 20 hours per week.

Enrollment status can change during a term. For example, if a student initially registers as full-time and withdraws from a course during a term, the student's course load might fall below 12 credits. The student's enrollment status will be reduced to less than full-time from that point until the end of the term.

Registering as a full-time, three-quarter, or half-time student can affect eligibility for financial aid, veterans' benefits, scholarships, insurance benefits and international student visas. Students receiving financial aid should speak with a financial aid specialist about the enrollment requirements for receiving aid.

If students request in writing to the office of admissions, registration, and records, they will provide verification of enrollment to employers, insurance agencies, and others. For courses that do not coincide with the Board of Trustees' approved beginning and ending dates of a fall, spring or summer term, course load and enrollment verifications will be based upon the term in which the course begins, regardless of the actual meeting dates.

### Enrollment status is based on the following course-load criteria:

**Full-time:** taking 12 or more credit hours during a term.

**Three-quarter-time:** taking nine to 11 credit hours during the term.

**Half-time:** taking six to eight credit hours during the term.

**Less than half-time:** taking five or less credit hours during the term.

### Change of Academic Program

Students who are changing their program code and who are receiving Financial Aid, Veteran's Benefits and/or are enrolled as an International student, must check with the necessary departments to be sure their benefits will not be affected before making the change. If the

current semester has begun, the change of program will be effective the following semester.

### Course Adjustment Drop and Add

Schedule adjustments must be made during the drop/add period. Students should check their class schedule on MyHCC Self-Service for the drop/add and withdrawal dates for each course.

**IMPORTANT:** If students stop attending a course but fail to officially drop or withdraw from the course, they will not be relieved of the financial obligation, and they might receive a failing grade.

### Withdrawal Policy

Students may officially withdraw from one or all courses prior to the course withdrawal deadline date for each. The withdrawal deadlines are on the student schedule in MyHCC Self-Service. Students who officially withdraw are issued a "W" grade. A student may withdraw using My HCC Self-Service or visit a campus AR&R department to complete this process.

**IMPORTANT:** Withdrawing from a course or courses may affect enrollment status and eligibility for athletics, financial assistance, veteran's benefits, international student visas, and benefits received from other federal agencies.

If students do not officially withdraw by the deadline, the instructor must assign a letter grade other than "W" to the grade report. If students have serious extenuating circumstances, they may petition the appropriate campus dean of student services for a late withdrawal. Students who officially withdraw from a class may not continue attending that class.

Instructors report non-attendance to the office of admissions, registration, and records, and an administrative withdrawal is initiated. The college will notify students whom the faculty has recommended, and the students will be given an opportunity to appeal the instructor-initiated withdrawal.

Students may attempt a course only three times (including original grades, repeat grades, and withdrawals). Through the academic appeals process, students with significant extenuating circumstances may petition for a fourth attempt. To begin the academic appeals process, students must contact the appropriate campus dean of student services. All grades from the third and any subsequent attempts will be included in the grade point average calculation.

Students must pay the full cost of instruction (equal to out-of-state fees) for credit classes they attempt a third time and any additional times. If students have serious extenuating circumstances, they may petition the appropriate campus dean of student services for a one-time exemption from paying the full cost of instruction.

## Microcredentials and Acceleration Mechanisms

### Advanced Placement (AP)\*

HCC awards college credit for scores of three, four, or five on the College Board Advanced Placement Program examinations given at high schools each May. Once credit is awarded, the student may not repeat the course for a letter grade. No credit will be awarded to students who have previously been awarded CLEP or regular college credit for the same course.

\* **NOTE:** To see course equivalencies and related information, refer to [www.floridashines.org](http://www.floridashines.org).

### Certified Administrative Professional

HCC will award 12 semester hours of credit to students who have passed the Certified Administrative Professional exam and earned the designation "CAP." (For further information, contact the appropriate campus academic dean or the Director of Technical Programs.)

### College Level Examination Program (CLEP)\*

CLEP provides an opportunity for those who have achieved a college level of education outside the classroom to demonstrate their achievement through testing and to earn college credit.

The advising and counseling staff can assist a student in determining which CLEP examination to attempt. CLEP tests are given at the Dale Mabry and Brandon Test Centers on the published dates. Applications are available at any HCC campus.

Students may earn up to 45 semester hours. The grade of satisfactory "S" is awarded for CLEP credit earned. Once credit is awarded, the student may not repeat the course for a letter grade.

**NOTE:** A student who is currently enrolled in a course is not eligible for CLEP credit for that course. A student who has completed a course and the grade earned was a "D" or an "F" is eligible for CLEP credit in a subsequent term. A student who has withdrawn or dropped a course is eligible for CLEP credit the following semester.

\* **NOTE:** To see course equivalencies and related information, refer to [www.floridashines.org](http://www.floridashines.org).

### Credit-by-Examination

Students may earn credit in approved courses by earning "C" or better on the appropriate HCC examination. Exams are given on dates published in the college's annual calendar. Credit awarded by examination becomes part of the student's permanent record, and the grade earned on the examination is used in calculating students' cumulative GPAs.

A student must obtain approval from the appropriate campus academic dean to take credit-by-examination. In addition to a \$20 non-refundable examination fee, a student who passes the examination will be required to pay a per-credit hour processing fee. A student may obtain the

required forms and additional information through the appropriate campus academic dean. A student may not retake a credit-by-exam if a grade of "C" or better has been earned on a previous exam.

A student is not eligible to attempt credit-by-examination for any courses in which the student is currently enrolled. A student who has completed a course and earned a grade of "D" or "F" is eligible to repeat it through credit-by-examination. Grades for courses repeated through credit-by-examination are recorded in the same way as courses repeated through class attendance.

**NOTE:** Credit earned through credit-by-examination may not be counted toward the requirement that students complete at least 25% of the credit hours applicable to a degree in residence at the college.

### DANTES\*

A student may earn credits for State designated courses by successfully completing Defense Activity for Non-Traditional Education Support (DANTES) examinations. Once credit is awarded, the student may not repeat the course for a letter grade. No credit is awarded if credit for the same course has already been earned.

\* **NOTE:** To see course equivalencies and related information, refer to [www.floridashines.org](http://www.floridashines.org).

### Digital Badge Completion

Students will earn the Fundamentals of Written Communication digital badge upon completion of ENC 1101, or a course for which ENC 1101 is a prerequisite, with a grade of "C" or better.

### Dual Enrollment\*

HCC awards credits for in-state dual enrollment courses (courses which are granted simultaneous credit for both high school and college). These credits are awarded as general education, elective, and/or discipline credits. Dual enrollment courses taken out of state will be evaluated on a course-by-course basis. Dual enrollment courses will not count as excess hours in the 60-hour requirement of an AA or AS degree.

\* **NOTE:** To see course equivalencies and related information, refer to [www.floridashines.org](http://www.floridashines.org).

### Experiential Credit

The college provides for the award of experiential credit in a limited number of technical programs: Nursing LPN-RN transition option; Emergency Medical Services; Optical Management Technology; Radiography-ARRT option; and Industrial Management Technology. Students in these programs who provide documentation verifying licensure and/or certification within the appropriate field of study will be awarded credit. Students must obtain approval from the appropriate campus academic dean and pay a processing fee for each request.

HCC awards experiential credit in the following programs to students who meet the appropriate criteria:

- **Industrial Management Program**

**Enrollees**

Students who have successfully completed one of the following Tampa Electric Company training programs and have successfully completed a minimum of 15 credit hours of industrial management courses will be awarded articulated credits toward an associate in science degree in Industrial Management based on the chosen technical path field.

- Controls Analyst
- Lineman Training
- Field Engineering
- Substation Electrician
- Plant Electrician

Students should obtain the experiential credit form from the appropriate campus academic dean, who will assist in completing and processing the form.

• **Nursing Program Enrollees**

Applicants for the LPN-RN transition program must have the following: a valid, current Florida LPN license; current CPR basic life support for health care providers; an official transcript from their LPN program; and 6 months full-time employment as an LPN during the past three years. Graduates from Erwin Vocational Technical Center are eligible for articulation credit in lieu of experiential credit.

• **Paramedic - Emergency Medical Services Associate Degree Program Enrollees**

Students who have completed paramedic training at a CoAEMSPs approved paramedic training center and who possess a valid Florida paramedic certification will be awarded up to 42 credits in EMS prefixed courses required for the College Credit Certificate in the Paramedic EMS program. These credits are also applicable to the Emergency Medical Services Associate Degree Program. No credit will be awarded for advanced cardiac life support (EMS 2551C).

**International Baccalaureate\***

The International Baccalaureate (IB) Diploma Program is a rigorous two-year, pre-university liberal arts program of study for highly motivated, academically oriented secondary students. The IB Diploma is awarded only to students who meet curricular, service, and thesis requirements and score at the prescribed level on internationally standardized subject examinations. Through the IB program, students may be awarded up to 30 credit hours. No grades will be assigned to credits awarded through the IB Program. Students will not receive credit for IB courses that duplicate credit awarded for courses attended at HCC or credit that was awarded through other accelerated programs, (i.e., AP, CLEP, credit by examination, etc.). To determine eligibility for IB credit, the student should contact any HCC campus advisor or counselor.

\*NOTE: To see course equivalencies and related information, refer to [www.floridashines.org](http://www.floridashines.org).

**Military Credit**

HCC awards credit for non-credit military training and education as specified and validated by the American Council on Education (ACE).

Active duty military students MUST submit their Joint Service or Community College of the Air Force (CCAF) transcript for evaluation and assignment of all possible military credits towards their degree. This is not optional, but required by the Department of Defense Memorandum of Understanding for college tuition assistance. If not done within their first semester (60 days per the MOU), they will not be eligible for further tuition assistance until evaluated and reflected in the student degree plan.

**Financial Information**

**TUITION AND FEES ARE SUBJECT TO CHANGE WITH THE APPROVAL OF THE BOARD OF TRUSTEES AND THE STATE LEGISLATURE.**

Except for students who have HCC fee waivers, all students must pay the applicable fees.

**All fees must be paid by the payment deadline or you risk being de-registered from all of your classes.** All fees are due and payable in full by the payment due date as published in the student calendar of important dates. If you stop attending a course but fail to officially drop or withdraw from the course, you will not be relieved of the financial obligation. Payments can be made through MyHCC Self-Service, HCC’s online Web registration system, using a credit card. Payments may also be paid at any of the campus bursar’s office using cash, cashier check, money order, and personal check.

**Credit Courses:**

**Florida Residents (In-State)\***

Tuition.....	\$80.45
Access Fee.....	.54
Capital Improvement Fee.....	8.23
Student Activity Fee.....	7.23
Student Financial Aid Fee** .....	4.03
Technology .....	3.91
Total per Credit Hour .....	\$104.39

**Non-Florida Residents (Out-of-State)**

Tuition.....	\$80.45
Out-of-State Fees .....	241.54
Access Fee.....	.54
Capital Improvement Fee.....	18.12
Student Activity Fee.....	7.23
Student Financial Aid Fee** .....	16.10
Technology Fee.....	15.63
Total per Credit Hour .....	\$379.61

\* See residency requirements in this section.

\*\* Allocated to the HCC Scholarship Fund as approved by the state legislature.

**Non-Credit Courses (Postsecondary Adult Vocational):  
Per Credit Hour Equivalent  
Florida Residents (In-State)**

Tuition.....	\$71.51
Access Fee.....	.43
Capital Improvement Fee.....	3.57
Technology Fee.....	3.47
Total per Credit Hour.....	\$78.98

**Non-Florida Resident (Out-of-State)**

Tuition.....	\$71.51
Out-of-State Fees.....	214.55
Access Fee.....	.43
Capital Improvement Fee.....	14.30
Technology Fee.....	13.89
Total per Credit Hour.....	\$314.68

**Baccalaureate Programs:  
Florida Residents (In-State)**

Tuition.....	\$91.79
Access Fee.....	.54
Student Financial Aid Fee.....	4.59
Student Activity Fee.....	9.18
Capital Improvement Fee.....	15.39
Technology Fee.....	4.59
Total per Credit Hour.....	\$126.08

**Non-Florida Resident (Out-of-State)**

Tuition.....	\$91.79
Out-of-State Fees.....	292.04
Access Fee.....	.54
Student Financial Aid Fee.....	19.19
Student Activity Fee.....	9.18
Capital Improvement Fee.....	44.84
Technology Fee.....	19.19
Total per Credit Hour.....	\$476.77

**Adult General Education, Vocational Certification /  
Diploma and Vocational Preparatory  
Florida Residents (In-State)**

Tuition.....	\$30.90
Access Fee.....	\$.43
Total per Credit Hour Equivalent.....	\$31.33

**Non-Florida Resident (Out-of-State)**

Tuition.....	\$30.90
Access Fee.....	\$.43
Total per Credit Hour Equivalent.....	\$31.33

**Special Fees and Charges**

Academic Systems Courses.....	\$ 60.00
Bookstore Processing Fee for Non-return of Rental Books.....	\$20.00
Child Care:	
Child Care Registration.....	\$100.00 per family
Full Day per Child for Students, Faculty and Staff.....	\$175.00 per week
Half Day per Child.....	\$80.00 per week
Late Pick-up Fee.....	\$1.00 per minute
Late Payment Fee.....	\$25.00 per day
VPK Before/After Care.....	\$75.00 per week
College Placement Test Retake Fee.....	\$10.00 per section
Credit-by-Examination Fee.....	\$20.00
Credits Earned by Examination.....	\$20.00 per cr. hr.

Distance Learning Fee.....	\$14.00 per cr. hr.
E-911 Application Fee.....	\$100.00
Experiential Credit Processing Fee.....	\$15.00
Hawk Card Replacement Fee.....	\$20.00
HCC OneCard Replacement Fee.....	\$23.00
Health Science Application Fee.....	\$53.00
Application for Additional Health Science area.....	\$10.00
International Student Application Fee.....	\$50.00
Laboratory Fee.....	various
Late Registration Fee*** (non-refundable).....	\$25.00
Law Enforcement Applicant Processing Fee.....	\$170.00

Pay for Print:

Single Sided	
Black and White.....	\$.10
Color.....	\$.35
Double Sided	
Black and White.....	\$.08/side
Color.....	\$.30/side

Returned Check Fee.....	\$30.00
Service Learning Course Fee.....	\$23.00
Test Proctoring Fee (non-HCC students).....	\$50.00
Veterinary Technician Application Fee.....	\$30.00

**Special Fees**

For some courses special fees may be required to cover supplies, materials, equipment, and instruction of facilities.

**Recreation and Leisure Courses**

Fees for all recreation and leisure courses are set to recover 100 percent of the cost of the courses.

Fees may be adjusted when other community agencies contribute resources or when courses require special facilities, equipment and/or personnel.

**Notification of Social Security Number (SSN) Collection and Usage**

The HCC financial services office uses student social security numbers to report information to the Internal Revenue Service (IRS) via 1098T, the Florida Prepaid Tuition Plan, third parties paying for tuition and fees on behalf of the student, reporting information to collection agencies, and reports as required by the state and federal government.

**Online Payments Using Visa, MasterCard, American Express, Discover or Electronic Check**

Students may pay fees online. Log onto [www.hccfl.edu](http://www.hccfl.edu) and click on MyHCC Self-Service.

**Payments by Check**

Personal checks will be accepted for the payment of tuition and fees. Checks must be payable to Hillsborough Community College and include the maker of the check's full name, address, home and work phone, maker's driver's license number and state, and student ID number.

If a check is returned for any reason by the college's bank:

- the student will be charged a \$30.00 fee,
- the student's file will be placed in a hold status, and
- any returned check(s) will be referred to the State At -

torney's office or the college's collection agency as appropriate. The student is responsible for any collection fees associated with returned checks.

- No additional personal checks will be accepted.

### Tuition Installment Plan (TIPS)

To help meet a student's educational expenses, Hillsborough Community College provides the tuition payment plan, (TIPS). TIPS allows students to pay tuition monthly. The earlier you enroll in the TIPS plan, the more payment options are available. You may enroll in the TIPS plan or review the available payment plans online at <https://www.hccfl.edu/paying-college/payment-information/tuition-installment-plan-tips>. If there is a balance as a result of the student cancelling a TIPS contract, the balance will be the student's responsibility. In addition, access to current term courses may be restricted. TIPS is administered for HCC by FACTS/Netnet Business Solutions., Lincoln, NE.

### Payment by Third Party Sponsors

If employers or other agencies are paying for student tuition and fees through direct payment to the college, students should present original letters of authorization signed by third party sponsors to the bursar office. HCC will not accept letters of authorization that are contingent upon students achieving a passing grade, completing courses or letters that state the employees will be reimbursed for their fees. Any fees that remain unpaid by third party sponsors will be the students' responsibility.

### Unpaid Financial Obligations

If students have an outstanding financial obligation to HCC, they may not be permitted to access current term courses or register for future classes until the balance is paid in full. In addition, transcripts and grades may be withheld until the obligation is satisfied. Payment may be made online through Hawknet or at any of the bursar offices until the account is referred to a collection agency.

If the unpaid obligation is referred to a collection agency, the student will be responsible for paying the amounts owed to the college and any collection fees assessed by the collection agency.

If an account has been referred to a collection agency, the student should contact the collection agency to make payment.

### Title IV Federal Repayment Guidelines

Students receiving Federal Title IV financial aid such as Pell, FSEOG, Direct and Plus loans, must attend classes through at least 60 percent of the term. Failure to do so may require pay back of all or a portion of the Title IV funds received to the federal government and or HCC. This will result in delinquent student accounts and will be processed accordingly.

### Refund of Fees

Tuition and fees are refunded to students who drop courses during the registration drop/add periods. The

drop/add periods are located on HCC's website published under "My HCC" and listed in the operational calendar for the current year.

Students enrolled in courses that do not follow a regular term calendar will find this information on their schedules listed on MyHCC Self-Service.

Outstanding financial obligations to HCC are deducted from refunds.

### No refunds will be made to students who:

- are administratively withdrawn for disciplinary reasons.
- are administratively withdrawn (WN) for non-attendance.
- withdraw from class after the designated drop/add refund deadline.

### Student Refunds through BankMobile

Hillsborough Community College has partnered with BankMobile for managing refunds from HCC. Each registered student will be mailed an enrollment packet from BankMobile to the current mailing address on file at the college.

**Students must verify the accuracy of their address either online through MyHCC Self-Service or at the admissions, records and registration window.**

Students are responsible for the replacement cost of the card if the re-issuance is due to an incorrect address. **The cost to replace a BankMobile card is \$10.00.**

Although, a refund may not be currently expected, a refund may be issued in the future.

For faster access to funds, a student may choose to have refunds deposited directly into a personal bank account. To choose the method of how to receive a refund go to [www.bankmobilevibe.com](http://www.bankmobilevibe.com).

### Waivers

There are various waivers for tuition and fees as listed in [Florida Statute 1009.26](#).

### Senior Citizens Waiver

Florida residents age 60 and over are eligible to enroll in courses at HCC on the first day of class on a space-available basis. There are no registration, application or related fees. If the same course is taken more than twice, the student is responsible for paying an out-of-state fee as part of registration. No academic credit is given for these courses. If academic credit is sought, all applicable fees must be paid.

In order to register as a senior citizen using a fee waiver, an applicant must:

- Complete an HCC application for admission and present this form to the campus admissions office.
- Complete a registration form and present this form to the campus admissions office.
- Provide proof of age
- Complete a fee waiver form and present it to the campus bursar's office.

For further information regarding tuition waivers for senior citizens, visit the HCC website at [www.hccfl.edu](http://www.hccfl.edu) and for residency information log onto [www.floridashines.org](http://www.floridashines.org).

## Exemptions

There are various exemptions for tuition and fees as listed in [Florida Statute 1009.25](#).

## Financial Aid

Financial aid is any scholarship, grant, loan, or employment (or a combination thereof) designed to help students meet their college expenses. The amount and types of financial aid given are based on state, federal and HCC guidelines. To be eligible for financial aid, students must be degree seeking, meet enrollment requirements, submit official high school transcripts showing graduation dates or official GED test scores, and make satisfactory academic progress.

Grants and scholarships are considered gifts and need not be repaid. Low-interest loans are usually repaid over an extended period of time after the student leaves college. Employment refers to an hourly wage paid to the student for work performed.

### Federal Financial Aid Requirements

To apply for Federal Financial Aid, students must meet the following qualifications:

- Be U.S. citizens or national, or resident of the Marshall Islands, the Federated States of Micronesia, Palau, or be eligible non-citizens.
- Have a valid high school diploma, GED, or associate degree or higher.
- Be accepted for enrollment at HCC as a degree-seeking undergraduate student or a financial aid approved PSAV, or College Credit Certificate program.
- No previous four-year degrees (except for direct federal loans).
- Not have defaulted on any federal educational loan or owe a repayment to any Federal loan or grant program.
- Meet selective service requirements.
- Be enrolled for the minimum credit hours required based upon the type of financial aid awarded.
- Be in good academic standing and making satisfactory academic progress.

## Federal Financial Aid Programs

### Federal Pell Grant

This grant, based upon financial need, does not have to be repaid. A valid Student Aid Report (SAR) must be electronically received by HCC. Appropriate income tax returns and other financial aid forms must be submitted if the SAR indicates that the student's application has been selected for verification. Awards are based on enrollment on the published Pell census date.

### Federal Supplemental Educational Opportunity Grant (FSEOG)

This grant, based upon exceptional financial need, does not have to be repaid. Amounts vary from \$200 to \$1,500 per year. A minimum of six credit hours is required.

## Federal Work-Study (FWS)

Students are paid an hourly wage for working on campus for up to 20 hours per week at the approved Board of Trustees Salary Schedule. Students can use their earnings to help defray college costs. Students must complete an I-9 Form when employed. A minimum of six Title IV credit hours is required. Refer to the "Earn While You Learn" section for more details.

### Federal Work-Study (Community Service Assignments)

Students may have opportunities to work on and off campus at community service designated locations. The assignments vary and are contingent upon the skill level of students. Refer to the "Earn While You Learn" section for more details.

### Direct Federal Subsidized Loan

This is a long-term repayable loan. First-year students can borrow up to \$3,500 per year. Second-year students can borrow up to \$4,500 per year. Second year students include those students who have completed 31 credit hours toward their degree, not including college preparatory credits. HCC will determine the amount for which a student is eligible. Payment of this loan does not begin until the student has been out of school for six months or drops below half-time status. A minimum enrollment of six credit hours per term is required. Visit [www.studentloans.gov](http://www.studentloans.gov) for the most up-to-date interest rates.

### Direct Federal Unsubsidized Loan

This is a long-term loan that can be awarded in addition to or as a substitute for the Direct Federal Subsidized Loan. Interest begins accruing immediately; however, payments may be deferred while the student is in school. Dependent students who qualify may borrow up to \$2,000. Independent students may borrow up to \$9,500 (if fewer than 31 credit hours earned) or \$10,500 (if over 31 credit hours earned). A minimum enrollment of six credit hours per term is required. For detailed information regarding loan amounts, students should contact a campus financial aid office. Visit [www.studentloans.gov](http://www.studentloans.gov) for the most up-to-date interest rates.

### Direct Federal PLUS Loan

This program enables parents who do not have an adverse credit history to borrow funds to pay for the education of dependent children. Interest accrues while the student attends school. Repayment begins immediately. Parents can borrow up to the cost of education, minus any other financial aid. The student must enroll in a minimum of six credit hours per term.

Parents may process a Direct Federal PLUS loan application online at [www.studentloans.gov](http://www.studentloans.gov). Click on the "Borrower Log-In" link and follow the instructions as noted. Visit [www.studentloans.gov](http://www.studentloans.gov) for the most up-to-date interest rates.

### Loan Entrance and Exit Counseling

For students borrowing an entrance counseling session must be completed. Students are required to complete the



loan exit counseling session during the last semester of enrollment or at the point of no longer attending at least a half-time (six credit hours) basis.

### **Earn While You Learn**

#### **Federal College Work Study**

The Federal Work Study Program (FWS) offers excellent opportunities for students with financial need to gain meaningful work experience while earning money to help pay their educational expenses. FWS award recipients are granted a designated amount of money, based upon their individual need and the availability of funds. It is from that allocation that the student's wages are paid bi-weekly at the hourly rate set by the college's Board of Trustees. Students work up to 20 hours per week, around their class schedules, until they have earned the full amount of their FWS Grant awards.

Most job assignments are on-campus opportunities. Students may also work off-campus at "community service" locations. Community service jobs are assigned with federal, state, or local public agencies or organizations. These jobs are ones which provide literacy activities in a family literacy project for families with preschool age children services to students with disabilities, solutions to environmental concerns, and numerous other services designed to improve the quality of life for community residents, particularly low-income individuals. Community service positions afford FWS workers a bonus of the joy that comes from helping others.

## **State Financial Aid Requirements**

### **To apply for state financial aid, students must:**

- Be a permanent resident of Florida for at least one year.
- Be accepted at HCC as a degree-seeking undergraduate student. Students working towards a certificate are eligible for state financial aid.
- Florida Vocational Gold Seal Scholarship recipients are only eligible for Technical Degree Educational programs (AS, CCC, and PSAV).
- Be enrolled for a minimum of six credit hours each semester.
- Be U.S. citizen, national, or eligible non-citizen.
- Have a valid high school diploma or GED.
- Not have defaulted on any educational loans or owe a repayment on any educational loans or grants.
- Meet selective service requirements.
- Be in good academic standing and make satisfactory progress.

### **State Financial Aid Programs**

Listed below are some of the state financial aid programs. For information on these and other state financial aid programs, students should call any campus financial aid office.

#### **Florida Bright Futures Scholarship**

Florida Bright Futures is a state funded, merit based scholarship program. Eligible students must enroll for a

minimum of 6 credit hours per term. The scholarship program does not pay for preparatory classes.

#### **Bright Futures Scholarship pays at a fixed per credit hour rate.**

- Florida Academic scholarship pays 100% of tuition and approved fees and can be used in the Fall, Spring, and Summer semesters. This scholarship also provides a \$300.00 book and educational expenses stipend in the Fall and Spring semesters.
- Florida Medallion scholarship pays 75% of tuition and approved fees.
- Florida Vocational Gold Seal pays \$48.00 per credit hour.
- Amounts are subject to change during the 2019 State of Florida legislative session. Students will be notified of any revisions.
- Complete the Free Application for Federal Student Aid if you need additional funds to help pay for college. Visit [www.fafsa.ed.gov](http://www.fafsa.ed.gov).

#### **Bright Futures Scholarship will not pay for lab fees.**

- The student or other sources of financial aid will have to pay for lab fees assessed for classes enrolled.

#### **Bright Futures Scholarship will not pay for Dropped or Withdrawn classes.**

- Students will be required to repay the cost for any course dropped or withdrawn.
- Repayment for the cost of dropped or withdrawn courses is required to renew a Bright Futures award for a subsequent academic year.
- Students with documented extenuating circumstances may seek an appeal to this payment requirement.
- Contact your campus Financial Aid Office to inquire about:
  - The amount you will owe if you drop or withdraw from a class; and
  - If you qualify for an appeal waiving your obligation to repay for funds owed.

#### **Renewal criteria revised.**

- Bright Futures students are required to complete the number of credit hours paid by the scholarship program. For example:
  - if you received a Bright Futures scholarship for the semester based upon full-time enrollment, you are required to complete at least 12 credit hours.
  - if your term enrollment is 9 - 11 credit hours, you must complete the minimum of 9 credit hours.
  - if your term enrollment is 6 - 8 credit hours, you must complete the minimum of 6 credit hours.

#### **Restoration options extended.**

- Students who do not meet the minimum renewal credit hours may regain their eligibility by completing the outstanding credit hours in the Summer Term 2020.

- Review the State of Florida's website for additional information, [www.floridastudentfinancialaid.org/SSFAD/bf](http://www.floridastudentfinancialaid.org/SSFAD/bf)

### Florida Student Assistance Grant

Florida Student Assistant Grant (FSAG) is a grant of between \$200 and \$1,600 annually which is not repayable. Application priority deadline is June 19, 2019. To be eligible to receive a grant, students must enroll for a minimum of six credit hours per term and have processed a FAFSA application.

### First Generation Matching Grant Program

This is a need-based program that provides financial aid funds to Florida undergraduate students who demonstrate financial need and whose parents have not earned a baccalaureate degree.

To receive this grant, the student must complete the annual FAFSA application and indicate the last level of education completed by the parent as high school.

Currently, distribution of this award is at \$500 per term. The financial aid office implemented the following priorities for selecting students for this award:

- Students who have a cumulative grade point average of 3.0 or better.
- Students who are enrolled in college full-time.
- Students who have met all other state requirements for financial aid.

Students should contact their campus financial aid office for additional information.

## Scholarships

### HCC Scholarships

HCC offers scholarships in a number of areas. Students may apply directly to the HCC department that has the responsibility for awarding the scholarship. Specific criteria are available in the campus offices of financial aid, or you can contact the HCC Foundation at [foundation@hccfl.edu](mailto:foundation@hccfl.edu) for more information regarding the following scholarships:

- Art Scholarships
- Athletic Scholarships
- Board of Trustees Scholarships
- Child Care Award (off-campus)
- Child Care Award (on-campus)
- Dance Scholarships
- Drama Scholarships
- HCC Need Scholarships
- HOPE Scholarships
- Music Scholarships
- Presidential Scholarships
- Presidential Honors Scholarships
- Publications Scholarships
- Student Support Services Need & Incentive Scholarships
- Student with Disabilities Scholarships

### Procedures for Applying

Each HCC scholarship recipient must have processed a Free Application for Federal Student Aid (FAFSA) application. This requirement is set forth by the State of Florida Department of Education. Although students may qualify for a merit-based scholarship, the completion of the FAFSA is required. Students may complete the FAFSA application by following the instructions noted under the "How to Apply" section.

Each scholarship program has its own application procedures. The campus financial aid offices have information regarding each of HCC's scholarship programs.

### Student Eligibility Standards

- Demonstrate financial need or exhibit specific skills
- Enroll for the appropriate number of credit hours
- Maintain satisfactory academic progress

### Criteria for Selection

Selection criteria for each scholarship program is established by HCC. Most HCC scholarships are awarded according to need or skills.

Criteria for Determining the Amount of the Award

- Based on appropriate recommendation or
- Student's unmet need

### HCC Foundation Scholarships

Information regarding HCC Foundation Scholarships is available in any campus office of counseling and advising or online at <https://hccfoundation.com/donate/scholarships/hccfoundationscholarships/>

### Other Scholarships

Information regarding other scholarships is available in the campus financial aid, counseling and advising offices and on the HCC website.

Students are urged to apply for external scholarships. A variety of local and national clubs and organizations offer financial aid to students meeting certain criteria.

## How to Apply for Financial Assistance

Students seeking financial assistance must apply each academic year. To apply for the Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Work-Study, Florida Student Assistance Grant and certain college scholarships, the following forms must be completed:

### Free Application for Federal Student Aid (FAFSA):

Students are strongly advised to complete the FAFSA application electronically by accessing the Department of Education's financial aid website: [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Students completing the FAFSA online may receive their results (Student Aid Report) within two weeks. If students do not have a computer at home, they may use computers at the following public locations: Hillsborough County Public Libraries, HCC Computer Labs, and HCC Libraries. Students must list HCC's school code, 007870, on

their FAFSA application in order for the college to receive their results and Student Aid Report electronically.

### Student Aid Report (SAR):

An official SAR is sent to all students who submit the Free Application for Federal Student Aid. This SAR contains information about a student's Pell Grant eligibility as determined by the U.S. Department of Education. The college's financial aid office reads the results of the application electronically as long as the student listed HCC's school code on the FAFSA application.

### Application Deadline Dates:

**Free Application for Federal Student Aid (FAFSA):** The student should complete the FAFSA application as soon as possible after October 1 and no later than six weeks prior to the beginning of the term. The last day to complete the FAFSA application for the 2019-2020 academic year is June 30, 2020.

**Because financial aid is not always available at the beginning of a semester for those who do not process by the suggested deadline date, students should budget their money to cover the cost of tuition, fees and books until they receive their funds. As an alternative, students may consider TIPS (Tuition Installment Plans) at <https://www.hccfl.edu/paying-college/payment-information/tuition-installment-plan-tips>.**

Students are required to complete a 2019-2020 FAFSA application and submit all requested financial aid forms by June 19, 2019 in order to have their financial aid awards processed by the first day of fall 2019 classes.

Students applying for financial aid or submitting financial aid forms after June 19, 2019 will be expected to pay for their classes or sign-up for TIPS (Tuition Installment Plans). Students that are eligible for financial aid may receive a refund for the payment of tuition and fees once financial aid is awarded.

## How Financial Aid is Awarded and Distributed

**Students declared eligible for financial aid will receive an award notice from HCC's financial aid office.**

Students awarded Federal Pell Grants, Federal Supplemental Educational Opportunity Grants, Direct Federal subsidized or unsubsidized loans, Florida Bright Futures Scholarships or institutional scholarships may use them to pay for the cost of tuition and fees at registration. Prior to the last day of drop/add of the semester, Pell Grant and subsidized and unsubsidized Direct Federal loan recipients who qualify can go directly to any HCC campus bookstore and purchase books and supplies against their award balance. Maximum book charges are contingent upon the available balance and credit hours enrolled.

After deductions for tuition, fees and book charges are made by HCC, the remaining balance in the students' account is forwarded to them via their BankMobile selection or other delivery method as selected by the student. For students awarded on or before the semesters drop/add

date, the remaining balance will be available 14 days from the date the college credits their account. For students awarded after the semesters drop/add date, the remaining balance will be available 14 days from the date the college credits their account.

Students who are employed under the Federal Work-Study Program will receive bi-weekly checks from the office in which they work.

### What are the required credit hours?

Financial Aid Programs	Minimum Hours Required
Federal Pell Grant	Contingent upon eligibility (most students: 1-12)
FSEOG	6
Direct Federal Loans	6
Federal Work Study	6
First Generation Matching Grant	6-12
Florida Bright Futures	6
Florida Student Assistance Grant (FSAG)	6
HCC's Presidential Scholarship	12
HCC's Board of Trustees Scholarship	12
HCC's Incentive & Need Based Scholarship	6
HCC's Athletic Scholarships	12

### How Will Students Know the Awarding Amount(s)?

Once the financial aid office receives the results of the student's FAFSA and other documents requested, the student will receive an official Award Notification via Hawkmail. This document will direct them to MyHCC Self-Service where they may check the specific type and the amount of financial aid the student is qualified to receive.

Student may check their financial aid award status on MyHCC Self-Service.

### Attention:

**Withdrawing or dropping courses may have an impact on financial aid.** Students may have to repay a percentage of financial aid, and their continued eligibility may be impacted. Prior to dropping or withdrawing from any class, students should consult a campus financial aid office to discuss how this may affect their financial aid.

### Return of Title IV Funds

If students receive Title IV, Federal Student Financial Assistance, and if they withdraw, drop out, take a leave of absence, or are expelled prior to completing 60 percent of a semester for which they have been charged, the college must recalculate their eligibility for Title IV funds.

The formula for recalculating eligibility utilizes the following concepts:

- Percent of aid earned, and
- Percent of aid unearned

- The percent earned equals the days the student completed divided by the total days in the enrollment period.
- The percent unearned equals 100 percent minus the percent earned.
- The amount of Title IV Aid earned equals the percent earned (A) multiplied by the student's Title IV Aid.
- The amount of Title IV Aid unearned equals the percent unearned (B) multiplied by the student's Title IV Aid.
- The amount the college must return equals the total institutional charges multiplied by the percent unearned (B).

If the college returns the Title IV funds that were credited to a student's account, it will create a charge on the student account for which the student is responsible.

**IMPORTANT:** The student might also be responsible for paying back to the federal programs any unearned portion of the Title IV Aid that was disbursed directly to the student.

F. The amount the student must return to the federal programs equals the amount of Title IV Aid unearned - the amount returned by the college.

**NOTE:** Students are obligated to pay the college for any funds returned to the U.S. Department of Education. Students receiving financial aid are advised not to withdraw from any classes prior to discussing how this may impact financial aid. The financial aid office will notify the student with the amount owed.

### Standards of Academic Progress

In order to remain eligible to receive Title IV, Student Financial Assistance (SFA) program funds while attending HCC, students must make steady progress toward their program of study. This requirement is known as the Satisfactory Academic Progress (SAP) requirement.

The SAP policy has three standards that a student must meet in order to remain eligible to receive Title IV, SFA - a qualitative standard, a quantitative standard, and a time standard. At HCC the qualitative standard requires recipients to maintain a cumulative GPA of 2.0. The quantitative standard requires recipients to satisfactorily complete 67 percent of all credit hours attempted. The time standard requires recipients to complete their academic program by the time they have attempted 150 percent of the credits required in their programs. Standards of progress evaluations occur at the end each semester.

Students who fail to meet the SAP standards will be placed on warning for one term. If after one term students are not making satisfactory progress, they will lose their eligibility for financial assistance. Students over 150% of attempted credit hours are immediately placed on suspension. In order to regain eligibility, students must meet the satisfactory progress standards or appeal for reinstatement.

### Financial aid pays tuition and fees for the following:

**All associate in arts and associate in science programs.**

#### Advanced Technical Certificates

- Computed Tomography Advanced Imaging
- Magnetic Resonance Imaging
- Medical Laboratory Science

#### College Credit Certificates

- Accounting Technology Management
- Accounting Technology Operations
- Accounting Technology Specialist
- Advanced Network Infrastructure
- Business Intelligence Professional
- Business Management
- Clinical Research Coordinator
- CNC Machinist
- Computer Programming
- Digital Forensics
- Drafting
- Early Childhood Administration
- Early Childhood Preschool
- Entrepreneurship and Innovation
- Fire Officer Supervisor
- Graphic Design Production
- Healthcare Support Specialist
- Help Desk Support Tech
- Health Navigator Specialist
- Human Resource Management
- Internet Services Technology Web Development Specialist - Designer
- Internet Services Technology Web Development Specialist - Developer
- Laser and Photonics Technician
- Logistics and Transportation Specialist
- Mechatronics
- Medical Information Coder
- Medical Office Management
- Motion Picture Production Management
- Network Enterprise Administration
- Network System Technology: Infrastructure
- Network System Technology: Support Tech
- Network System Technology: Server Admin
- NST: Security/Cybersecurity Cisco
- NST: Security/Cybersecurity Windows
- Office Management
- Robotics and Simulation

#### Postsecondary Adult Vocational (PSAV)

- Alternative Fuels Technology
- Automotive CNG/LPG Technology
- Auto/Collision Repair and Refinishing

- Automotive Service Technology
- Dental Assisting
- Law Enforcement
- Educator Preparation Institute (EPI)
- Diesel Engine Service Technology
- Heavy Equipment Service Technician
- Welding Technology

### Financial Aid Offices

Each HCC campus has a financial aid office. Information about financial aid can be obtained from any of them. Normal working hours are as follows: Monday and Tuesday from 8:00 a.m. until 7:00 p.m. and Wednesday, Thursday and Friday from 8:00 a.m. until 4:30pm.

### Veterans' Benefits

Eligible veterans pursuing an associate in arts or an associate in science degree may use veterans' educational benefits at HCC. Eligible chapters are Chapter 30 (Montgomery Bill), Chapter 31 (Vocational), Chapter 32 (Post-Vietnam Veterans Education Assistance Program), Chapter 35 (Dependents Educational Assistance), and Chapter 1606 (Selected Reserve), and Chapter 1607 (REAP), and Chapter 33 (Post 911 GI Bill).

To be eligible, veterans must have any discharge other than a dishonorable and must have served on active duty for a specified period. For additional information, veterans should contact any campus admissions, registration and records office or call the department of veterans' affairs (DVA) toll free number 1-888-442-4551.

### Deferments

In accordance with Florida law and college policy, any eligible veteran or dependent wishing to pursue an approved program within the meaning of VA Chapter 30, 31, 32, 35, 1606, or 1607 will have, upon request, 60 days after the first day of classes to pay registration fees. One deferment per academic year is standard.

### General Requirements

Veteran students must declare their final educational goals and choose their desired educational program when they apply for benefits. Benefits are paid only for courses applying to the students chosen program.

Veteran students must comply with attendance requirements established by instructors. If veterans withdraw, their last day of attendance will be reported to the Department of Veterans Affairs (DVA). HCC will notify the DVA of any changes in a student's enrollment status.

Benefits are not paid for courses when non-punitive grades such as "W," "N," or "U" are received. An "I" grade (incomplete grade) that has not been removed by the end of the semester after the grade was given (excluding Summer Session) will be reported as a non-punitive grade.

### Attendance

#### Criminal Justice Institute, Firefighter Academy and Autobody Collision Programs

Veteran students participating in the college's Law Enforcement and Correctional Officer programs and Automotive Collision programs are encouraged to attend all class sessions. Veterans whose absences total more than 10 percent of the scheduled class sessions will be required to participate in counseling to determine if it is possible to make up the required coursework within a reasonable time frame. If it is determined the work cannot be completed within the time constraints, the students' benefits will be terminated.

#### Paramedic and Emergency Medical Technician Programs

The Veterans Administration will be notified of unsatisfactory attendance at the point of the term that a veteran student accumulates three unexcused absences. The veteran student may not be recertified for veteran's benefits until 30 days of satisfactory attendance (no more than two unexcused absences in the 30-day period) have elapsed.

### Repeating Courses

Veterans' benefits are not paid for courses in which students have already earned satisfactory grades. A "D" is considered satisfactory except when program requirements mandate a "C."

### Transcripts

Veteran students must have transcripts sent to HCC from each college previously attended. Students will not be certified for a second term until all official transcripts are received.

### Benefit Levels for Standard Terms

Standard sessions are 16 weeks. Credit hours for benefits are:

Full-time	12 hours
Three-quarter-time	9 hours
Half-time	6 hours

Students registered for less than half-time are eligible only for the direct cost of their courses. Students should see a VA Specialist about benefits for non-standard sessions.

### Unsatisfactory Progress

Students receiving veterans' benefits must maintain a cumulative GPA of 2.0. Veterans (except Paramedic and Emergency Medical Technician Programs) with less than a 2.0 GPA will be given two probationary terms to bring their GPA up to a 2.0. Veteran students who fail to raise their GPA to 2.0 after two probationary terms will be reported to the DVA and benefits will be terminated. For those students in the Paramedic and Emergency Medical Technician Programs who fail to raise their GPA to 2.0 after one probationary term will be reported to the DVA and benefits will be terminated. These veterans will also be referred to an HCC counselor for reassessment of their academic goals.

Veterans who violate the student code of conduct will be reported to the DVA and their benefits will be terminated.

Veteran students who wish to seek reinstatement of benefits at HCC may see a counselor for assistance in petitioning the Department of Veterans' Affairs. However, the DVA makes all decisions on reinstating benefits.

## Academic Policies

### Academic Year

HCC's academic year consists of the Fall, Spring, and Summer terms. Faculty may make course materials available to students prior to the first official day of class. However, student participation, attendance, and work submitted before the first official day of class will not be counted for purposes of financial aid, grades, or material participation in the class until the first official day of class.

### Attendance

Students are required to attend class regularly and punctually. If students miss classes, regardless of the cause, their opportunities for learning and academic success will be adversely affected.

The syllabus for each course contains the instructor's attendance and grading requirements. It is the student's responsibility to read the syllabus, comply with the instructor's policies, and arrange to make up work missed because of absence or lateness.

If students stop attending class, they will be assigned a letter grade unless they complete and submit a withdrawal form by the deadline published in the current catalog and credit course schedule. Students receiving financial aid are advised to discuss the impact of not attending classes on their financial aid or veterans benefits.

### Online Attendance

Federal regulations require online students not only to attend but also to participate in coursework each term to be eligible for federal financial aid. Hillsborough Community College verifies student attendance in accordance with this regulation.

In a distance education context, logging into an online class is not sufficient, by itself, to demonstrate attendance by the student. Students must establish a record of participation in **academically related** activities in order to comply with this requirement.

Academically related activities include, but are not limited to

- physically attending a class where there is an opportunity for direct interaction between the instructor and students;
- submitting an academic assignment;
- taking an exam, an interactive tutorial or computer-assisted instruction;
- attending and participating in an online study group that is assigned by the instructor;

- participating in an online discussion about academic matters or
- initiating contact with a faculty member to ask a question about the academic subject studied in the course.

Academically related activities **DO NOT** include activities where a student may be present, but not academically engaged, such as logging into an online class without active participation or participating in academic counseling or advisement session unrelated to a specific course assignment.

Students who have not established attendance/participation in online courses may have their federal financial aid eligibility adjusted.

## Credit Hour Policy Statement

Florida Statutes (F.S.) 1001.64 *Florida College System institution boards of trustees; powers and duties*, F.S. 1004.68 *Florida College System institution; degrees and certificates*, and F.S. 1007.25 *General education courses; common prerequisites; other degree requirements* provide the basis for establishing credit hour policy at Hillsborough Community College. For purposes of calculation and monitoring, credit hours will be measured in Carnegie units.

- A. Traditional lecture discussion courses must be scheduled to meet Carnegie units.

# of Credit Hours (50 Minute Carnegie Unit)	# of Clock Hours	# of Minutes in Classroom
1	15	750
2	30	1,500
3	45	2,250
4	60	3,000

- B. Courses offered in alternative formats such as hybrid, online, independent study, cooperative education, internship and practicum must be identified as such in the schedule of classes, must meet the same student learning outcomes as the traditional format course, and must be scheduled to provide adequate time to achieve student learning outcomes.

## Grading Policies

### Grade Reports

Students may ask instructors about their academic progress throughout a term. Final grades may be viewed via MyHCC Self-Service at the end of each term (see calendar). Only the final grade appears on the student's transcript which is posted on the [www.floridashines.org](http://www.floridashines.org) website. Grades are not mailed. HCC may withhold the grades of students for the following reasons:

- Unpaid fees
- Overdue loans
- Overdue library materials
- Overdue audiovisual or physical education materials and equipment
- Disciplinary action

Students whose grades are being withheld may appeal to the appropriate campus dean of student services or his/her designee.

Students called to active military duty will be permitted to drop their course(s) or make arrangements with faculty to complete academic requirements and receive final grades. To qualify, students must provide a copy of their active duty orders. Contact the campus advising or counseling office.

**Grading**

Students will be awarded letter grades for courses taken at HCC. Course grades will be awarded and recorded following the final class meeting (or its equivalent in the case of online course).

**Grades used in computing GPA:**

Grade	Interpretation	Point Value
A	Excellent	4
B	Good	3
C	Average	2
D	Poor	1
F	Failure	0

**Grades not used in computing GPA:**

AU	Audit
AW	Administrative withdrawal
I	Incomplete
N	No credit
NR	Grade not reported by instructor
S	Satisfactory
U	Unsatisfactory
W	Withdrawal
WN	Withdrawal, non-attendance

**Grade Point Average**

Each letter grade has a point value. To determine grade point average (GPA), one multiplies the number of points for each grade earned times the number of the course’s credits, adds the total grade-point values for all courses, then divides by the total number of credit hours.

A “B” (three points) in a three-credit course is worth nine points. An “A” (four points) in the same three-credit course is worth 12 points.

**GPA Example:**

ENC 1101	3 cr.	Grade A (4 points)	=	12
CGS 1000	3 cr.	Grade C (2 points)	=	6
HUM 2210	3 cr.	Grade F (0 points)	=	0

PEM 1954	1 cr.	Grade B (3 points)	=	3
Total	10 cr.	Total Points	=	21

Divide 21 points by 10 credits = 2.100 grade point average. A degree GPA of 2.0 or higher is required to receive an associate degree from HCC.

The following letter grades have special requirements:

**Audit** – awarded to students who enroll in credit classes for enrichment but not for credit. A change in enrollment from credit to audit or audit to credit can be made only during the designated schedule adjustment (drop/add) period.

**Administrative Withdrawal** – awarded by the college for reasons such as non-attendance, non-payment of fees, non-compliance with rules, or extenuating circumstances.

**Incomplete** – awarded only when requested by the students, approved by instructors and confirmed by the appropriate academic deans. “I” grades are given only when unforeseen circumstances prevent students from completing course requirements during the regular term. An “I” grade contract is agreed upon and signed by the student, instructor, and academic dean.

Contracts include a list of the course requirements students must complete and the deadline by which the work must be completed. To be eligible for an “I,” students must have satisfactorily completed at least two-thirds of the course requirements. “I” grades must be removed before the end of the eighth week of the following term (excluding the summer term) or they will be changed to “F” grades on the students’ permanent records. Students should refer to the student services Important Calendar for Students.

**No Credit (N)** – “N” grades are awarded only in college preparatory courses. The “N” grade is awarded to students who attend class through the end of the term but who do not reach the level of skill or knowledge required to move on to the next course. Students who receive an “N” grade do not earn credits, and “N” grades are not included in calculating students’ cumulative GPAs. Students who receive “N” grades must repeat the courses during the following term.

**Grade Not Reported** – when instructors omit a grade, the notation “NR” is placed on transcripts.

**Withdrawal** – awarded to students who officially withdraw by the deadline.

**WN** – grades are initiated by faculty and awarded to students who have never attended or participated in a course. The WN grade must be submitted by the faculty following the first class meeting after the end of add/drop for a campus-based section or an online section with class meetings. For online classes without class meetings, the WN deadline is 4 days after the end of add/drop. The WN must be entered no later than the 5th day after add/drop. The student is financially responsible for cost of the course(s). Students who

have not established attendance/participation may also have their federal financial aid eligibility adjusted. The table below provides additional information about WN actions and timelines.

for the third and all subsequent attempts will be included in calculating grade point averages.

**NOTE:** Some colleges and universities may not accept grades earned for repeated courses; some might use

WN Criteria per Modality							
Modality	At Least One Student Action is Required to Prevent WN			Student Deadline	Faculty WN Posting Deadline		Modality
	Class Attendance	Submit Assignment or Discussion Post	Contact Instructor Stating Intention to Complete the Course	Student Action Should be Completed by:	Immediately After 1st Class following Add/Drop	On the 5 <sup>th</sup> day following Add/Drop	
Campus: Face-to-face, Simulcast, etc.	√	√	√	First class following Add/Drop	√		Campus: Face-to-face, Simulcast, etc.
Hybrid	√	√	√	First class following Add/Drop	√		Hybrid
Online Synchronous (e.g., DLIVC)	√	√	√	First class following Add/Drop	√		Online Synchronous (e.g., DLIVC)
Online Asynchronous (e.g., DLONL)		√	√	Fourth calendar day following Add/Drop		√	Online Asynchronous (e.g., DLONL)

**Grade Forgiveness Policy**

Courses in which a “C” or better is earned cannot be repeated regardless of where they are completed. All course attempts will appear on the transcript. Courses in which a grade of “D” or “F” is earned may be repeated for credit, and only the most recent grade earned will be used to calculate the cumulative grade point average. A student who has completed a course and the grade earned was a “D” or an “F” is eligible for CLEP, AP, and/or credit-by-exam in a subsequent term.

**NOTE:** Some courses may be repeated for credit, i.e., JOU 1949. This means the grade and quality points earned in each attempt for this course will be included in the GPA computation. Grade forgiveness does not apply to a course that may be taken more than one time for credit. Check the course description to determine if a course may be repeated for credit.

Students may attempt a course only three times - including the first attempt, repeat grades, and withdrawals. Students attempting a course for the third time must pay the full cost of instruction (withdrawal from a course counts as an attempt). Students who have serious extenuating circumstances may petition the appropriate campus dean of student services for an exemption from paying the full cost of instruction. Permission for a fourth attempt will be granted only through the academic appeals process and will be granted only to students who can document major extenuating circumstances. Students who wish to begin the academic appeals process should contact the appropriate campus dean of student services. Grades

only the grades originally earned. Students receiving financial assistance of any type should speak with a financial aid counselor to ensure that any repeat attempts will qualify for aid.

**Dean’s List**

To earn placement on the Dean’s List, a student must earn a 3.5 or higher term GPA for 12 or more semester hours in the term of attendance.

**Honors**

Students who graduate with the specified HCC cumulative grade point averages will be recognized as distinguished graduates.

Degree Grade Point Average		
3.50 – 3.79	=	Honors
3.80 – 3.99	=	High Honors
4.00	=	Highest Honors

An honors statement will be placed on the student’s transcripts and diploma.

**Academic Progress**

In order to have satisfactory academic standing, a student at Hillsborough Community College must maintain a cumulative grade point average of 2.0 “C.” Students may be required to take reduced hours per semester to improve their GPA and must meet with a counselor for approval to register for classes. While financial benefits (financial aid, VA benefits, insurance, etc.) may be taken into consideration, it may not always be the basis for registration approvals. Only institutional GPA, including remedial coursework, would be included. Transfer GPA would not



be included. For PSAV programs, GPA is calculated by class not by term.

The four steps in the process are Academic Warning, Academic Probation, Academic Suspension, and Academic Dismissal.

### **Academic Warning**

When a student's cumulative GPA falls below 2.00, the student is placed on Warning and notified via Hawkmail or HawkGPS. A registration hold is placed on the student's record and the student must see a counselor to register. The student must maintain a term GPA of 2.00 or better thereafter. The student remains on warning until the cumulative GPA rises to 2.00 or better.

### **Academic Probation**

If while on Warning, a student's term GPA falls below 2.00, the student is placed on Probation and notified via Hawkmail or HawkGPS. The registration hold remains, and the student must see a counselor to register. The student must maintain a term GPA of 2.00 or better thereafter. The student remains on Probation until the cumulative GPA rises to 2.00 or better.

### **Academic Suspension**

If while on Probation, a student's term GPA falls below 2.00, the student is placed on Suspension and notified via Hawkmail or HawkGPS. The registration hold remains, and the student may not register for a period of one term. The student must see a counselor to be informed of the appeal process and timeline. The student will petition the Academic Standards Committee to be allowed to register. If the petition is successful, the student must maintain a term GPA of 2.00 or better thereafter. The student remains on Suspension until the cumulative GPA rises to 2.00 or better. If while on Suspension a student's term GPA falls below 2.00, the student is placed on Dismissal and must meet with a counselor to discuss the appeal process to return.

### **Academic Dismissal**

If while on Suspension a student's term GPA falls below 2.00, the student is placed on Dismissal and notified via Hawkmail or HawkGPS. The registration hold remains, and the student may not register for a period of one calendar year. The student must see a counselor to be informed of the appeal process and timeline to seek re-admission. The student will petition the Academic Standards Committee to be allowed to register. If the petition is successful, the student returns in the status of Suspension, under the conditions stated above regarding return from a one-term suspension.

### **Academic Grade Appeals**

Students must adhere to the standards of academic performance established in the course syllabi provided by their instructors. However, students are protected against prejudicial or capricious evaluation and may dispute an assigned grade by asking the instructor for reconsideration. If grades remain in dispute, students should contact the appropriate campus dean of student services. The

dean of student services will direct students to the appropriate appeals procedure.

## **Application for Degree and Transcripts**

### **Application for Degree**

Students are requested to apply using the "Application for Graduation" option in MyHCC Self-Service upon nearing graduation. Students who apply for graduation will have their diploma processed and mailed using the information in the HCC database.

### **Auto-identification for Graduation and Reverse Transfer**

Students who do not apply for graduation but have met all graduation requirements may still have their graduation processed. HCC participates in a "reverse transfer" program. Students who do not complete their graduation requirements at HCC but complete them at a participating institution may still be graduated from their HCC program.

### **Transcript Request**

To request an HCC transcript, follow the guidelines on the HCC website by going to <https://www.hccfl.edu/admissions/ask-registrar/request-hcc-transcripts>.

**NOTE:** The college will not provide transcripts if the student has an outstanding financial obligation to HCC.

## **Academic Support Services**

### **Learning at Hillsborough Community College**

As an institution focused on student learning, Hillsborough Community College offers a variety of learning options to enhance its' strong traditional college programs.

### **Academic Success Centers**

Each campus has an Academic Success Center (ASC). The ASCs provide learning environments, services, and resources designed to empower students to become successful, independent learners. They provide free tutoring, and resources for subject areas such as writing, reading, EAP/ESOL, foreign language, mathematics, sciences, computer science, developmental education, and business/finance. To learn more about the academic assistance offered at each campus visit their website: <https://www.hccfl.edu/support-services/academic-success-centers>.

### **Academic Technologies**

Hillsborough Community College is committed to providing academic technologies for its student population, and therefore, has developed a wide array of on-site and Internet-based technologies. These technologies include programs such as MyHCC Self-Service for managing student business, the college portal for communication and supplemental learning, Mythic for alternative coursework, web-based library resources, and an online tutoring service called Smarthinking. As a student at Hillsborough

Community College, you will be able to access these resources both on-campus and from your home or other locations away from the college.

Students are expected to learn to use various technologies to communicate with HCC and with classmates. Students may also be required to use web-based programs, such as those in MyHCC or other technologies to complete homework assignments, course assessments and testing, or other learning activities as assigned by instructors. In the event a computer and internet access is needed, each campus has technology available to use in the libraries and computer labs.

The college also provides helpdesk support for students with problems accessing their resources. You can call the helpdesk at 813-253-7000 ext. 4357 (HELP) to speak to a technician for assistance. The college helpdesk is limited to addressing only those problems associated with accessing web-based resources; i.e. MyHCC portal, Smarthinking, and MyHCC Self-Service.

### **Libraries**

Each campus has a library that provides materials to support the College curriculum. Campus library collections include books, magazines, journals, audiovisual materials, and other items in print and online. In addition, campus-specific reserve collections contain documents and objects identified by HCC instructors for students' attention.

Each library has computers for research, homework, and printing needs (including Wi-Fi). The library may not be the only walk-in computer lab at a given campus.

Campus librarians provide reference assistance online, by phone, and in-person; one-on-one instruction in locating information; and customized group instruction to classes upon instructor request.

Library hours vary by campus and are posted online at [www.hccfl.edu/library](http://www.hccfl.edu/library), (under "Campus Libraries") and at each location.

## **Student Services and Activities**

### **Student Services**

HCC offers a wide variety of services to help students reach their academic, career and personal goals.

#### **Academic Advising**

Advisors are available on each campus to help students select educational programs and choose appropriate courses. Advisors review transcripts, interpret placement test scores, explain degree requirements and provide information about transferring to four-year institutions. Students are encouraged to obtain an advising guide for their program from the HCC website (<https://www.hccfl.edu/support-services/academic-advising/hawkgps>) and review it with an advisor early in their academic career so that they know which courses to register for each semester.

### **Admissions, Registration and Records**

In order to provide students with prompt, efficient service, HCC must collect accurate information and maintain reliable student records. The college operates an admissions, registration and records office on each campus to answer questions about admissions, assist with registration, help complete HCC forms, receive and respond to requests for transcripts, and provide information required by outside individuals and organizations. In addition, the campus admissions, registration and records office will help students understand the policies and procedures in this catalog.

### **Bookstores**

Each campus has a bookstore. The bookstores sell textbooks, general reading materials, books and periodicals, school supplies, art and engineering supplies, gifts, computers, computer software and other miscellaneous items.

### **Career Resource Center**

The Career Resource Center provides students with information on careers and helps them make career decisions. Students can take career assessments and explore occupations with a campus Career Resource Center staff member through a variety of resources.

If students prefer working on their own, the college offers several automated career exploration options. Students can get more information about the career exploration system by visiting any campus Career Resource Center.

Employment opportunities are posted in the campus career centers and the online job boards. The Career Resource Center sponsors job fairs; schedules on-campus interviews with employers; and helps students with resume writing, interviewing techniques and other career related issues.

### **College Publications and Information**

HCC provides members of the college community with current information by maintaining and supporting a variety of publications and media.

### **Counseling Services**

Professional counselors are available to help students with career decision-making, academic planning, and personal growth. Counselors help provide direction to and monitor the progress of students who are on academic probation and those who have been previously academically suspended or dismissed. All information students share with counselors is treated with strict confidentiality.

In addition to short-term individual and group counseling, counselors offer seminars and workshops on study skills, time management, interpersonal skills, test anxiety reduction, and career exploration. All counseling services are free to students.

Students who would like to meet with a counselor may call or stop by an HCC counseling office. Students will either be seen on a walk-in basis or given an appointment.

## Disability Services

HCC makes every effort to help students with disabilities get the most out of attending college by providing reasonable accommodations to ensure access to all academic programs, campus organizations, services and activities, in accordance with the Americans with Disabilities Act (ADA) of 1990.

All HCC activities, organizations, courses and academic and technical programs are open to students with disabling conditions.

HCC facilities are, as a whole, accessible to persons with physical disabilities via ramps, automatic entrances, and elevators. Accessible restroom facilities, parking spaces, telephones and water fountains are also available.

### Who is Eligible?

The ADA defines a person with a disability as any person who has a physical or mental impairment that substantially limits one or more of such person's major life activities; has a record of such impairment; or is regarded as having such an impairment. **If students have one or more of the following disabilities, they may be eligible to receive services at HCC:**

- Specific learning disability
- Hearing impairment
- Visual impairment
- Physical impairment
- ADD/ADHD
- Psychiatric disability
- Alcohol/drug abuse
- AIDS
- Speech/language impairment
- Other health impairment

### Examples of Accommodations

HCC's office of services for students with disabilities provides a wide range of free services to meet the needs of disabled students.

Depending upon documentation provided, available accommodations/services include, but are not limited to:

- College placement test and new student orientation accommodations
- Learning disability specialist
- Sign language interpreter
- Reader1201C
- Notetaker
- Books on CD
- Assistive computer hardware and software on campus
- Visual magnifier
- Alternative testing arrangement

### How to Apply

A student or future student wishing academic accommodations must self-identify and provide appropriate documentation of their disability to the office of services for students with disabilities. Students should contact an HCC coordinator of services for students with disabilities to discuss documentation guidelines.

Students are encouraged to begin this process at least one month prior to the start of the semester. Students may schedule an appointment or visit on a walk-in basis.

### Contact

**For additional information on services and eligibility requirements, or to request services, students should contact an HCC coordinator of services for students with disabilities.**

Brandon	BSSB 122	253-7914
Dale Mabry	DSTU 102	259-6035
Plant City	PSTU 124	757-2209
MacDill Center	PSTU 101C	757-2209
South Shore	SPMF 135	253-7000 ext. 5734
Ybor City	YPST 230	253-7757

### Substitution, Admission and Graduation Requirements for Disabled Students

Students with hearing impairments, visual impairments, or specific learning disabilities who have received a standard diploma from a regionally accredited secondary school or earned passing GED scores may be eligible for substitutions of HCC admission requirements, program admission requirements, or graduation requirements. Eligibility for specific substitutions is based on the documentation of the students' disabilities.

If documentation of students' disabilities substantiates that the disabilities can reasonably be expected to prevent the students from meeting HCC's admission, program, course and/or graduation requirements, students might qualify for substitutions. Students must provide appropriate documentation to an HCC coordinator of services for students with disabilities.

### Food Services

Cafeterias on the Dale Mabry, Ybor and Brandon campuses are open when classes are in session. The food facilities at the Plant City and South Shore campuses are open during posted hours. Vending machines are located on all campuses.

### Student Housing

The Hawks Landing Apartment Complex is available to HCC students for occupancy. The complex is located on the Dale Mabry Campus. For rental information, contact (813) 875-6000 or visit the Hawks Landing Web page at <https://www.hccstudenthousing.com/>.

### College ID Card

As of spring term 2010, the Hawk Card serves as the official HCC photo ID card for students, faculty, and staff. The Hawk Card does not replace the HigherOne card which will remain as the student financial reimbursement card.

The Hawk Card is available at the Dale Mabry, Ybor City, Brandon, and Plant City Campus bookstores and at the Dean's Suite on the South Shore Campus. The first card is issued free of charge. A \$20.00 card replacement fee will be charged for each additional card.

## Student Email

Upon enrollment at HCC, all students are provided personalized email access through HawkNet, HCC's web-based service delivery portal. HCC has adopted email as the official means of communications with students because of its speed and efficiency in delivering important college communications. For this reason, it is important for students to check their HawkNet email regularly.

**During registration periods, students should check HCC email daily for registration confirmations, notices regarding fees, financial aid and other pertinent information. Log-in information for email and other electronic services available via HawkNet will be provided during new student orientation.**

## Hawk Alert

Hawk Alert is Hillsborough Community College's new text messaging system. It is easy to sign up! To receive text messages about emergencies, special notices and campus closures, go to <https://www.hccfl.edu/alerts> and sign up for this free service.\* Stay connected by signing up today!

\* NOTE: Some charges may apply based on your service provider.

## Lost and Found

Students should turn in any articles found on campus to the campus security office. To claim lost articles, students must present proper identification.

## Student Support Services Program

Student Support Services (SSS) is one of the federal TRIO Programs that provide a variety of academic support services to eligible disadvantaged students. Comprehensive support services enhance and improve the retention, graduation and transfer rates of the program's participants from HCC. Additional transfer services are available to participants who qualify to transfer to 4-year colleges and universities.

All full-time and part-time disadvantaged students enrolled at any of the college's campuses, learning centers or off-campus instructional sites, who qualify under the broad criteria, can apply for admission to the Student Support Services Program.

## Test Centers

Test Centers, located on all campuses, administer faculty make-up, distance learning, placement, and counseling-related tests. Before being allowed to take tests, students must show picture identification, either a government-issued photo ID such as a driver's license or an HCC student ID card. Appointments for some or all services may be required. Check the specific campus Test Center for information <https://www.hccfl.edu/support-services/testing>.

Students taking the CLEP test are required to provide two forms of identification. One form of identification must be a government-issued photo ID such as a driver's license.

Students with disabilities who require alternative testing arrangements must contact an HCC coordinator of services for students with disabilities.

Students using unauthorized or inappropriate materials and students who conduct themselves inappropriately in a test center will be denied future testing privileges in the center and may be subject to college disciplinary action.

## Vocational Rehabilitation Services

The Division of Vocational Rehabilitation, the Division of Blind Services, the Veterans Administration, and government agencies fund academic and vocational (technical) training for individuals with disabilities. For information about services and eligibility requirements and for referral to the appropriate agencies, students should contact an HCC coordinator of services for students with disabilities.

## WINGS

The WINGS program is designed to promote the graduation of students pursuing AS or college certificate programs. A variety of support services are offered to address short-term as well as lifelong goals. Students may qualify for partial tuition and textbook support, in addition to childcare assistance.

To qualify, students must be enrolled in a technical education program and be eligible to receive a Federal Pell Grant. **To obtain further information, students should call (813)253-7234.**

## Student Activities

### Student Government Association

The Student Government Association (SGA) provides opportunities for students to actively participate in programs and policy-making at HCC. The SGA serves as a major vehicle for communication between students and the administration. The Student Government Association represents all students.

Each campus has an SGA with a president, executive board and senate.

### Student Union Facilities

Student union facilities are open to all students. These facilities usually house offices for the SGA and areas in which students can meet.

## Student Publications

Student publications and the student press are valuable aids in establishing and maintaining an atmosphere of free and responsible discussion. The college requires that its student publications staff adhere to responsible journalistic practices. The Canons of Journalism, the Advertising Code, and the Advertising Standards of Acceptability serve as external standards for which the editors and staff of the student publications at HCC strive.

## Newspaper

The Hawkeye is HCC's student newspaper. Published regularly, the paper is staffed by students from all campuses and receives assistance from a faculty advisor. The newspaper is free.

## Galeria

The Galeria, HCC's literary-arts magazine, is published annually under the supervision of a faculty advisor. The Galeria has a staff of student volunteers, and students from all campuses contribute the material published. The magazine is free to all HCC students.

## Triad

The Triad, HCC's general magazine, is published annually under the supervision of a faculty advisor. Volunteer journalism students staff the Triad, and the magazine is free.

## Cultural and Special Events

### Art Exhibitions

HCC's Dale Mabry and Ybor City campuses are home to a variety of professional visual art galleries, offering learning environments that develop and teach visual literacy to students as well as the Tampa Bay community. These spaces support the college's educational and cultural vision by providing continuous forums dedicated to the appreciation, enjoyment, and understanding of the visual arts through the presentation of diverse, high-quality exhibitions. Artists of regional, national, and international artists in all media are included. Admission is free.

#### HCC Dale Mabry Campus

Gallery 221 @HCC, Learning Resources Center, 2<sup>nd</sup> Floor

Gallery 3 @HCC, Learning Resources Center, 3<sup>rd</sup> Floor

**Gallery Hours:** Mon-Wed 9am-4pm; Thurs 9am-7pm; Fri 9am-2pm; closed Sat/Sun and holidays.

For more information, call (813) 253-7386

#### HCC Ybor City Campus

HCC Ybor Art Gallery, Performing Arts Building, 1<sup>st</sup> Floor

MAZE Gallery, Administration Building 3<sup>rd</sup> Floor

**Gallery Hours:** Mon, Wed-Fri 10am-4pm; Tues 12-7 pm; closed Sat/Sun and holidays.

For more information, call (813) 253-7674

## Dance

During the academic year, the HCC Dance department produces several faculty and student performances, workshops and guest artists in residence. Auditions for these performance and other events are held each semester. Productions are held at the Ybor City Campus Performing Arts Building.

## Films, Dances and Special Events

Each semester campus student government associations sponsor events such as films, dances, concerts, guest speakers, special forums and cookouts. All events are at no cost to current students with a valid HCC ID card.

## Music

Student, faculty and artist recitals are held in the Ybor Performing Arts Building. Vocal and instrumental recitals and concerts are scheduled primarily during the fall and spring terms and feature student, faculty and guest artists in solo and ensemble performances.

## Visual and Performing Arts Guest Series

The Visual and Performing Arts guest series offers students an opportunity to see cutting edge performances by top notch performers for free. Productions are held at the Ybor City Campus Performing Arts Building, Mainstage Theatre. This program is sponsored by HCC Student Activities.

## Theatre

During the academic year, theatrical presentations are held on the Ybor City Campus. The schedule and location of open auditions for upcoming productions are posted on the campus bulletin board and on the [website](#). Theatre department productions are held at the Ybor City Campus Performing Arts Building.

## Sports

### Gymnasium, Weight Room and the Tejas Pradip Patel Tennis Center

HCC's Tennis Center is located at the northeast corner of the Dale Mabry Campus.

Tennis courts are available for educational and recreational use by HCC students and the community. Programs, clinics and lessons are available for players of all ages and levels. Further details are available by calling (813) 348-1173 or visiting the website at [www.tampatenis.net](http://www.tampatenis.net).

The gymnasium, which serves as the home court of the Hawks basketball and volleyball teams, is located on the Dale Mabry Campus.

College weight training rooms are available for student use free of charge at designated times. There are weight rooms located on the Dale Mabry and Ybor City campuses. Hours of operation for the weight room are posted and vary from term to term. Students are required to dress appropriately.

## Varsity Sports

The varsity sports program consists of volleyball, basketball, tennis and softball (fast pitch) for women; and basketball and baseball for men.

The Hawks are members of the Florida College System Activities Association, Suncoast Conference, Mid-Florida Conference and Region VIII of the National Junior College Athletic Association.

Financial aid is available to any full-time student who meets both athletic and academic qualifications. For details, students should contact the athletic office, Dale Mabry Campus, at (813) 253-7407. Upon request, the college will make available to current or future students the completion rates of student athletes.

## Student Clubs and Organizations

Each campus has clubs and organizations that serve student needs and interests. Student clubs and organizations provide students with the opportunity to participate in organized activities with others having similar interests. They offer students a way to make friends, expand horizons, and get involved in college life.

The HCC Student Handbook has a current list of clubs and organizations offered at each campus.

## Student Policies

### Activities Calendar

Each campus maintains a calendar listing the time and location of approved activities. Students must make arrangements for scheduling an event and reserving a location for a co-curricular activity with the appropriate student government activities advisor before the event can be placed on the activities calendar.

### ADA (Americans with Disabilities Act)

HCC complies with, and fully supports, the 1990 Americans with Disabilities Act (ADA). The ADA prohibits discrimination on the basis of disability in the services, programs and activities provided and operated by the college. HCC also complies with, and fully supports, other federal, state and local laws that protect the rights of disabled persons, such as the Rehabilitation Act of 1973 and the Florida Educational Equity Act. Unless the result will cause an undue hardship to the college or fundamentally alter a program or service provided by the college, HCC will provide reasonable accommodations and auxiliary aids to disabled applicants, employees, students and members of the college community.

### AIDS

HCC recognizes that Acquired Immune Deficiency Syndrome (AIDS), AIDS Related Complex (ARC), or a positive test for HIV antibody represents a significant public health threat. It is HCC's policy to balance the rights of AIDS victims to an education and employment at HCC against the rights of other students and employees to an environment in which they are protected from contracting the disease.

HCC will offer students with AIDS the same opportunities and benefits offered to other students. Generally, HCC will not impose any rules on students with AIDS that may have the effect of limiting their participation in the educational programs or activities at HCC. Students with AIDS will not be isolated by HCC or prevented from participating in college activities unless such participation has been scientifically shown to endanger the wider community. Risk determinations will be made by medical professionals in consultation with an office of services for students with disabilities.

A campus coordinator of services for students with disabilities is responsible for reviewing HCC's procedures and ensuring they are both free of discrimination and pose no danger to the community at large. The coordinator will also meet, as needed, to consider and recommend appropriate action in individual occurrences of the disease. Any

questions, concerns, consultation regarding AIDS, services or accommodations should be referred to an office of services for students with disabilities.

### Audio/Video Recordings

Students may, without prior notice, record video or audio of a class lecture for a class in which the student is enrolled for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of an HCC course intended to present information or teach enrolled students about a particular subject. Recording class activities other than class lectures, including but not limited to lab sessions, student presentations (whether individually or part of a group), class discussion (except when incidental to and incorporated within a class lecture), clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, private conversations between students in the class or between a student and the faculty member, and invited guest speakers is prohibited. Recordings may not be used as a substitute for class participation and class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the HCC Student Code of Conduct.

### Bulletin Boards

Each campus has several large community bulletin boards on which students may post announcements such as want ads, for-sale notices, notices of meetings, etc. Prior to posting, all notices from students must have the stamped approval of the appropriate campus dean of student services, the dean's designee, or the organization assigned authority and/or responsibility for the specific bulletin board.

### Campus Disturbances

State law prohibits the disruption of or interference with the administration, function or activities of an educational institution. In addition, the law prohibits individuals from encouraging students to disrupt the educational process or to interfere with the attendance of any student or employee.

Individuals who violate this law will be charged with a second-degree misdemeanor and, upon conviction, be fined up to \$500, imprisoned for up to 60 days, or both. In addition, students who violate this law will be subject to college disciplinary procedures.

### Campus Events

All on-campus meetings must be scheduled with the appropriate campus student activity coordinator or through the office of the appropriate campus dean of student services.

### Children on Campus

For safety reasons, parents and others responsible for the care of minor children under the age of 17 should not bring them on campus while engaged in academic activities such as class, research, lab periods, or study groups. Minor children under the age of 17 should be on campus

only when activities specifically allow for their involvement.

### Disciplinary Action

The campus dean of student services, according to HCC administrative procedures, administers disciplinary action resulting from violations of the Student Code of Conduct. The Student Code of Conduct is located in the Student Handbook, which is available on the HCC website at [www.hccfl.edu](http://www.hccfl.edu).

### Dress Code

HCC believes that students are mature enough to determine what constitutes appropriate dress. However, state law requires students to wear shirts and shoes while on HCC's campuses.

### Drugs & Alcohol

One of HCC's goals is to maintain a drug-free workplace and educational setting. Therefore, the manufacture, distribution, dispensation, possession, or use of alcohol or controlled substances on HCC property is prohibited. However, upon prior authorization by the President, alcoholic beverages may be served on HCC property and at HCC functions.

Annually, each registered student is provided detailed information about HCC drug policies and the behavioral, social and legal consequences associated with drug use.

Students charged with violating this policy will be referred for disciplinary action to the appropriate campus dean of student services. Students who violate the college's drug and alcohol policy will be subject to severe disciplinary sanctions including suspension or expulsion. In addition, the college will refer violators to the appropriate law enforcement agencies for prosecution and will assist law enforcement agencies in investigating students who may be using or trafficking drugs.

For more details regarding HCC's policy on alcohol and illicit drugs, see the HCC Safety Handbook, Student Handbook and Academic Planner or HCC Administrative Rule 6HX-10-2.05. A copy of this information is available on the HCC website at [www.hccfl.edu](http://www.hccfl.edu).

The college will also provide future students with a review of HCC's alcohol and drug prevention and education programs.

### Hazing

Officers, members, and others associated with HCC student organizations are prohibited from engaging in hazing and in participating in activities on or off campus that endanger students' health or safety.

### Intellectual Property

HCC is committed to providing an environment that supports the academic activities of our students and encourages innovation. Students may produce endeavors that are subject to copyright, trademark or patents from independent work or through College-sponsored or supported efforts using College funds, staff, facilities, material or technological information.

HCC's [Administrative Rule 6HX-10-2.12](#) and [Administrative Procedure 4.23](#) provide additional information on intellectual property and student work.

### Ombudsman/Student Advocate

The vice president for student services and enrollment management is the college's ombudsman/advocate for students. The vice president's office is located on the third floor of the district administration center. Students may appeal decisions related to course access and credits granted toward degrees to the office of the ombudsman.

### Religious Observances

HCC will reasonably accommodate the religious observances, practices, and beliefs of students in its admission, class attendance and the examination policies and in work assignments. Students must notify instructors at least one week prior to a religious observance.

Students may file a grievance if they believe they have unreasonably been denied an educational benefit due to their religious beliefs or practices.

### Public Safety

The HCC public safety office is available to assist all students and employees. The public safety office patrols college property to detect and deter criminal activity, provide protection to those on campus, provide security for college property, and detect and document hazardous, unusual and suspicious behavior and conditions.

The public safety department provides information and assistance on a 24-hour basis. The department utilizes uniformed patrol officers with marked vehicles and officers on foot patrol to observe and detect criminal behavior and suspicious activities; enforce traffic and parking regulations; and assist students and employees. Students, employees, and members of the community are required to obey all local, state and federal laws, statutes and ordinances. In addition, members of the college community must observe all HCC administrative rules and procedures. The public safety department is responsible for monitoring compliance with these laws and many of the college's rules and procedures.

### Responsible Students and Employees should:

- Inform the public safety department about suspicious conduct, criminal activities and hazardous situations.
- Refrain from leaving doors and windows open when rooms are vacant.
- Walk to cars and classes in groups or with a companion. (**Call 253-7911** for an officer escort to the parking lots or garage.)
- Walk in well-lighted areas at night, even when in a group.
- Attend to their intuition. (**If students feel they are being followed, they should change direction and walk toward a group of people or to a secure area.**)
- Watch their belongings.
- Avoid strangers that appear suspicious or out of place.
- Freely contact Security to ask for assistance.

***Students who notice situations that represent potential or real safety or security problems should notify the local campus security office by using the emergency telephones.***

Upon request, the college will make available to future students its policies, procedures, statistics and other information about campus safety and security. The Safety Handbook is available at the student services Web page at <https://www.hccfl.edu/support-services/public-safety>.

### **Sexual Harassment Policy**

Hillsborough Community College will maintain a workplace and educational setting free from harassment of any kind and from any source including but not be limited to supervisors, co-workers, administrators, students, faculty, consultants and visitors to the college. Each administrator, faculty member, professional-managerial employee, classified employee and student should pursue assignments and responsibilities at the college with a total commitment to basic ethical principles and professional codes of conduct.

The college believes sexual relationships between teachers and students or superiors and subordinates are ill advised as they might adversely affect the academic or workplace environment or relationships. Such relationships between superiors and subordinates or between teachers and students are unethical because the consent of students or subordinates may not in fact be voluntary given the "power imbalance" in such relationships.

### **Tobacco-Free Policy**

HCC is dedicated to providing a healthy and productive environment for its faculty, staff, students, visitors, and contractors which includes eliminating tobacco use as part of our commitment to promoting healthy practices and choices for individuals.

Tobacco-use is prohibited on all Hillsborough Community College properties, including owned and leased buildings, student housing, outdoor areas, parking lots and garages, courtyards, entrance and exit ways and college vehicles. This policy includes all types of tobacco and tobacco-like products, including smoked and smoke-less tobacco, other smoking products, and electronic cigarettes.

### **Student Misconduct**

Students must adhere to all published federal and state laws and ordinances and college administrative rules and procedures. Alleged violations of the Student Code of Conduct will be referred to the appropriate campus dean of student services. Following the guidelines in the Student Handbook and Academic Planner for student conduct and discipline, the dean will determine the appropriate college response.

HCC will cooperate with external police and judicial authorities investigating alleged violations of public laws or ordinances.

### **Telephones**

Office telephones are for official use only. If the college receives an emergency call for a student, every effort will be made to locate and inform the student. However, the

college will not deliver personal messages of a non-emergency nature.

### **Textbook Refund Policy**

HCC bookstores grant full refunds on textbooks (whether purchased new or used) during the first two weeks of the semester and during the first week of summer term. Books returned after those deadlines will be purchased at used book prices (55 percent of purchase price). In determining the amount to be refunded, the bookstores will follow these guidelines:

- All refund requests must be accompanied by sales receipts.
- If purchased new, books must be unmarked and must not be defaced in any manner. Marked books will be purchased at used book prices. The bookstore staff members are the sole judge of whether a book is in new or used condition.
- Each HCC bookstore will refund textbooks purchased at any other HCC bookstore.
- Books or merchandise that is defective should be exchanged as soon as the defect is discovered. Defective used books must be returned for exchange during the first two weeks of class.
- Students must provide a student ID and a government-issued photo ID in order to receive refunds.
- Refunds are not given for merchandise other than text books.
- Refunds are not given for special-order books.
- When students' petitions for late drops are approved, the deadline for refunds will be waived.

### **Buy Back Policy**

If a textbook is in good, resalable condition and is a required textbook for the next semester (except when the bookstore's current stock exceeds the anticipated demand), the bookstore may buy the book back at a price determined by the bookstore.

The buy-back period is the first two weeks and last week of each semester and on every Tuesday and Wednesday during the semester.

On each campus, bookstore hours are posted each term.

### **Threats of Violence**

Threats by HCC students, staff or visitors to do bodily harm, damage property or disrupt the operation of the college are inimical with the goals of the college and will not be tolerated. Students or employees who make such threats, whether verbal or written, expressed or implied, will be disciplined according to the appropriate administrative procedures.

## **Records Policies**

### **Confidentiality of Student Records**

The Family Educational Rights and Privacy Act (FERPA) governs the confidentiality of student records. (Records are defined as all records, files and data directly



related to students that are created, maintained, and used by HCC.)

### **Notification of Social Security Number Collection and Usage**

Hillsborough Community College (HCC) will only use your social security number (SSN) as needed for lawful purposes within the business of HCC and for those specific purposes identified by the Social Security Administration, the Internal Revenue Service and other state and federal regulatory agencies. The SSN will not be used in any information system as the primary identification of individuals unless required by law. HCC is committed to provide security for our students, faculty and staff; and recognizes that the threat of identity theft is a growing problem. HCC departments that are authorized and required to collect, transmit, store or use a SSN will do so in a secure manner. Violations of this policy may result in disciplinary action up to and including discharge or dismissal in accordance with HCC rules and procedures.

In compliance with [Section 119.071, Florida Statutes](#), this document serves to notify you of the purpose for the collection and usage of your SSN.

HCC collects and uses your SSN only for the following purposes in performance of the College's duties and responsibilities. To protect your identity, HCC will protect your SSN from unauthorized access, never release your SSN to unauthorized parties, and assign you a unique student/employee identification number. This unique ID number is used for all associated employment and educational purposes at HCC.

For the student information system (Hawknet), the primary identifier for a student will be the student identification number, which will be used to access student education records, and for electronic and paper data systems that identify, track and service students. Faculty and staff will require students to provide their student identification number for all transactions and not SSNs for any transactions requiring access to student records.

Providing your SSN is a condition of employment at HCC. Your SSN is used for legitimate employment business purposes in compliance with:

- Completing an Employment Application/Packet
- Completing and processing background checks
- Completing and processing the Federal I-9 (Dept. of Homeland Security)
- Completing and processing Federal W4, W2, 1099 (Internal Revenue Service)
- Completing and processing Federal Social Security taxes (FICA)
- Processing and distributing Federal W2 (Internal Revenue Service)
- Completing and processing quarterly unemployment reports (FL Dept. of Revenue)
- Completing and processing Florida retirement contribution reports (FL Dept. of Revenue)
- Processing workers compensation claims Florida Community College Risk Management Consortium (FCCRMC) and Dept. of Labor

- Completing and processing direct deposit files
- Completing and processing 403b and 457b contribution and similar reports
- Completing and processing group health, life and dental coverage enrollment
- Completing and processing various supplemental insurance deduction reports

The HCC Office of Financial Aid requires students to submit their SSN on various financial aid forms to coordinate institutional, state and federal financial aid programs.

The HCC Admissions Department will collect student SSNs, which are needed for federal reporting requirements. However, students are assigned a student number which will be used for all college business of identification. All SSNs are protected by FERPA and are never released to unauthorized parties.

The HCC Financial Services Office uses student SSN's to report information to the Internal Revenue Service (IRS) via 1098T, the Florida Prepaid Tuition Plan, to third parties paying for tuition and fees on behalf of the student, for reporting information to collection agencies, and for reports required by the state and federal government.

The Upward Bound, Educational Talent Search and College Reach-Out Programs are youth outreach (intervention) projects funded by discretionary grants from the United States or Florida Department of Education (FDOE). As such, each project is required to exclusively serve eligible participants that are citizens or nationals of the United States; or, are permanent residents of the United States. In order to verify a participant's project eligibility, SSNs are required and also later used when submitting information for the annual performance reports due to the United States or FDOE.

Workforce programs, funded through the Agency for Workforce Innovation (AWI), use your SSN as an identifier for program enrollment and completion. Also, it is used for entering placement information into the statewide data collection and reporting system. Because these are performance-based contract programs, AWI requires that all participants and their program-related activities be recorded in the Florida state system.

### **HCC students have the right to:**

- Inspect and review their educational reports and records.
- Have privacy of their educational reports and records maintained.
- Require the college to obtain written consent prior to disclosing personally identifiable information except in those instances specifically noted in the statute.
- Challenge and request a hearing on requiring the college to amend any portion of the students' records that are inaccurate, misleading or otherwise in violation of the students' privacy.

### **Right of Access**

Students and parents or guardians of dependent (per Section 152 of the Internal Revenue Code) students are entitled to these rights and to access to students' records. Parents or guardians of students will not be given access

to the students' records without the written consent of the student or documentation that the student is dependent.

Students and eligible parents or guardians may request a list of the types of student records maintained by HCC. These records include but are not limited to:

- Academic records, i.e., application, transcripts, enrollment verifications, course records, grades, etc. (Direct requests to the appropriate campus admissions, registration and records office.)
- Disciplinary records. (Direct requests to the appropriate campus dean of student services.)
- Financial aid records. (Direct requests to the appropriate campus financial aid office.)
- Student account and fee records. (Direct requests to the college financial services department.)

Eligible individuals may inspect or review student records and reports and receive copies for the cost of producing such copies. College employees may review student records when the reason for their review serves a legitimate educational or administrative purpose. Unless conducting approved research, faculty members may review the records only of students currently enrolled in their classes.

#### Right of Waiver of Access to Confidential Letters or Statements

A student, eligible parent, or guardian may waive the right of access to evaluations, confidential letters, or letters of recommendation. When requested, HCC will provide the names of individuals who have submitted such letters and evaluations. Moreover, HCC will endeavor to ensure the recommendations and evaluations are used only for the purpose(s) intended.

#### Corrections

HCC maintains student records electronically, on paper, on microfilm and on microfiche. In order to provide students the opportunity to correct errors and appeal discrepancies, the college will maintain the original documents on which the records are based for one year. After one year, the source documents may no longer be available and documenting errors will become the students' responsibility.

#### Right to Challenge and Hearing

Students and eligible parents or guardians have the right to challenge the content and request amendment of records and reports they believe to be inaccurate or misleading. To present such a challenge, students, eligible parents or guardians should contact the appropriate campus admissions, registration and records office.

Challenges may be settled informally by a written agreement. If challenges cannot be settled informally, either party may request, within a reasonable period of time, that a formal hearing be held to settle the dispute. If a request is made, the appropriate campus president will appoint an administrator, without an interest in the outcome, to serve as the hearing officer. Students, eligible parents or guardians, and college employees whose testimony is relevant to the issue may present evidence. After

reviewing all available evidence and testimony the hearing officer will make a written recommendation to the appointing president. The campus president will issue a written decision.

Students and eligible parents or guardians have the right to appeal decisions of campus presidents' rulings on FERPA challenges to the vice president for student services and enrollment management.

#### Right to Privacy

Students have the right to privacy with respect to the educational records maintained by the college. Personally identifiable student records or reports are confidential and will not be released without the written consent of students. HCC will release directory information on students unless students submit written requests to the appropriate campus admissions, registration and records office requesting that directory information be withheld. Directory information includes students':

- Names;
- Majors;
- Participation in officially recognized activities and sports;
- Weight and height (of members of athletic teams);
- Dates of attendance;
- Degrees and awards received;
- Enrollment status.

#### Complaints

Individuals who believe their privacy rights have been violated may petition the Family Educational Rights and Privacy Acts Office at the Department of Health & Welfare in Washington, D.C. or file suit in Circuit Court to request enforcement of the rights they believe to have been violated.

#### Rule and Procedure

Students may obtain a copy of the administrative rule and procedure on student records, including the requirements of the federal and state laws, from their campus dean of student services.

#### Release of Information

Organizations requiring verification of student enrollment or graduation should contact the National Student Clearinghouse at [www.studentclearinghouse.org](http://www.studentclearinghouse.org). Unofficial verifications can be processed through the student's MyHCC Self-Service account.

Since the federal government requires educational institutions to take precautions to prevent the misuse of student data, HCC will release student information only upon receipt of a signed, written request by the student or other authorized requestor.

Parties requesting information should submit their requests, and any accompanying forms, to the campus admissions, registration and records office. The college will try to process requests for information within 10 working days.

**Faculty Retention of Student Records**

Faculty members should keep proof of student grades for one full year. HCC maintains student records on paper, microfilm, and computer files. Students have one year to correct any discrepancies in these records. After that, source documents for microfilm and computer files may no longer be available. Therefore, the burden of proof for changes made after the one-year period lies with the student.

## College Preparatory Curriculum

The college preparatory curriculum is designed to improve students' performance in reading, writing and mathematics. In accordance with SBE Rule 6A-10.0315 **Common Placement Testing and Instruction**, "a student who entered 9th grade in a Florida public school in the 2003-2004 school year, or any year thereafter, and earned a Florida standard high school diploma or a student who is serving as an active duty member of any branch of the United States Armed Services shall not be required to take the common placement test and shall not be required to enroll in developmental education instruction in a Florida College System institution." Students who are required to take the college placement test and who earn scores below the state-mandated minimum scores must enroll in college preparatory communication and computation instruction. Depending on the areas needing remediation, students will be placed into college preparatory writing, reading, and/or computation courses. Students **must** see an advisor to ensure that they enroll in the appropriate

courses that will best meet their needs. Even if the placement test is not required, all students are encouraged to take the placement test to determine if college preparatory courses are advisable for them.

The bulleted items below refer to specific requirements related to the preparatory curriculum:

- Completion of a preparatory course in reading is required prior to enrolling in preparatory math if the student scores below 84 in reading on the PERT.
- Students attempting a college preparatory course for the third time must pay the full cost of instruction (withdrawal from a course counts as an attempt). Students who have serious extenuating circumstances may petition the appropriate campus dean of student services for an exemption from paying the full cost of instruction. Students who fail to complete a preparatory course satisfactorily within three attempts will not be allowed to register again for that course, unless otherwise specified.

### College Preparatory Courses

ENC	0022	Developmental Writing .....	4 cr.
ENC	0055	Developmental Writing Module .....	1 cr.
†REA	0018	Developmental Reading .....	2 cr.
†REA	0019	Developmental Reading .....	4 cr.
†MAT	0018	Pre-Algebra .....	3 cr.
†MAT	0022	Integrated Arithmetic and Algebra.....	5 cr.
†MAT	0028	Beginning Algebra .....	3 cr.
†MAT	0029	Developmental Mathematics for Statistics and Liberal Arts .....	3 cr.

### Suggested electives to take with preparatory course work:

CGS	1500	Applied Word Processing .....	1 cr.
†CLP	1000	Psychology of Personal Growth .....	3 cr.
†FIN	1100	Personal Finance .....	3 cr.
†OST	1142	Keyboarding I .....	1 cr.
†OST	1143	Keyboarding II .....	1 cr.
†OST	1741	Word Processing .....	1 cr.
REA	1105	Critical Reading Techniques .....	3 cr.
REA	2505	Vocabulary Improvement .....	3 cr.

## English for Academic Purposes (EAP)

Courses in English for Academic Purposes are offered at the Ybor City, Dale Mabry and SouthShore campuses.

The six levels of instruction are designed to help non-native English speakers reach a level of proficiency that will prepare them for better employment or academic opportunities.

Students whose diagnostic tests indicate they need instruction in English for Academic Purposes (EAP) are eligible to take the Post-secondary Education Readiness Test (PERT) after they have successfully completed all Level IV classes and their grades have been posted.

If they obtain the required college-level PERT scores in both writing and reading, they may enroll in ENC 1101 and in other college-level courses that are in their intended major. If they do not meet the required college-level PERT scores in both writing and reading, they must complete Levels V and VI. Students may not skip Level VI or retake the PERT after beginning Level V. Students enrolled in EAP Levels V and VI are eligible to take the PERT test only in math.

In order to be admitted to EAP, students must meet the required minimum scores in reading and language use on the placement test. Students who do not meet the required minimum scores are advised to take *Foundations: Beginning in English* classes offered through HCC's Institute for Corporate and Continuing Education (ICCE). EAP courses are as follows:

### Institutional Credit Level

†EAP	0100	Speech/Listening I.....	3 cr.
†EAP	0120	Reading I.....	3 cr.
†EAP	0140	Writing I.....	3 cr.
†EAP	0160	Grammar I.....	3 cr.
†EAP	0200	Speech/Listening II.....	3 cr.
†EAP	0220	Reading II.....	3 cr.
†EAP	0240	Writing II.....	3 cr.
†EAP	0260	Grammar II.....	3 cr.
†EAP	0300	Speech/Listening III.....	3 cr.
†EAP	0320	Reading III.....	3 cr.
†EAP	0340	Writing III.....	3 cr.
†EAP	0360	Grammar III.....	3 cr.
†EAP	0400	Speech/Listening IV.....	3 cr.
†EAP	0420	Reading IV.....	3 cr.
†EAP	0440	Writing IV.....	3 cr.
†EAP	0460	Grammar IV.....	3 cr.

### Associate in Arts Degree Elective Level (up to 24 cr. hrs.)

†EAP	1520	Reading V.....	3 cr.
†EAP	1520L	Reading Lab V.....	1 cr.
†EAP	1540	Writing V.....	3 cr.
†EAP	1540L	Writing Lab V.....	1 cr.
†EAP	1620	Reading VI.....	3 cr.
†EAP	1620L	Reading Lab VI.....	1 cr.
†EAP	1640	Writing VI.....	3 cr.
†EAP	1640L	Writing VI Lab.....	1 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## The Associate Degree

Hillsborough Community College offers associate in arts (AA) and associate in science (AS) degrees.

The AA degree is awarded to students who complete university transfer curricula designed to prepare them to enter as juniors at a four-year college or university.

The AS degree is awarded to students who complete technical programs. The AS degree is designed to prepare students for the workforce. A number of these degrees are designed so that students who earn them may transfer their credits into specialized programs at four-year institutions. In addition, students who earn one AS degree may qualify for another. Students wishing to earn a second AS degree must complete at least 15 hours at HCC beyond the first degree. Moreover, they must meet all requirements for the second degree.

To ensure a well-rounded education, degree curricula include general education courses within communications, humanities, natural sciences, mathematics and social and behavioral sciences. Where options are available, they are noted.

### Excess Hours Advisory Statement

[Section 1009.286, Florida Statutes](#), establishes an “excess hour” surcharge for a student seeking a baccalaureate degree at a state university. An excess hour surcharge equal to 100 percent of the tuition rate will be applied for each credit hour in excess of 110 percent.

All students whose educational plan may include earning a bachelor’s degree should make every effort to enroll in and successfully complete those courses that are required for their intended major on their first attempt. Florida college students intending to transfer to a state university should identify a major or “transfer program” early and be advised of admission requirements for that program, including the approved common prerequisites. Course withdrawals and/or repeats, as well as enrollment in courses, non-essential to the intended major, may contribute to a potential excess hours surcharge.

### Prerequisite Coursework “C” or Better Requirement

A student must earn a “C” or better in prerequisite coursework unless the instructor waives the requirement or unless otherwise stated in the course description.

## Graduation Requirements

To earn an AA or an AS degree, students must:

- Complete the approved curriculum of not less than 60 credits including general education requirements, program requirements, and electives.
- Complete Civics Literacy requirement:

Per [Section 1007.25, Florida Statutes](#) and [SBE 6A-10.02413 Civic Literacy Competency](#), first-time in college associate in arts students entering a Florida College System institution between 2018-19 to 2020-21 school year must demonstrate competency in civic literacy through one of the following options prior to graduation:

1. Successfully passing either POS 2041, American Government or AMH 2020, Modern American History.
2. Achieving the standard score on one of the following assessments:

Assessment	Standard Score
AP Government and Politics: United States	3
AP United States History	4
CLEP: American Government	50

- Associate in arts students entering a Florida College System Institution in the 2021-22 school year, and thereafter, must successfully pass either POS 2041 or AMH 2020 either by taking a course or passing an approved credit-by-examination (see below) and must achieve a standard score on one of the following assessments prior to graduation:

Assessment	Standard Score
AP Government and Politics: United States	3
AP United States History	4
CLEP: American Government	50
Florida Civic Literacy Exam	60%

- Associate in science students initially entering a Florida College System Institution in the 2022-2023 school year, and thereafter, must successfully pass either POS 2041 or AMH 2020 either by taking a course or passing an approved credit-by-examination (see above) and must achieve a standard score on one of the assessments listed in the previous paragraph prior to graduation.
- Fulfill the degree requirements under the catalog in effect during the semester that begins the period of continuous enrollment immediately prior to the semester in which the student applies for graduation. The graduation requirements of the catalog year in which a student initially enrolls will be valid for six years. Students who graduate after six years from the time of their initial enrollment will graduate under the requirements of the catalog in effect during the academic year in which they wish to graduate.

Exceptions:

- Programs deleted from the College inventory have a two-year teach-out time period, and students must complete a deleted program within the two-year teach-out period;
- State Framework changes or other changes coming from the state supersede the six-year time period.

**NOTE:** Continuous enrollment is maintained by registering for at least one term each academic catalog year. An academic catalog year is defined as the beginning Fall, Spring and ending Summer terms for the academic year. If a student’s enrollment is interrupted for more than one academic catalog

year, the student will be considered a former student returning. A former student returning must meet the graduation requirements of the catalog in effect during the semester they return.

- Earn at least 25 percent of the credit hours applicable to the degree in residence at HCC.

**In addition:**

- Have no more than four credit hours of physical education activity/skills courses may be applied toward a degree.
- Have a 2.0 cumulative GPA and a 2.0 institutional GPA.

**NOTE:** Credits from other colleges will be used in computing the GPA.

- Complete an application
- Fulfill all financial obligations before a release of transcripts or diploma.

***Programs are subject to change.***

***Students are responsible for obtaining current and accurate information prior to registering for classes.***

## The Associate in Arts Degree

### University Transfer Program

HCC offers one associate in arts (AA) degree program, and it is designed primarily to meet the requirements for a student to transfer to the upper division level of a college or university to continue to work toward a bachelor's degree. No more than one AA degree will be awarded to students.

Students should be aware of the specific requirements for the AA degree imposed by state regulations and law. For example, general education and elective credit requirements integrate requirements established by the Southern Association of Colleges and Schools and Florida's State Board of Education Rule [6A-10.030](#) (the Gordon Rule). [Section 1007.25 \(7\), Florida Statutes](#) require that associate in arts degree requires no more than 60 credit hours. Those statutes also mandate that the general education courses required for the associates in arts degree be distributed within designated categories. Courses that comprise the 24 hours of electives may be designated for university program entry.

Meeting graduation requirements for an AA degree from a Florida community college is not synonymous with meeting the specific course requirements to enter a specific program at a state university or private college belonging to the Independent Colleges of Florida.

The HCC AA degree program prepares students for hundreds of possible transfer majors, each of which has a distinct listing of common prerequisite courses designated by the Florida State University System. To help students in their educational planning, HCC offers AA pathways that include courses that may be typically found in an associated baccalaureate degree program. These AA pathways are intended to guide students. Students are not obligated to choose the courses that are included in the pathway, nor do they graduate with a degree in their selected pathway. To ensure accuracy in selecting courses, students should consult an advisor. The following is a list of the available HCC AA pathways:

- Accounting
- Agriculture
- Anthropology
- Architecture
- Art
- Biological Sciences: General, Marine, or Aquatic
- Building Construction
- Business Administration
- Communication
- Computer Information Systems
- Computer Science (Engineering)
- Criminology
- Cybersecurity
- Dance
- Education/Teacher Preparation
- Engineering
- Entrepreneurship
- Exercise Science
- Finance
- Foreign Language
- Graphic Design

- Geology
- History
- Hospitality Administration Management
- Humanities
- Information Technology
- Liberal Arts and Sciences
- Marketing
- Mass Communications
- Math Education: Teacher Prep
- Mathematics
- Medical Science
- Music
- Pharmacy
- Philosophy
- Political Science
- Psychology
- Public Health
- Religious Studies
- Sociology
- Statistics
- Supply Chain Management
- Theatre

To earn an AA degree, students must complete a minimum of 60 credit hours with no less than 36 credits of specified general education courses and 24 credits in the university transfer program electives. Legislation may further affect the graduation requirement; therefore, students are advised to obtain more current information from the advising and transfer offices.

The articulation agreement between Florida community colleges and state universities specifies that students who have been certified as having satisfactorily completed the general education requirements in a university transfer program are exempt from any additional general education requirements after transferring to a state university or community college. However, to be eligible for admission into a limited access program at a state university, students may be required to take specific prerequisite courses (which may exceed the 60 credit hours) and meet other requirements such as a minimum GPA, minimum ACT/SAT test scores or audition/portfolio.

Students may pursue any combination of university transfer programs, but only one AA degree will be awarded.

Students are advised to contact the specific department of the institution where they plan to transfer as early as possible for information regarding courses to be taken at HCC. Courses required at transfer institutions may fulfill HCC general education requirements or electives.

SLS 1106 or an approved substitute is required for all first-time-college-students seeking an Associate in Arts degree. Please see an advisor for more information.

## General Education Requirements

General education provides a foundation upon which a student's learning experience is built. It offers students the opportunity to acquire the skills and knowledge necessary to have a broad understanding of a changing world.

The HCC general education program is designed to provide students with the knowledge, skills, and vision



necessary to allow them to become valued participants in a complex and culturally diverse world. The program encourages intellectual inquiry, helping students to develop an understanding of the human mind and spirit, as well as a sense of history and the dynamics of the society around them. As students plan for the world that is ahead of them, the general education program gives them an appreciation of the world that preceded them, as well as a frame of reference for the world in which they live.

Students who complete the HCC general education core curriculum should be able to demonstrate their:

- ability to think critically.
- ability to express themselves clearly in written and oral communication.
- ability to express themselves effectively in quantitative terms.
- understanding of and appreciation for the value and significance of culture.
- appreciation of the scientific method of inquiry and the historical and contemporary impact of science on daily life.
- understanding of global political, social, economic, and historical perspectives.
- ability to use technology to access, retrieve, process, and communicate information.

To earn an AA degree, students must complete 36 hours of general education courses which includes state-mandated core coursework. The general education courses are divided into three groups consisting of two or more disciplines. Each discipline category includes core options and additional HCC options. Specific instructions are provided for each discipline.

### **Group I – Communications and Humanities: 15 credits required**

#### **Discipline: Communications (9 credits required)**

##### **Core Options**

Choose course below:

ENC 1101 English Composition I.....3 cr.

**NOTE:** Students will earn the Fundamentals in Written Communication digital badge upon completion of this course with a grade of C or better.

##### **Additional HCC Options**

Choose both options below:

ENC 1102 English Composition II.....3 cr.

SPC 1608 Public Speaking.....3 cr.

#### **Discipline: Humanities (6 credits required)**

##### **Core Options**

Choose one or two courses below:

ARH 1000 Understanding Visual Art.....3 cr.

HUM 1020 Introduction to the Humanities.....3 cr.

MUL 1010 Introduction to Music.....3 cr.

PHI 1010 Introduction to Philosophy.....3 cr.

THE 1000 Introduction to Theatre Arts.....3 cr.

LIT 2000 Introduction to Literature ..... 3 cr.\*

\*LIT 2000 is a selected topics course in literature.

During any given term, sections will be offered covering a variety of literature subjects, such as the following possible topics:

American Literature to 1885

American Literature: 1885 to Present

African-American Literature

British Literature to 1800

British Literature: 1800 to Present

Latin-American Literature

World Literature to 1650

World Literature: 1650 to Present

Or other selected topics in literature.

#### **Additional HCC Options**

If only one course was selected from the core options, choose the second course from options below:

DAN 2100 Introduction to Dance ..... 3 cr.

HUM 2210 World Humanities: Prehistory to Early Modern Era..... 3 cr.

HUM 2230 World Humanities: Early Modern to Contemporary ..... 3 cr.

HUM 2410 Asian Humanities ..... 3 cr.

HUM 2420 African Humanities ..... 3 cr.

HUM 2461 Latin-American Humanities..... 3 cr.

PHI 1100 Elementary Logic ..... 3 cr.

PHI 1600 Ethics ..... 3 cr.

PHI 2635 Biomedical Ethics..... 3 cr.

REL 2300 Introduction to Religion..... 3 cr.

### **Group II – Mathematics and Natural Science: 12 credits required**

#### **Discipline: Mathematics (6 credits required)**

##### **Core Options**

Choose one or two courses below:

MAC 1105 College Algebra ..... 3 cr.

MAC 2311 Calculus and Analytic Geometry ..... 5 cr.

MGF 1106 Topics in Mathematics ..... 3 cr.

MGF 1107 Explorations in Mathematics..... 3 cr.

STA 2023 Elementary Statistics ..... 3 cr.

##### **Additional HCC Options**

If only one course was selected from the core options, choose the second course from the options below:

MAC 1106 Combined College Algebra/Pre-Calculus 5 cr.

MAC 1114 Trigonometry ..... 3 cr.

MAC 1140 Pre-Calculus Algebra ..... 3 cr.

MAC 1147 Pre-Calculus Algebra and Trigonometry 5 cr.

MAC 2233C Calculus for Business and Social Science. 3 cr.

MAC 2312 Calculus and Analytic Geometry II..... 5 cr.

MAC 2313 Calculus and Analytic Geometry III ..... 5 cr.

MAD 2104 Discrete Mathematics ..... 3 cr.

MAP 2302 Differential Equations ..... 3 cr.

**NOTE:** Any student who completes a mathematics course for which one of the general education core course options in mathematics is an immediate prerequisite should be considered to have completed the mathematics core. Additionally, all general education mathematics courses require college level reading and writing skills.

#### **Discipline: Science (6 credits required plus at least one lab as a required elective)**

Students must select at least one course in biological science and one course in physical science from the following list of courses. At least one science option must be a core option. For the additional HCC options, students

may choose from the list below, or students may select any college-level science course higher than the core course options.

The selection must include at least one lecture course with its co-requisite laboratory in biological science or physical science. The co-requisite laboratory will count outside of the 36 hour general education requirement.

Courses with an asterisk denote courses that are intended for students who plan to pursue a major in the sciences, health care, or a related field. See an advisor for specific guidance on which courses to take.

### Biological Science

Students must select at least one course below in the biological sciences from the core option or from the additional HCC options. Students may choose a lecture/lab combination from the biological sciences and/or from the physical sciences, but they must choose a lecture/lab combination from at least one of these sciences.

#### Core Options

BSC 1005	Biological Foundations/BSC 1005L, Biological Foundations Lab.....	4 cr.
BSC 2010	Biological Science I/BSC 2010L Biological Science I Lab* .....	4 cr.
BSC 2085	Human Anatomy and Physiology I/BSC 2085L Human Anatomy and Physiology I Lab*.....	4 cr.
EVR 1001C	Introduction to Environmental Science.....	3 cr.

#### Additional HCC Options

BSC 1025C	Nutrition and Drugs .....	3 cr.
BSC 1026C	Reproductive Biology and Inheritance.....	3 cr.
BSC 1092	Human Biology /BSC 1092L, Human Biology Lab .....	4 cr.
BSC 2011	Biological Science II/BSC 2011L, Biological Science II Lab .....	4 cr.
BSC 2086	Human Anatomy and Physiology II/BSC 2086L, Human Anatomy and Physiology II Lab.....	4 cr.
OCB 2000	Marine Biology/OCB 2000L, Marine Biology Lab * .....	4 cr.
PCB 1730C	Human Reproduction and Inheritance .....	3 cr.
ZOO 1010C	General Zoology .....	3 cr.

### Physical Science

Students must select at least one course below in the physical sciences from the core option or from the additional HCC options. Students may choose a lecture/lab combination from the physical sciences and/or from the biological sciences, but they must choose a lecture/lab combination from at least one of these sciences.

#### Core Options

AST 1002C	Astronomy .....	3 cr.
CHM 1020C	Chemistry and Society.....	3 cr.
CHM 2045	General Chemistry I/CHM 2045L, General Chemistry I Lab*.....	4 cr.
ESC 1000	Earth Science/ESC 1000L, Earth Science Lab .....	4 cr.
PHY 1020C	Conceptual Physics.....	3 cr.
PHY 2048	Physics with Calculus I/PHY 2048L, Physics with Calculus I Lab.....	5 cr.

PHY 2053	General Physics I/PHY 2053L, General Physics I Lab* .....	4 cr.
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#### Additional HCC Options

CHM 2046	General Chemistry II/CHM 2046L, General Chemistry II Lab .....	4 cr.
CHM 1032	Chemistry for Health Sciences/CHM 1032L, Chemistry for Health Sciences Lab* .	4 cr.
CHM 2210	Organic Chemistry I/CHM 2210L, Organic Chemistry I Lab.....	5 cr.
CHM 2211	Organic Chemistry II/CHM 2211L, Organic Chemistry II Lab .....	5 cr.
CHS 2440	Chemistry for Engineers/CHS 2440L, Chemistry for Engineers Lab .....	4 cr.
GLY 2010	Physical Geology/GLY 2010L, Physical Geology Lab * .....	4 cr.
MET 2010C	Meteorology .....	3 cr.
OCE 2001C	Introduction to Oceanography .....	3 cr.
PHY 2049	Physics with Calculus II/PHY 2049L, Physics with Calculus II Lab.....	5 cr.
PHY 2054	General Physics II/PHY 2054L, General Physics II Lab.....	4 cr.
PSC 1515	Energy and the Environment/PSC 1515L, Energy and the Environment Lab...	4 cr.

\* Intended for students who plan to pursue a major in the sciences, health care, or a related field. See an advisor for specific guidelines on which courses to take.

**NOTE:** Any student who completes a natural science course for which one of the general education core course options in natural science is an immediate prerequisite should be considered to have completed the natural science core.

### Group III – Social Science: 9 credits required

**NOTE:** Effective Fall 2018, students initially entering HCC must fulfill the Civics Literacy requirement (see next page).

#### Discipline: Behavioral Science (3 credits required)

##### Core Options

Choose one course from options below:

ANT 2000	Introduction to Anthropology .....	3 cr.
PSY 2012	General Psychology .....	3 cr.
SYG 2000	Introduction to Sociology .....	3 cr.

#### Disciplines: History/Political Science (3 credits required)

Choose one course from core history/political science options or additional HCC history/political science options below:

##### Core Options

AMH 2020	Modern American History .....	3 cr.
POS 2041	American Government .....	3 cr.

#### Additional HCC Options

AMH 2010	Early American History .....	3 cr.
EUH 2000	The Western World Origins to Early Modern Europe .....	3 cr.
EUH 2001	The Western World: Modern Europe.....	3 cr.
LAH 2020	Survey of Latin American History .....	3 cr.
POS 1001	Introduction to Political Science .....	3 cr.

**Disciplines: Behavioral Science, History, Political Science, Economics (3 credits required)**

Choose one course options below:

**Core Options**

AMH 2020	Modern American History.....	3 cr.
ANT 2000	Introduction to Anthropology.....	3 cr.
ECO 2013	Principles of Macroeconomics.....	3 cr.
POS 2041	American Government.....	3 cr.
PSY 2012	General Psychology.....	3 cr.
SYG 2000	Introduction to Sociology.....	3 cr.

**Additional HCC Options**

AMH 2010	Early American History.....	3 cr.
EUH 2000	The Western World Origins to Early Modern Europe.....	3 cr.
EUH 2001	The Western World: Modern Europe.....	3 cr.
LAH 2020	Survey of Latin American History.....	3 cr.
POS 1001	Introduction to Political Science.....	3 cr.

**Computer Proficiency Requirement**

Computer proficiency is a core requirement of the associate in arts degree general education curriculum. Students must demonstrate computer proficiency in one of the following ways:

1. Successfully complete the approved HCC computer course, CGS 2100 (3 Credits). Successful completion requires that the student earn a grade of "C" or better in the course.
2. Provide an official transcript demonstrating successful completion of a college/university course(s) equivalent to the approved HCC course(s).
3. Pass the proficiency test administered by the college.

Students should check with the counseling/advising office on their campus for specific information about fulfilling the requirement to demonstrate computer proficiency.

**Foreign Language Requirement**

[Section 1007.262, Florida Statutes](#) require demonstration of foreign language competency for Associate in Arts degree-seeking students. Students must demonstrate competence in foreign languages by completing two credits in one foreign language at the secondary level or the equivalent at the postsecondary level. The equivalent at the postsecondary level is defined as completing a postsecondary course at the elementary 2 level in one foreign language or in American Sign Language.

**Gordon Rule Requirements**

State Board of Education [Rule 6A-10.030](#) (the Gordon Rule) is a rule stipulating requirements of student performance in both the communications and mathematics areas. Satisfactory completion of this rule requires that a student earn a grade of "C" or better in each applicable course.

Students fulfill the Gordon Rule requirement upon successful completion of the general education curriculum. Within the communications area, the student is required to complete writing assignments as designated in the instructors' syllabi in the areas of English, humanities,

history, natural science, physical science, behavioral science, and history/political science. Certain courses and disciplines have word-count requirements. Within the mathematics area, completion of the general education mathematics courses fulfills the requirement. Prerequisite courses must be completed, or appropriate test scores attained, before enrolling in Gordon Rule courses.

**IDS 2891, CONNECTIONS****Course Requirement**

IDS 2891, Connections, is an interdisciplinary course that allows students to synthesize key components of their general education experience. Based on the selected topics approach, the course summarizes major points in the bodies of knowledge that were acquired while students participated in the general education curriculum, and it provides opportunities for students to use the knowledge and skills gained from their general education experience in an applied manner. Required for graduation by students enrolled in the associate in arts degree program, the course involves research skills, the application of theoretical models, and the use of learned skills. Prior to taking the course, students must have completed at least 45 hours of coursework towards the degree, including at least 24 hours of general education coursework with a minimum grade of "C."

**SLS 1106, First Year Experience Course Requirement**

SLS 1106, First Year Experience is a course designed to support and guide first-time-in-college students. Prior to earning 18 college credits, students in the A.A. Degree Program must enroll in SLS 1106--a three-credit, college-level course that is fully transferable and financial aid eligible. SLS 1106 will assist those new to college by pairing faculty and academic advisors in the classroom, where they will help students develop short and long-range goals, create a career-focused college completion plan, and learn about HCC's support services. The course content emphasizes student navigation and learning engagement at the College in order help ensure that more learners persist into their second academic years and graduate on time. Students who have taken other SLS courses or who are accepted into certain programs or AA pathways (e.g., HCC Honors Program, FUSE, AA.THE. AA.MUSIC, AA.ART, AA.GRA) may be exempt from this program requirement. Be certain to consult an academic advisor to confirm an exemption. Non-exempt, first-time-in-college students must earn a "C" or better in SLS 1106 before completing 18 credit hours.

## AA • Associate in Arts Degree

Students may pursue any combination of university AA pathways, but only one AA degree will be awarded upon satisfactory completion of 60 credit hours. Unless restrictions apply, any transferrable course may be included and used as an AA elective. The AA pathways included in the catalog are guidelines, and course requirements may vary by university. Advisors should be consulted to help with the student’s specific academic plan or for information on any pathway that is not included in the HCC Catalog.

### AA • Accounting Pathway

#### AA.ACG (60 credit hours)

This pathway is for students who want to pursue a four-year degree in Accountancy, which includes careers in business, industry, government, and other organizations.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

*†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
*†MAC	1105	College Algebra .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.

#### YEAR I – Second Semester

*†ECO	2013	Principles of Macroeconomics .....	3 cr.
†ENC	1102	English Composition II .....	3 cr.
*†MAC	2233C	Calculus for Business and Social Science .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.

#### YEAR I – Third Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
		Biological Science General Education .....	3-4 cr.

#### YEAR II – First Semester

*†ACG	2021	Financial Accounting .....	3 cr.
*†ECO	2023	Principles of Microeconomics .....	3 cr.
*†STA	2023	Elementary Statistics .....	3 cr.
		†Humanities General Education CORE .....	3 cr.

#### YEAR II – Second Semester

*†ACG	2071	Managerial Accounting .....	3 cr.
†IDS	2891	Connections .....	1 cr.
		Humanities General Education .....	3 cr.
		Physical Science General Education .....	3-4 cr.
		**Elective .....	4 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**\*\*Select electives from the following. Elective hours are contingent on initial math sequence placement.**

†ACG	2061	Computers and Accounting .....	3 cr.
†ACG	2104	Intermediate Accounting I .....	3 cr.
†ACG	2450	Microcomputers and Accounting .....	3 cr.
†ACG	2681	Financial Investigation .....	3 cr.

## AA • Agriculture Pathway

### AA.AGR (60 credit hours)

This pathway is for students who want to pursue a four-year degree in agricultural fields such as agricultural-education, media, engineering, agronomy, animal science, forestry, plant science and food science. Careers include teaching, writing, sales, manufacturing, farm management, extension services, animal breeding, other jobs working directly with plants and animals as well as a variety of positions in agricultural businesses and related industries.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†CHM 1025	Introductory Chemistry.....	3 cr.
†CHM 1025L	Introductory Chemistry Laboratory .....	1 cr.
†ENC 1101	English Composition I.....	3 cr.
*†MAC 1105	College Algebra.....	3 cr.
†SLS 1106	First Year Experience Orientation .....	3 cr.
*†SPC 1608	Public Speaking.....	3 cr.

#### YEAR I – Second Semester

*†BSC 2010	Biological Science I.....	3 cr.
*†BSC 2010L	Biological Science I Laboratory .....	1 cr.
*†CHM 2045	General Chemistry I.....	3 cr.
*†CHM 2045L	General Chemistry I Laboratory .....	1 cr.
*†MAC 1140	Pre-Calculus Algebra.....	3 cr.
	Behavioral Science/History/Economics General Education CORE .....	3 cr.

#### YEAR I – Third Semester

†CGS 2100	Computer Information Technology and Literacy .....	3 cr.
*†CGS 1160	Desktop Information Management.....	1 cr.
*†CHM 2046	General Chemistry II.....	3 cr.
*†CHM 2046L	General Chemistry II Laboratory .....	1 cr.
*†MAC 1114	Trigonometry.....	3 cr.

#### YEAR II – First Semester

*†STA 2023	Elementary Statistics.....	3 cr.
†ENC 1102	English Composition II.....	3 cr.
†AMH 2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
	†Humanities General Education CORE .....	3 cr.

#### YEAR II – Second Semester

*†BSC 2011	Biological Science II.....	3 cr.
*†BSC 2011L	Biological Science II Laboratory .....	1 cr.
*†ECO 2023	Principles of Microeconomics.....	3 cr.
†IDS 2891	Connections .....	1 cr.
*†SYG 2000	Introduction to Sociology <i>or</i> †PSY 2012, General Psychology .....	3 cr.
	Humanities General Education .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Anthropology Pathway

### AA.ANT (60 credit hours)

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ENC 1101	English Composition I.....	3 cr.
†ESC 1000	Earth Science.....	3 cr.
†ESC 1000L	Earth Science Laboratory .....	1 cr.

†EUH	2000	The Western World: Early Modern Europe.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.

**YEAR I – Second Semester**

*†ANT	2000	Introduction to Anthropology.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
†MGF	1106	Topics in Mathematics.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.

**YEAR I – Third Semester**

†PHI	1010	Introduction to Philosophy.....	3 cr.
†PSY	2012	General Psychology <i>or</i> †SYG 2000, Introduction to Sociology.....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.

**YEAR II – First Semester**

*ANT	2511	Introduction to Biological Anthropology.....	3 cr.
*ANT	2511L	Introduction to Biological Anthropology Laboratory.....	1 cr.
†BSC	1092	Human Biology <i>and</i> BSC 1092L, Human Biology Laboratory <i>or</i> †PCB 1730C, Human Reproduction and Inheritance.....	3-4 cr.
†HUM	2210	World Humanities: Prehistory to Early Modern Era <i>or</i> †HUM 2230, World Humanities: Early Modern to Contemporary.....	3 cr.
		**Elective.....	3 cr.

**YEAR II – Second Semester**

†ANT	2410	Cultural Anthropology.....	3 cr.
†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
†IDS	2891	Connections.....	1 cr.
†POS	1001	Introduction to Political Science.....	3 cr.
		**Electives.....	6 cr.

**\*\*Select 9 credit hours from the following elective course options:**

AFA	1001	Introduction to Black Culture.....	3 cr.
†BSC	1005	Biological Foundations <i>and</i> †BSC 1005L, Biological Foundations Laboratory.....	4 cr.
†BSC	1025C	Nutrition and Drugs.....	3 cr.
†BSC	2085	Human Anatomy and Physiology <i>and</i> †BSC 2085L, Human Anatomy and Physiology Laboratory.....	4 cr.
†CCJ	1010	Introduction to Criminology.....	3 cr.
†CHM	1020C	Chemistry and Society.....	3 cr.
†EVR	1001C	Introduction to Environmental Science.....	3 cr.
†HUM	2230	World Humanities: Early Modern to Contemporary.....	3 cr.
†HUM	2410	Asian Humanities.....	3 cr.
†HUM	2420	African Humanities.....	3 cr.
†HUM	2461	Latin-American Humanities.....	3 cr.
MAN	2604	Intercultural Relations in Business.....	3 cr.
†MUL	1010	Introduction to Music.....	3 cr.
†PHI	1010	Introduction to Philosophy.....	3 cr.
†PHI	1600	Ethics.....	3 cr.
†PSY	2012	General Psychology.....	3 cr.
†REL	2300	Introduction to Religion.....	3 cr.
SOP	1740	Feminine Psychology.....	3 cr.
†SYG	2000	Introduction to Sociology.....	3 cr.
†SYG	2012	Introduction to Globalization.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Architecture Pathway

### AA.ARC (72 credit hours)

This pathway is for students who want to pursue a four-year degree in architectural design, interior design and landscape architecture. Careers include interior and building design, furniture and lighting design, urban planning, industrial design and sales as well as jobs in the environmental field and construction industry.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ARC	1180	Introduction to Digital Architecture.....	3 cr.
*ARC	1301	Architectural Design I.....	4 cr.
*†ARC	1701	Architectural History I.....	3 cr.
*†MAC	1105	College Algebra.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.

#### YEAR I – Second Semester

*ARC	1302	Architectural Design II.....	4 cr.
*†ARC	2461	Materials and Methods I.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
*†PHY	2053	General Physics I.....	3 cr.
*†PHY	2053L	General Physics I Laboratory.....	1 cr.

#### YEAR I – Third Semester

†ENC	1102	English Composition II.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.
		Behavioral Science/History/Economics General Education CORE.....	3 cr.

#### YEAR II – First Semester

*†ARC	2201	Theory of Architecture.....	3 cr.
*†ARC	2303	Architectural Design III.....	5 cr.
*†MAC	2233C	Calculus for Business and Social Science <i>or</i> †MAC 2311, Calculus and Analytic Geometry I.....	3-5 cr.
		†Humanities General Education CORE.....	3 cr.

#### YEAR II – Second Semester

*†ARC	2304	Architectural Design IV.....	5 cr.
*†ARC	2501	Architectural Structure I.....	4 cr.
		Biological Science General Education.....	3-4 cr.

#### YEAR II – Third Semester

†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
†IDS	2891	Connections.....	1 cr.
†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government.....	3 cr.
		†Behavioral Science General Education CORE.....	3 cr.
		Humanities General Education.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Art Pathway

### AA.ART (60 credit hours)

This pathway is for students who want to pursue a four-year college/university degree in such fields as fine arts, art education, art history, and design. The pathway offers foundation courses in studio skills and studio methods. Major studies include design, drawing, painting, sculpture, printmaking, ceramics, photography, and graphic art. Depending upon personal development, students may choose to work in a variety of art media or concentrate in a specialized area.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

*†ARH	1050	Art History I.....	3 cr.
*†ART	1201C	Visual Studies Foundations I.....	3 cr.
†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
		Mathematics CORE General Education.....	3 cr.

**YEAR I – Second Semester**

*†ARH	1051	Art History II.....	3 cr.
*†ART	1300C	Drawing I.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
		Mathematics General Education.....	3 cr.
		Physical Science General Education.....	3-4 cr.

**YEAR I – Third Semester**

†SPC	1608	Public Speaking.....	3 cr.
		†Behavioral Science General Education CORE.....	3 cr.
		Biological Science General Education.....	3-4 cr.

**YEAR II – First Semester**

*ART	1203C	Visual Studies Foundations II.....	3 cr.
†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government.....	3 cr.
		**Art Specified Elective.....	3 cr.
		†Humanities General Education CORE.....	3 cr.

**YEAR II – Second Semester**

*†ART	2301C	Drawing II.....	3 cr.
†IDS	2891	Connections.....	1 cr.
		**Art Specified Elective.....	3 cr.
		Behavioral Science/History/Economics General Education CORE.....	3 cr.
		Humanities General Education.....	3 cr.

**\*\*Select 6 credit hours from the following art specified electives:**

ART	2400C	Printmaking I.....	3 cr.
†ART	2500C	Painting I.....	3 cr.
†ART	2600C	Digital Art.....	3 cr.
ART	2701C	Sculpture I.....	3 cr.
ART	2750C	Ceramics I.....	3 cr.
†PGY	2401C	Photography I.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Biological Sciences: General, Marine, or Aquatic Pathway****AA.BIO (60 credit hours)**

This pathway is for students who want to pursue a four-year degree in biological sciences: general, marine or aquatic.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

†BSC	2010	Biological Science I.....	3 cr.
†BSC	2010L	Biological Science I Laboratory.....	1 cr.
*†CHM	2045	General Chemistry I.....	3 cr.
*†CHM	2045L	General Chemistry I Laboratory.....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
		†Humanities General Education CORE.....	3 cr.

**YEAR I – Second Semester**

†BSC	2011	Biological Science II.....	3 cr.
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†BSC	2011L	Biological Science II Laboratory .....	1 cr.
*†CHM	2046	General Chemistry II.....	3 cr.
*†CHM	2046L	General Chemistry II Laboratory .....	1 cr.
*†MAC	2311	Calculus and Analytic Geometry I <i>or</i> †MAC 2233C, Calculus for Business and Social Sciences.....	3-5 cr.
†ENC	1102	English Composition II.....	3 cr.
†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.

**YEAR I – Third Semester**

†ANT	2000	Introduction to Anthropology.....	3 cr.
		Humanities General Education .....	3 cr.

**YEAR II – First Semester**

*†CHM	2210	Organic Chemistry I.....	4 cr.
*CHM	2210L	Organic Chemistry I Laboratory .....	1 cr.
†MAC	2312	Calculus and Analytic Geometry <i>or</i> †STA 2023, Elementary Statistics .....	3-5 cr.
†OCB	2000	Marine Biology .....	3 cr.
†OCB	2000L	Marine Biology Laboratory.....	1 cr.

**YEAR II – Second Semester**

†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
*†CHM	2211	Organic Chemistry II .....	4 cr.
*CHM	2211L	Organic Chemistry II Laboratory .....	1 cr.
†IDS	2891	Connections .....	1 cr.
IDS	2912L	Undergraduate Research Experience in Natural Science <i>or</i> †OCE 2001C, Introduction to Oceanography <i>or</i> †PHY 2053, General Physics I <i>and</i> †PHY 2053L, General Physics I Laboratory .....	2-4 cr.
†PSY	2012	General Psychology .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Building Construction Pathway****AA.BCN (65 credit hours)**

This pathway is for students who want to pursue a four-year degree in building construction, development, contracting or related industries. Careers include construction manager, contractor, building inspector, owning or managing a construction firm as well as a variety of jobs within the construction industry and related fields.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

**YEAR I – First Semester**

*†BCN	1210	Construction Materials and Processes.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
*†MAC	2233C	Calculus for Business & Social Sciences .....	3 cr.
†SLS	1106	Introduction to Computers and Technology .....	3 cr.
*†SPC	1608	Public Speaking .....	3 cr.

**YEAR I – Second Semester**

*BCN	1250	Introduction to Graphic Technology .....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
*†GLY	2010	Physical Geology.....	3 cr.
*†GLY	2010L	Physical Geology Laboratory .....	1 cr.

**YEAR I – Third Semester**

		†Behavioral Science General Education CORE .....	3 cr.
		Biological Science General Education.....	3-4 cr.
		†Humanities General Education CORE .....	3 cr.

**YEAR II – First Semester**

*†ARC	2501	Architectural Structures I.....	4 cr.
*†ECO	2023	Principles of Microeconomics.....	3 cr.
†ENC	2210	Technical Writing.....	3 cr.
*†PHY	2053	General Physics I.....	3 cr.
†PHY	2053L	General Physics I Laboratory.....	1 cr.

**YEAR II – Second Semester**

†BUL	2241	Business Law I.....	3 cr.
†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.
		Humanities General Education .....	3 cr.

**YEAR I – Third Semester**

*†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†IDS	2891	Connections .....	1 cr.
		Behavioral Science/History/Economics General Education CORE .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Business Administration Pathway**

**AA.BUS (60 credit hours)**

This pathway is for students who want to pursue a four-year degree in business, specializing in such fields as accounting, economics, finance, insurance, marketing and management. Careers include various management positions in nearly every business and industry, such as sales, accountant, labor negotiator and business owner.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

*†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.

**YEAR I – Second Semester**

†ENC	1102	English Composition II.....	3 cr.
*†MAC	2233C	Calculus for Business and Social Science .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.
		†Humanities General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†SPC	1608	Public Speaking .....	3 cr.
		Biological Science General Education.....	3-4 cr.
†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.

**YEAR II – First Semester**

*†ACG	2021	Introduction to Financial Accounting.....	3 cr.
*†ECO	2013	Principles of Macroeconomics .....	3 cr.
*†STA	2023	Elementary Statistics.....	3 cr.
		Humanities General Education .....	3 cr.

**YEAR II – Second Semester**

*†ACG	2071	Managerial Accounting .....	3 cr.
*†ECO	2023	Principles of Microeconomics.....	3 cr.
†IDS	2891	Connections .....	1 cr.
		**Business Electives.....	4 cr.
		Physical Science General Education .....	3-4 cr.

**\*\*Select 4 credit hours of electives from the following. Elective hours are contingent on initial math sequence placement.**

†BUL	2241	Business Law I.....	3 cr.
†BUL	2242	Business Law II.....	3 cr.
†ENT	1000	Introduction to Entrepreneurship.....	3 cr.
†FIN	1100	Personal Finance.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
GEB	1949	Business Internship.....	3 cr.
†GEB	2214	Business Communications and Technology.....	3 cr.
†GEB	2350	Introduction to International Business Essentials.....	3 cr.
†MAN	2021	Principles of Management.....	3 cr.
MAN	2604	Intercultural Relations in Business.....	3 cr.
†MAR	2011	Principles of Marketing.....	3 cr.
†SBM	2000	Small Business Management.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Communication Pathway

### AA.COMM (60 credit hours)

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
COM	1000	Introduction to Communication.....	3 cr.
†MGF	1106	Topics in Mathematics, <i>or</i> †MGF 1107, Explorations in Mathematics <i>or</i> †STA 2023, Elementary Statistics.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.

#### YEAR I – Second Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.
		Foreign Language.....	4 cr.

#### YEAR I – Third Semester

†BSC	1005	Biological Foundations and BSC 1005L, Biological Foundations Laboratory <i>or</i> †BSC 1092, Human Biology <i>and</i> †BSC 1092L, Human Biology Laboratory.....	4 cr.
†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
†MGF	1106	Topics in Mathematics, <i>or</i> †MGF 1107, Explorations in Mathematics <i>or</i> †STA 2023, Elementary Statistics ( <b>if not previously taken</b> ).....	3 cr.
†SYG	2000	Introduction to Sociology.....	3 cr.

#### YEAR II – First Semester

†AST	1002C	Astronomy <i>or</i> †CHM 1020C, Chemistry and Society.....	3 cr.
†PHI	1100	Elementary Logic <i>or</i> PHI 1600, Ethics.....	3 cr.
SPC	2300	Interpersonal Communication.....	3 cr.
		Foreign Language II.....	4 cr.

#### YEAR II – Second Semester

†IDS	2891	Connections.....	1 cr.
†PSY	2012	General Psychology.....	3 cr.
		Humanities General Education CORE.....	3 cr.
		Elective.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Computer Information Systems Pathway

### AA.CIS (65 credit hours)

This pathway is for students who want to pursue a four-year degree in computer and information sciences and work in business or related fields. Careers include finance analysts, actuaries, statisticians, economists, and positions in designing, testing and implementing computer programs in various segments of business and industry, management, operations and business planning.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
*†MAC	2311	Calculus and Analytic Geometry .....	5 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.

#### YEAR I – Second Semester

†ENC	1102	English Composition II .....	3 cr.
*†MAC	2312	Calculus and Analytic Geometry II .....	5 cr.
*†PHY	2048	Physics w/Calculus I .....	4 cr.
*†PHY	2048L	Physics w/Calculus Laboratory I .....	1 cr.

#### YEAR I – Third Semester

*†COP	1000	Programming Logic .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
		Behavioral Science General Education CORE .....	3 cr.

#### YEAR II – First Semester

*†MAC	2313	Calculus and Analytic Geometry III .....	5 cr.
*†PHY	2049	Physics w/Calculus II .....	4 cr.
*†PHY	2049L	Physics w/Calculus II Laboratory .....	1 cr.
		Biological Sciences General Education .....	3 cr.
		†Humanities General Education CORE .....	3 cr.

#### YEAR II – Second Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†IDS	2891	Connections .....	1 cr.
		Humanities General Education .....	3 cr.
		Behavioral Science, History, Political Science, Economics .....	3 cr.
		**Elective .....	3 cr.

#### \*\*Select 3 credit hours from the following elective course options:

COP	1030	Introduction to Python Programming .....	3 cr.
COP	1220	Programming in C .....	3 cr.
COP	2800	Java Programming .....	3 cr.
COP	2224	Programming in C++ .....	3 cr.
COP	2360	Programming in C# .....	3 cr.
COP	2805C	Java Advanced .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Computer Science (Engineering) Pathway

### AA.COMP (72 credit hours)

This pathway is for students who want to pursue a four-year degree in computer and information engineering sciences. Careers are of a technical nature, including planning and developing new computer systems, computer programming, software development, systems analysis and technical writing.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
*†MAC	2311	Calculus and Analytic Geometry I .....	5 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.

#### YEAR I – Second Semester

*†CHM	2045	General Chemistry I .....	3 cr.
*†CHM	2045L	General Chemistry I Laboratory .....	1 cr.
†ENC	1102	English Composition II .....	3 cr.
*†MAC	2312	Calculus and Analytic Geometry II .....	5 cr.

#### YEAR I – Third Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
*†COP	1000	Programming Logic .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.

#### YEAR II – First Semester

*†MAC	2313	Calculus and Analytic Geometry III .....	5 cr.
*†PHY	2048	Physics w/Calculus I .....	4 cr.
*†PHY	2048L	Physics w/Calculus Laboratory I .....	1 cr.
		Behavioral Science/History/Economics General Education .....	3 cr.

#### YEAR II – Second Semester

*†MAP	2302	Differential Equations .....	3 cr.
*†PHY	2049	Physics w/Calculus II .....	4 cr.
*†PHY	2049L	Physics w/Calculus II Laboratory .....	1 cr.
		†Humanities General Education CORE .....	3 cr.

#### YEAR II – Third Semester

†IDS	2891	Connections .....	1 cr.
†SPC	1608	Public Speaking .....	3 cr.
		Biological Science General Education .....	3 cr.
		†Humanities General Education .....	3 cr.
		**Elective .....	3 cr.

#### \*\*Select 3 credit hours from the following elective course options:

COP	1030	Introduction to Python Programming .....	3 cr.
COP	1220	Programming in C .....	3 cr.
COP	2800	Java Programming .....	3 cr.
COP	2224	Programming in C++ .....	3 cr.
COP	2360	Programming in C# .....	3 cr.
COP	2805C	Java Advanced .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Criminology Pathway

### AA.CRIM (60 credit hours)

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†PSY	2012	General Psychology <i>OR</i> †SYG 2000, Introduction to Sociology .....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
		†Humanities General Education CORE .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

#### YEAR I – Second Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
		Biological Science General Education.....	3-4 cr.
		Humanities General Education .....	3 cr.
		Mathematics General Education .....	3 cr.

#### YEAR I – Third Semester

†SPC	1608	Public Speaking .....	3 cr.
		Behavioral Science/History/Economics General Education CORE .....	3 cr.

#### YEAR II – First Semester

†CCJ	1010	Introduction to Criminology <i>or</i> †CCJ 1020, Introduction to Criminal Justice.....	3 cr.
		Physical Science General Education .....	3-4 cr.
		Elective .....	3 cr.
		Elective .....	3 cr.
		Elective .....	3 cr.

#### YEAR II – Second Semester

†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†IDS	2891	Connections .....	1 cr.
		Elective .....	3 cr.
		Elective .....	3 cr.
		Elective .....	3 cr.

#### Suggested Electives:

Any HCC Criminology or Criminal Justice course with a CCJ, CJC, CJE, CJJ, or CJL prefix. See HCC Catalog or [Criminal Justice Majors](#)

†CCJ	1488	Ethics in Criminal Justice .....	3 cr.
†CCJ	2013	Introduction to Victimology .....	3 cr.
†CCJ	2111	Introduction to Theories of Criminal Behavior .....	3 cr.
†CCJ	2600	Criminal Deviant Behavior in Society .....	3 cr.
†CCJ	2610	Introduction to Criminal Typologies.....	3 cr.
†CCJ	2618	Forensic Psychology .....	3 cr.
†CCJ	2720	Introduction to Criminal Justice Research Methods.....	3 cr.
†CJE	1000	Introduction to Law Enforcement.....	3 cr.
†CJL	1062	Constitutional Law.....	3 cr.
†CJL	1100	Criminal Law .....	3 cr.
†CJL	1500	Introduction to the Court System.....	3 cr.
†CJL	2130	Criminal Evidence and Procedure.....	3 cr.

Common Course Prerequisites recommended by the state for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Cybersecurity Pathway

### AA.CYBER (60 credit hours)

This pathway is for students who want to pursue a four-year degree in computer and information technology security. Cybersecurity degrees lead to positions as a systems administrator, intelligence analyst, network engineer, information security manager, network security engineer, or information systems analyst.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
*†MAC	1147	Precalculus Algebra and Trigonometry .....	5 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.

#### YEAR I – Second Semester

*†CGS	1540	Database Management I .....	1 cr.
*†COP	1000	Programming Logic .....	3 cr.
†ENC	1102	English Composition II .....	3 cr.
*MAD	2104	Discrete Math .....	3 cr.
*†PHY	1020C	Conceptual Physics .....	3 cr.

#### YEAR I – Third Semester

†PSY	2012	General Psychology .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
*†STA	2023	.....	3 cr.

#### YEAR II – First Semester

†Biological Sciences General Education .....	3 cr.
†Biological Science Co-Requisite Lab .....	1 cr.
†Humanities General Education CORE .....	3 cr.
**Programming Fundamentals Elective .....	3 cr.
***Object Oriented Programming Elective .....	3 cr.

#### YEAR II – Second Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†ECO	2013	Principles of Macroeconomics .....	3 cr.
†IDS	2891	Connections .....	1 cr.
		Humanities General Education .....	3 cr.
		Elective .....	1 cr.

**\*\*Select 3 credit hours from the following Programming Fundamentals elective course options:**

COP	1030	Introduction to Python Programming .....	3 cr.
COP	1220	Programming in C .....	3 cr.
COP	2800	Java Programming .....	3 cr.
COP	2224	Programming in C++ .....	3 cr.
COP	2360	Programming in C# .....	3 cr.
COP	2805C	Java Advanced .....	3 cr.

**\*\*\*Select 3 credit hours from the following Object-Oriented Programming elective course options (must not be the same course as the Programming Fundamentals elective course option):**

COP	2805C	Java Advanced .....	3 cr.
COP	2224	Programming in C++ .....	3 cr.
COP	2360	Programming in C# .....	3 cr.
COP	2800	Java Programming .....	3 cr.
COP	1030	Introduction to Python Programming .....	3 cr.

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†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Dance Pathway

### AA.DAN (63 credit hours)

This pathway is for students who wish to pursue a four-year degree in dance or further their dance training at the university level or pursue a dance career. Dance courses are rigorous and demanding, but offer students opportunities for artistic explorations, creative thinking and individual growth. The associate in arts pathway in dance provides a comprehensive sequence of technique, choreography, repertory and analysis courses.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

*DAA	11XX	OR DAA 21XX, Modern Dance Technique (I-IV)	2 cr.
*DAA	12XX	OR DAA 22XX, Ballet Technique (I-IV)	2 cr.
DAA	1680L	Dance Ensemble	1 cr.
DAN	1600C	Music for Dance	2 cr.
†ENC	1101	English Composition I	3 cr.
		Mathematics CORE General Education	3 cr.

#### YEAR I – Second Semester

*DAA	11XX	OR DAA 21XX, Modern Dance Technique (I-IV)	2 cr.
*DAA	12XX	OR DAA 22XX, Ballet Technique (I-IV)	2 cr.
DAA	1610L	Dance Composition I	2 cr.
DAA	1680L	Dance Ensemble	1 cr.
†ENC	1102	English Composition II	3 cr.
		Mathematics General Education	3 cr.

#### YEAR I – Third Semester

†CGS	2100	Computer Information Technology and Literacy	3 cr.
†DAN	2100	Introduction to Dance	3 cr.
†SPC	1608	Public Speaking	3 cr.
		†Behavioral Science General Education CORE	3 cr.
		Physical Science General Education	3-4 cr.

#### YEAR II – First Semester

*DAA	11XX	OR DAA 21XX, Modern Dance Technique (I-IV)	2 cr.
*DAA	12XX	OR DAA 22XX, Ballet Technique (I-IV)	2 cr.
DAA	1680L	Dance Ensemble	1 cr.
DAA	2611	Dance Improvisation	2 cr.
DAN	1750	Dance Conditioning	2 cr.
		Biological Science General Education	3-4 cr.
		Behavioral Science/History/Economics General Education	3 cr.

#### YEAR II – Second Semester

†AMH	2020	Modern American History or †POS 2041, American Government	3 cr.
†ARH	1000	Understanding Visual Arts or †MUL 1010, Introduction to Music or †THE 1000, Introduction to Theatre Arts	3 cr.
*DAA	11XX	OR DAA 21XX, Modern Dance Technique (I-IV)	2 cr.
*DAA	12XX	OR DAA 22XX, Ballet Technique (I-IV)	2 cr.
DAA	1680L	Dance Ensemble	1 cr.
†IDS	2891	Connections	1 cr.
		**Dance Specified Elective	1 cr.

#### \*\*Select 1 specified dance elective from the following:

DAA	1900	Dance Practicum	1 cr.
DAA	1931-9	Special Topics in Dance	1 cr.
DAA	2500L	Jazz Dance	1 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.



## AA • Education/Teacher Preparation Pathway

### AA.EDU (60 credit hours)

This pathway is for students who want to pursue a four-year degree in education. **Students planning to become classroom teachers must have a standard high school diploma or a GED.**

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

*†EDF	1005	Introduction to the Teaching Profession .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.

#### YEAR I – Second Semester

*†EDF	2085	Introduction to Diversity for Educators .....	3 cr.
†ENC	1102	English Composition II .....	3 cr.
†MGF	1106	Topics in Mathematics .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.

#### YEAR I – Third Semester

		Behavioral Science/History/Economics General Education CORE .....	3 cr.
		†Humanities General Education CORE .....	3 cr.
		**International <i>or</i> Diversity Focused Elective .....	3 cr.

#### YEAR II – First Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†MGF	1107	Explorations in Mathematics .....	3 cr.
		Biological Science General Education .....	3-4 cr.
		**Electives .....	6 cr.

#### YEAR II – Second Semester

*†EME	2040	Introduction to Technology for Educators .....	3 cr.
†IDS	2891	Connections .....	3 cr.
		Humanities General Education .....	3 cr.
		Physical Science General Education .....	3-4 cr.
		**International <i>or</i> Diversity Focused Elective .....	3 cr.

**\*\*Select 6 credit hours from the following international or diversity focused courses:** (Any approved general education course previously listed, but not used to satisfy another general education requirement may be used to fulfill this area.)

†ANT	2000	Introduction to Anthropology .....	3 cr.
*†ANT	2410	Cultural Anthropology .....	3 cr.
†ARH	1000	Understanding Visual Art .....	3 cr.
†ARH	1050	Art History I .....	3 cr.
†ARH	1051	Art History II .....	3 cr.
†DAN	2100	Introduction to Dance .....	3 cr.
†HUM	2210	World Humanities: Prehistory to Early Modern Era .....	3 cr.
†HUM	2230	World Humanities: Early Modern to Contemporary .....	3 cr.
†HUM	2410	Asian Humanities .....	3 cr.
†HUM	2420	African Humanities .....	3 cr.
†HUM	2461	Latin-American Humanities .....	3 cr.
LAH	2020	Survey of Latin-American History .....	3 cr.
†MUL	1010	Introduction to Music .....	3 cr.
†PHI	1010	Introduction to Philosophy .....	3 cr.
†PHI	1100	Elementary Logic .....	3 cr.
†PHI	1600	Ethics .....	3 cr.
†PSY	2012	General Psychology .....	3 cr.
†REL	2300	Introduction to Religion .....	3 cr.
†SYG	2000	Introduction to Sociology .....	3 cr.

†THE 1000 Introduction to Theatre Arts..... 3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Engineering Pathway

### AA.ENG (60 credit hours)

This pathway is for students who want to pursue a four-year degree in electrical, mechanical, civil, computer science, aerospace, nuclear, agricultural, industrial and environmental engineering. Options in surveying and mapping and materials design and testing are also available. Careers include positions in the areas of design, testing, research, architecture, electronics, robotics, manufacturing, sales, construction management and technical writing.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

#### YEAR I – First Semester

†ENC 1101 English Composition I..... 3 cr.  
 \*†MAC 2311 Calculus and Analytic Geometry I..... 5 cr.  
 †SLS 1106 First Year Experience Orientation..... 3 cr.  
     †Behavioral Science General Education CORE..... 3 cr.  
     †Biological Science General Education..... 3 cr.

#### YEAR I – Second Semester

†CHM 2045 General Chemistry I..... 3 cr.  
 †CHM 2045L General Chemistry I Laboratory ..... 1 cr.  
 †ENC 1102 English Composition II..... 3 cr.  
 †MAC 2312 Calculus and Analytic Geometry II ..... 5 cr.

#### YEAR I – Third Semester

†AMH 2020 Modern American History *or* †POS 2041, American Government ..... 3 cr.  
     Behavioral Science/History/Economics General Education CORE ..... 3 cr.  
     †Humanities General Education CORE ..... 3 cr.

#### YEAR II – First Semester

†MAC 2313 Calculus and Analytic Geometry III..... 5 cr.  
 \*†PHY 2048 General Physics with Calculus I *and* †PHY 2048L, General Physics with  
     Calculus I Laboratory *or* †PHY 2053, General Physics I *and* †PHY 2053L, General  
     Physics I Laboratory ..... 4-5 cr.  
 †SPC 1608 Public Speaking ..... 3 cr.

#### YEAR II – Second Semester

†CGS 2100 Computer Information Technology and Literacy ..... 3 cr.  
 †IDS 2891 Connections ..... 1 cr.  
 †MAP 2302 Differential Equations..... 3 cr.  
 \*†PHY 2049 General Physics with Calculus II *and* †PHY 2049L, General Physics with  
     Calculus II Laboratory *or* PHY 2054, General Physics II *and* PHY 2054, General  
     Physics II Laboratory ..... 4-5 cr.  
     Humanities General Education ..... 3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Entrepreneurship Pathway

### AA.ENT (60 credit hours)

This pathway is for students interested in pursuing an entrepreneurship degree that is separate from the college of business. This experiential pathway provides students with the opportunity to engage in ideation, business and financial modeling, effectuation, rapid prototyping, and design thinking. Careers include 21<sup>st</sup> Century Management, entrepreneurship, and self-employment.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

*†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.

#### YEAR I – Second Semester

†ENC	1102	English Composition II .....	3 cr.
*†STA	2023	Elementary Statistics .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.
		†Humanities General Education CORE .....	3 cr.

#### YEAR I – Third Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
		Biological Science General Education .....	3-4 cr.

#### YEAR II – First Semester

*†ECO	2013	Principles of Macroeconomics .....	3 cr.
†ENT	1000	Introduction to Entrepreneurship .....	3 cr.
†ENT	1031	Entrepreneurial Marketing and Sales <i>or</i> †ENT 1411, Small Business Accounting and Finance <i>or</i> †ENT 1012 Entrepreneurship Management <i>or</i> †ENT 1612, Creativity, Innovation, and Human Centered Design .....	3 cr.
		Humanities General Education .....	3 cr.

#### YEAR II – Second Semester

*†ECO	2023	Principles of Microeconomics .....	3 cr.
†ENT	1031	Entrepreneurial Marketing and Sales <i>or</i> †ENT 1411, Small Business Accounting and Finance <i>or</i> †ENT 1012 Entrepreneurship Management <i>or</i> †ENT 1612, Creativity, Innovation, and Human Centered Design .....	6 cr.
†IDS	2891	Connections .....	1 cr.
		Physical Science .....	3-4 cr.
		General Elective .....	1 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Exercise Science Pathway

### AA.EXS (60 credit hours)

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†BSC	2085	Human Anatomy and Physiology I .....	3 cr.
†BSC	2085L	Human Anatomy and Physiology I Laboratory .....	1 cr.
†ENC	1101	English Composition I .....	3 cr.
†HSC	2100	Health Education .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.

**YEAR I – Second Semester**

†BSC	2086	Human Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
HLP	1081	Health Analysis .....	3 cr.
		PEM class.....	2 cr.
		†Humanities General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†PSY	2012	General Psychology .....	3 cr.
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**YEAR II – First Semester**

†CHM	2045	General Chemistry I.....	3 cr.
†CHM	2045L	General Chemistry I Laboratory .....	1 cr.
†ENC	1102	English Composition II.....	3 cr.
†HUN	2201	Human Nutrition .....	3 cr.
		Social Science/Behavioral Science General Education.....	3 cr.

**YEAR II – Second Semester**

†IDS	2891	Connections .....	1 cr.
HSC	2400	First Aid/CPR.....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.
†POS	2041	American Government .....	3 cr.
		Humanities General Education .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Finance Pathway****AA.FIN (60 credit hours)**

This pathway is for students who want to pursue a four-year degree in Finance, which includes careers in business and management in diverse organizations.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

**YEAR I – First Semester**

*†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
*†MAC	1105	College Algebra .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.

**YEAR I – Second Semester**

*†ECO	2013	Principles of Macroeconomics .....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
*†MAC	2233C	Calculus for Business and Social Science .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
		Biological Science General Education.....	3-4 cr.

**YEAR II – First Semester**

*†ACG	2021	Financial Accounting .....	3 cr.
*†ECO	2023	Principles of Microeconomics.....	3 cr.
*†STA	2023	Elementary Statistics.....	3 cr.
		†Humanities General Education CORE .....	3 cr.

**YEAR II – Second Semester**

*†ACG	2071	Managerial Accounting .....	3 cr.
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†IDS	2891	Connections .....	1 cr.
		Humanities General Education .....	3 cr.
		Physical Science General Education .....	3-4 cr.
		**Elective .....	3-4 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**\*\*Select electives from the following. Elective hours are contingent on initial math sequence placement.**

†BRC	1301	Introduction to Financial Institutions .....	3 cr.
†FIN	1100	Personal Finance.....	3 cr.
†FIN	2001	Principles of Finance.....	3 cr.
†FIN	2051	International Finance Management .....	3 cr.

## AA • Foreign Language Pathway

### AA.FORL (60 credit hours)

This pathway is designed to assist students who plan to transfer to a Florida public university as a junior to complete a four-year bachelors’ degree with a major or minor in a Foreign Language. The Foreign Language pathway builds competencies in listening, speaking, reading, writing and culture. Students begin at the elementary language level and continue to the intermediate level. This is normally a 4 semester sequence. Proficiency at the intermediate level is required to enter a bachelors’ degree program with a major or minor in a Foreign Language. In addition to the required language core courses, students will have the opportunity to choose elective interdisciplinary courses that further develop their cultural, social and historical knowledge. This broad interdisciplinary approach can lead to a variety of career paths, such as government and international affairs, business, journalism, service professions, education, criminal justice, social sciences and public health. Students who plan to transfer to a limited access program are responsible for completing the specific requirements of the institution to which they will transfer since **completion of this pathway does not guarantee admission to an upper division limited access program**. Students in this pathway must complete all required college-preparatory courses, prerequisites for the listed course requirements. Courses meeting the preceding requirements may be in addition to the 60 credit hours listed.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
		*Foreign Language I (FRE <i>or</i> GER <i>or</i> ITA <i>or</i> SPN).....	4 cr.
		†Humanities General Education CORE.....	3 cr.

#### YEAR I – Second Semester

†ENC	1102	English Composition II.....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.
		*Foreign Language II (FRE <i>or</i> GER <i>or</i> ITA <i>or</i> SPN).....	4 cr.
		Physical Science General Education .....	3-4 cr.

#### YEAR I – Third Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.
		Biological Science General Education.....	3-4 cr.

#### YEAR II – First Semester

†ANT	2410	Cultural Anthropology.....	3 cr.
†LIN	1670	English Grammar and Usage.....	3 cr.
†HUM	2210	World Humanities: Prehistoric to Early Modern Era <i>or</i> †HUM 2230, World Humanities: Early Modern to Contemporary <i>or</i> †HUM 2461, Latin American Humanities .....	3 cr.
		*Foreign Language III FRE <i>or</i> GER <i>or</i> ITA <i>or</i> SPN <b>not previously taken</b> ) .....	4 cr.

#### YEAR II – Second Semester

†EUH	2000	The Western World: Origins to Early Modern Europe <i>or</i> †EUH 2001, The Western	
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		World: Modern Europe <b>or</b> LAH 2020, Survey of Latin American History.....	3 cr.
†IDS	2891	Connections .....	1 cr.
†SPC	1608	Public Speaking .....	3 cr.
†SYG	2012	Introduction to Globalization.....	3 cr.
		*Foreign Language IV (FRE <i>or</i> GER <i>or</i> ITA <i>or</i> SPN <b>not previously taken</b> ).....	4 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Graphic Design Pathway

### AA.GRA (60 credit hours)

This pathway is for students who wish to pursue a four-year degree in graphic arts or commercial arts. Careers include creating graphics for newspapers, television, Web pages, magazines or any media format.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

#### YEAR I – First Semester

*†ART	1201C	Visual Studies Foundations I.....	3 cr.
*†ART	1300C	Drawing I.....	3 cr.
†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
		Mathematics General Education CORE.....	3 cr.

#### YEAR I – Second Semester

†ARH	1050	Art History I <i>or</i> †ARH 1051, Art History II.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
*†PGY	2401C	Photography I.....	3 cr.
		†Humanities General Education CORE.....	3 cr.

#### YEAR I – Third Semester

†SPC	1608	Public Speaking.....	3 cr.
		†Behavioral Science General Education CORE.....	3 cr.
		Biological Science General Education.....	3 cr.
		Mathematics General Education.....	3 cr.

#### YEAR II – First Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government.....	3 cr.
*†GRA	2111C	Graphic Design.....	3 cr.
†PGY	2801C	Digital Photography I.....	3 cr.
		Physical Science General Education.....	3 cr.

#### YEAR II – Second Semester

†ART	2600C	Digital Art.....	3 cr.
*GRA	2156C	Digital Illustration <i>or</i> GRA 2206C, Introduction to Typography.....	3 cr.
†IDH	2891	Connections .....	1 cr.
		Behavioral Science/History/Economics General Education CORE.....	3 cr.
		Humanities General Education .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Geology Pathway

### AA.GEO (60 credit hours)

This pathway is for students who want to pursue a four-year degree in Earth Sciences.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
SLS	1106	First Year Experience Orientation.....	3 cr.
HUM	1020	Introduction to Humanities.....	3 cr.
MAC	1105	College Algebra.....	3 cr.

#### YEAR I – Second Semester

ECO	2013	Principles of Macroeconomics.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
GLY	2010	Physical Geology.....	3 cr.
GLY	2010L	Physical Geology Laboratory.....	1 cr.
MAC	1147	Pre-Calculus Algebra and Trigonometry.....	5 cr.

#### YEAR I – Third Semester

MAC	2311	Calculus and Analytic Geometry.....	5 cr.
PHI	1600	Ethics.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.

#### YEAR II – First Semester

†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
CHM	2045	General Chemistry I.....	3 cr.
CHM	2045L	General Chemistry I Laboratory.....	1 cr.
EVR	1001C	Intro to Environmental Science.....	3 cr.
†PSY	2012	General Psychology.....	3 cr.

#### YEAR II – Second Semester

CHM	2046	General Chemistry II.....	3 cr.
CHM	2046L	General Chemistry II Laboratory.....	1 cr.
†IDS	2891	Connections.....	1 cr.
MET	2010C	Meteorology.....	3 cr.
POS	2041	American Government.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • History Pathway

### AA.HIS (60 credit hours)

This pathway is for students who want to pursue a four-year college/university degree in such fields as history, humanities, education, pre-law, political science, museum studies, journalism, library science, archeology/classics or international studies programs. This pathway is broadly designed to allow students to cater the major to their own interests, however, students are encouraged to meet with a full-time history faculty member to discuss their program interests in their first semester at HCC.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†AMH	2020	Modern American History.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
		†Humanities General Education CORE.....	3 cr.
		Mathematics General Education CORE.....	3 cr.

**YEAR I – Second Semester**

*†AMH 2010	Early American History <i>or</i> †EUH 2000, Western World: Origins to Early Modern Europe <i>or</i> †EUH 2001, Western World: Modern Europe <i>or</i> LAH 2020, Latin-American History .....	3 cr.
†ENC 1102	English Composition II.....	3 cr.
†SPC 1608	Public Speaking .....	3 cr.
	Mathematics General Education .....	3 cr.

**YEAR I – Third Semester**

*†AMH 2010	Early American History <i>or</i> †EUH 2000, Western World: Origins to Early Modern Europe <i>or</i> †EUH 2001, Western World: Modern Europe <i>or</i> LAH 2020, Latin-American History General Education ( <b>not previously taken</b> ).....	3 cr.
	**Elective .....	3 cr.
	Humanities General Education .....	3 cr.

**YEAR II – First Semester**

*†AMH 2010	Early American History <i>or</i> †EUH 2000, Western World: Origins to Early Modern Europe <i>or</i> †EUH 2001, Western World: Modern Europe <i>or</i> LAH 2020, Latin-American History ( <b>not previously taken</b> ) .....	3 cr.
	†Behavioral Science General Education CORE .....	3 cr.
	Biological Science General Education.....	3-4 cr.
	**Elective .....	3 cr.

**YEAR II – Second Semester**

*†AMH 2010	Early American History <i>or</i> †EUH 2000, Western World: Origins to Early Modern Europe <i>or</i> †EUH 2001, Western World: Modern Europe <i>or</i> LAH 2020, Latin-American **History General Education ( <b>not previously taken</b> ) .....	3 cr.
†CGS 2100	Computer Information Technology and Literacy .....	3 cr.
†IDS 2891	Connections .....	1 cr.
	Physical Science General Education .....	3-4 cr.
	**Electives.....	6 cr.

**\*\*Select 12 credit hours from the following not previously taken:**

AMH 2051	U.S. Military History.....	3 cr.
AMH 2090	History of Women in the United States.....	3 cr.
†ANT 2000	Introduction to Anthropology.....	3 cr.
†ARH 1000	Understanding Visual Art.....	3 cr.
†ARH 1050	Art History I.....	3 cr.
†ARH 1051	Art History II .....	3 cr.
†ECO 2013	Principles of Macroeconomics .....	3 cr.
†HUM 2210	World Humanities: Pre-Historic to Early Modern.....	3 cr.
†HUM 2230	World Humanities: Early Modern to Contemporary .....	3 cr.
†HUM 2410	Asian Humanities.....	3 cr.
†HUM 2420	African Humanities.....	3 cr.
†HUM 2461	Latin-American Humanities .....	3 cr.
†PHI 1010	Introduction to Philosophy .....	3 cr.
†PHI 1600	Ethics.....	3 cr.
†POS 1001	Introduction to Political Science.....	3 cr.
†POS 2041	American Government .....	3 cr.
†SYG 2000	Introduction to Sociology.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.



## AA • Hospitality Administration Management Pathway

### AA.HOS.ADMIN.MGMT (60 credit hours)

This pathway is for students who want to pursue a four-year degree in hospitality administration management. It allows a student the ability to complete the 36 hours of general education while meeting the common prerequisite requirements for university admission into the hospitality administration program.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

*†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
		†Humanities General Education CORE .....	3 cr.

#### YEAR I – Second Semester

†ENC	1102	English Composition II .....	3 cr.
*†HFT	1000	Introduction to Hospitality Industry Management .....	3 cr.
*†MAC	2233C	Calculus for Business and Social Science .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.

#### YEAR I – Third Semester

*†ECO	2013	Principles of Macroeconomics .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
*†STA	2023	Elementary Statistics .....	3 cr.
		Biological Science General Education .....	3-4 cr.

#### YEAR II – First Semester

*†ACG	2021	Introduction to Financial Accounting .....	3 cr.
*†ECO	2023	Principals of Microeconomics .....	3 cr.
		Humanities General Education .....	3 cr.
		Physical Science General Education .....	3-4 cr.

#### YEAR II – Second Semester

*†ACG	2071	Managerial Accounting .....	3 cr.
†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†IDS	2891	Connections .....	1 cr.
		Hospitality Administration Management Related Elective .....	6 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Humanities Pathway

### AA.HUM (60 credit hours)

This pathway is for students who want to pursue a four-year degree in Humanities.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ENC	1101	English Composition I .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.
		Biological Science General Education .....	3-4 cr.
		Mathematics General Education CORE .....	3 cr.

#### YEAR I – Second Semester

†ENC	1102	English Composition II .....	3 cr.
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†HUM 1020	Introduction to Humanities .....	3 cr.
	Mathematics General Education .....	3 cr.
	Physical Science General Education .....	3 cr.

**YEAR I – Third Semester**

**Humanities Electives .....	9 cr.
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**YEAR II – First Semester**

†AMH 2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†EUH 2000	The Western World: Origins to Early Modern Europe .....	3 cr.
†HUM 2210	World Humanities: Prehistory to Early Modern Era <i>or</i> †HUM 2230, World Humanities: Early Modern to Contemporary .....	3 cr.
**Humanities Electives .....	3 cr.	

**YEAR II – Second Semester**

†CGS 2100	Computer Information Technology and Literacy .....	3 cr.
†IDS 2891	Connections .....	1 cr.
†SPC 1608	Public Speaking .....	3 cr.
**Humanities Electives .....	9 cr.	

**\*\*Select 21 credit hours of humanities courses from the following if not previously taken:**

†ARH 1000	Understanding Visual Art.....	3 cr.
†DAN 2100	Introduction to Dance.....	3 cr.
HUM 1020	Introduction to Humanities .....	3 cr.
†HUM 2210	World Humanities: Prehistory to Early Modern Era.....	3 cr.
†HUM 2230	World Humanities: Early Modern to Contemporary .....	3 cr.
†HUM 2410	Asian Humanities.....	3 cr.
†HUM 2420	African Humanities.....	3 cr.
†HUM 2461	Latin-American Humanities .....	3 cr.
†LIT 2000	Introduction to Literature .....	3 cr.
†MUL 1010	Introduction to Music .....	3 cr.
†PHI 1100	Elementary Logic .....	3 cr.
†PHI 1600	Ethics.....	3 cr.
†REL 2300	Introduction to Religion.....	3 cr.
†THE 1000	Introduction to Theatre Arts.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Information Technology Pathway

### AA.IT (60 credit hours)

This pathway is for students who want to pursue a four-year degree in databases, networking, and web systems to meet the technological needs of business and industry.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. Consult an academic advisor with questions related to pathways and course planning.**

**YEAR I – First Semester**

†CGS 1000	Introduction to Computers and Technology .....	3 cr.
†ENC 1101	English Composition I.....	3 cr.
*†MAC 1147	Precalculus Algebra and Trigonometry .....	5 cr.
†SLS 1106	First Year Experience Orientation.....	3 cr.

**YEAR I – Second Semester**

*†CGS 1540	Database Management I.....	1 cr.
*†COP 1000	Programming Logic .....	3 cr.
†ENC 1102	English Composition II.....	3 cr.
*MAD 2104	Discrete Math.....	3 cr.
*†PHY 1020C	Conceptual Physics .....	3 cr.

**YEAR I – Third Semester**

†PSY	2012	General Psychology .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
*†STA	2023	.....	3 cr.

**YEAR II – First Semester**

†Biological Sciences General Education .....	3 cr.
†Biological Science Co-Requisite Lab .....	1 cr.
†Humanities General Education CORE .....	3 cr.
**Programming Fundamentals Elective .....	3 cr.
***Object Oriented Programming Elective.....	3 cr.

**YEAR II – Second Semester**

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†ECO	2013	Principles of Macroeconomics .....	3 cr.
†IDS	2891	Connections .....	1 cr.
		Humanities General Education .....	3 cr.
		Elective .....	1 cr.

**\*\*Select 3 credit hours from the following Programming Fundamentals elective course options:**

COP	1030	Introduction to Python Programming.....	3 cr.
COP	1220	Programming in C.....	3 cr.
COP	2800	Java Programming .....	3 cr.
COP	2224	Programming in C++ .....	3 cr.
COP	2360	Programming in C# .....	3 cr.
COP	2805C	Java Advanced.....	3 cr.

**\*\*\*Select 3 credit hours from the following Object-Oriented Programming elective course options (must not be the same course as the Programming Fundamentals elective course option):**

COP	2805C	Java Advanced.....	3 cr.
COP	2224	Programming in C++ .....	3 cr.
COP	2360	Programming in C# .....	3 cr.
COP	2800	Java Programming .....	3 cr.
COP	1030	Introduction to Python Programming.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Liberal Arts and Sciences Pathway****AA.LA (60 credit hours)**

This pathway is for students who want to pursue a four-year degree in liberal arts or a variety of fields. Depending upon the focus of study, careers are available in such fields as linguistics, criminal justice, history, ethnic studies, foreign language, social sciences, journalism and computer science.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
		Mathematics General Education CORE .....	3 cr.
		Electives.....	3 cr.

**YEAR I – Second Semester**

†ENC	1102	English Composition II.....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
		Behavioral Science/History/Economics General Education .....	3 cr.
		Mathematics General Education .....	3 cr.
		Electives.....	3 cr.

**YEAR I – Third Semester**

Electives..... 9 cr.

**YEAR II – First Semester**

†Behavioral Science General Education CORE ..... 3 cr.  
 Biological Science General Education..... 3-4 cr.  
 Electives..... 3 cr.  
 †Humanities General Education CORE ..... 3 cr.

**YEAR II – Second Semester**

†CGS 2100 Computer Information Technology and Literacy ..... 3 cr.  
 †IDS 2891 Connections ..... 1 cr.  
 Humanities General Education ..... 3 cr.  
 Physical Science General Education ..... 3-4 cr.  
 Electives..... 6 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Marketing Pathway**

**AA.MKT (60 credit hours)**

This pathway is for students who want to pursue a four-year degree in Marketing, which includes careers that are focused upon attracting and retaining customers in public and private sectors.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

\*†CGS 2100 Computer Information Technology and Literacy ..... 3 cr.  
 †ENC 1101 English Composition I ..... 3 cr.  
 \*†MAC 1105 College Algebra ..... 3 cr.  
 †SLS 1106 First Year Experience Orientation ..... 3 cr.

**YEAR I – Second Semester**

\*†ECO 2013 Principles of Macroeconomics ..... 3 cr.  
 †ENC 1102 English Composition II..... 3 cr.  
 \*†MAC 2233C Calculus for Business and Social Science ..... 3 cr.  
 †Behavioral Science General Education CORE ..... 3 cr.

**YEAR I – Third Semester**

†AMH 2020 Modern American History *or* †POS 2041, American Government ..... 3 cr.  
 †SPC 1608 Public Speaking ..... 3 cr.  
 Biological Science General Education..... 3-4 cr.

**YEAR II – First Semester**

\*†ACG 2021 Financial Accounting ..... 3 cr.  
 \*†ECO 2023 Principles of Microeconomics..... 3 cr.  
 \*†STA 2023 Elementary Statistics..... 3 cr.  
 †Humanities General Education CORE ..... 3 cr.

**YEAR II – Second Semester**

\*†ACG 2071 Managerial Accounting ..... 3 cr.  
 †IDS 2891 Connections ..... 1 cr.  
 Humanities General Education ..... 3 cr.  
 Physical Science General Education ..... 3-4 cr.  
 \*\*Elective ..... 3-4 cr.

**\*\*Select electives from the following. Elective hours are contingent on initial math sequence placement.**

†ENT 1031 Entrepreneurial Marketing and Sales..... 3 cr.  
 †MAR 2011 Principles of Marketing ..... 3 cr.  
 MAR 2150 International Marketing ..... 3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Mass Communication Pathway

### AA.MMC (60 credit hours)

This pathway is for students who want to pursue a four-year degree in mass communications, journalism, advertising, public relations, education and telecommunications. Careers include writing for various media, broadcasting, corporate communications, spokesperson for governmental agencies, various jobs such as copy writing within the advertising and public relations fields, video and audio-visual production and sales and political lobbyist.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†MMC	2000	Introduction to Mass Communications.....	3 cr.
†PHI	1100	Elementary Logic .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

#### YEAR I – Second Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
JOU	1400L	Journalism Lab.....	1 cr.
MMC	2100C	Writing for Mass Communications.....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.

#### YEAR I – Third Semester

†ECO	2013	Principles of Macroeconomics.....	3 cr.
†POS	2112	State and Local Government.....	3 cr.
PUR	2003	Introduction to Public Relations.....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.

#### YEAR II – First Semester

†ANT	2000	Introduction to Anthropology <i>or</i> †SYG 2000, Introduction to Sociology .....	3 cr.
JOU	1400L	Journalism Lab.....	1 cr.
JOU	2100C	Journalistic Writing and Reporting.....	3 cr.
		Biological Science General Education.....	3 - 4 cr.
		†Humanities General Education CORE .....	3 cr.

#### YEAR II – Second Semester

†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†IDS	2891	Connections .....	1 cr.
ENC	2341C	Magazine Writing and Design.....	3 cr.
JOU	1949	Journalism Internship.....	3 cr.
		Physical Science General Education .....	3 - 4 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Math: Education/Teacher Preparation Pathway

### AA.MATH.EDU (60 credit hours)

This pathway is for students who want to pursue a four-year degree in mathematics education. **Students planning to become classroom teachers must have a standard high school diploma or a GED.**

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
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†ENC	1101	English Composition I.....	3 cr.
*†MAC	2311	Calculus and Analytical Geometry I.....	5 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.

**YEAR I – Second Semester**

*†EDF	1005	Introduction to the Teaching Profession.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
*†MAC	2312	Calculus and Analytic Geometry II.....	5 cr.
		Biological Science General Education.....	3-4 cr.

**YEAR I – Third Semester**

		Behavioral Science/History/Economics General Education CORE.....	3 cr.
		†Humanities General Education CORE.....	3 cr.
		Physical Science General Education.....	3-4 cr.

**YEAR II – First Semester**

*†EME	2040	Introduction to Technology for Educators.....	3 cr.
		†Behavioral Science General Education CORE.....	3 cr.
		**Elective.....	3 cr.
		Humanities General Education.....	3 cr.

**YEAR II – Second Semester**

†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
*†EDF	2085	Introduction to Diversity for Educators.....	3 cr.
†IDS	2891	Connections.....	1 cr.
*†MAC	2313	Calculus and Analytic Geometry III.....	5 cr.
		**Elective.....	3 cr.

**\*\*Select 6 credit hours from the following international or diversity focused courses:**

(Any approved general education course previously listed, but not used to satisfy another general education requirement may be used to fulfill this area.)

†ANT	2000	Introduction to Anthropology.....	3 cr.
*†ANT	2410	Cultural Anthropology.....	3 cr.
†ARH	1000	Understanding Visual Art.....	3 cr.
†ARH	1050	Art History I.....	3 cr.
†ARH	1051	Art History II.....	3 cr.
†DAN	2100	Introduction to Dance.....	3 cr.
†HUM	2210	World Humanities: Prehistory to Early Modern Era.....	3 cr.
†HUM	2230	World Humanities: Early Modern to Contemporary.....	3 cr.
†HUM	2410	Asian Humanities.....	3 cr.
†HUM	2420	African Humanities.....	3 cr.
†HUM	2461	Latin-American Humanities.....	3 cr.
LAH	2020	Survey of Latin-American History.....	3 cr.
†MUL	1010	Introduction to Music.....	3 cr.
†PHI	1010	Introduction to Philosophy.....	3 cr.
†PHI	1100	Elementary Logic.....	3 cr.
†PHI	1600	Ethics.....	3 cr.
†PSY	2012	General Psychology.....	3 cr.
†REL	2300	Introduction to Religion.....	3 cr.
†SYG	2000	Introduction to Sociology.....	3 cr.
THE	1000	Introduction to Theatre Arts.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Mathematics Pathway

### AA.MATH (60 credit hours)

This pathway is for students who want to pursue a four-year degree in Mathematics.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†AMH 2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†ENC 1101	English Composition I .....	3 cr.
*†MAC 1140	Pre-Calculus Algebra .....	3 cr.
†SLS 1106	First Year Experience Orientation .....	3 cr.
†SPC 1608	Public Speaking .....	3 cr.

#### YEAR I – Second Semester

†ENC 1102	English Composition II .....	3 cr.
†MAC 1114	Trigonometry .....	3 cr.
	*Physical Science General Education .....	3-4 cr.
	†Humanities General Education CORE .....	3 cr.

#### YEAR I – Third Semester

†CGS 1000	Introduction to Computers & Technology .....	3 cr.
*†MAC 2311	Calculus and Analytical Geometry I .....	5 cr.
	**Biological Science General Education .....	3-4 cr.

#### YEAR II – First Semester

*††COP 1000	Programming Logic .....	3 cr.
*†MAC 2312	Calculus and Analytic Geometry II .....	5 cr.
	†Behavioral Science General Education CORE .....	3 cr.
	Humanities General Education .....	3 cr.

#### YEAR II – Second Semester

†IDS 2891	Connections .....	1 cr.
*†MAC 2313	Calculus and Analytic Geometry III .....	5 cr.
*†MAP 2302	Differential Equations .....	3 cr.
	Behavioral Science/History/Economics CORE .....	3 cr.
	Elective .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

†COP 1000 requires CGS 1000 as a prerequisite. If CGS 1000 is completed, it will satisfy the computer proficiency requirement; therefore, the student will not need to take CGS 2100 in addition to CGS 1000.

## AA • Medical Sciences: Dental, Medical and Veterinary Pathway

### AA.DENT, AA.MED, AA.VET (60 credit hours)

This pathway is for students who want to pursue a four-year degree and/or professional programs in these fields. Depending upon the chosen degree, careers include dentist, physician, chiropractor, pharmacist, veterinarian and teacher, plus a variety of other jobs in related fields such as physical or occupational therapist, researcher and salesperson.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†BSC 2010	Biological Science I .....	3 cr.
†BSC 2010L	Biological Science I Laboratory .....	1 cr.
*†CHM 2045	General Chemistry I .....	3 cr.
*†CHM 2045L	General Chemistry I Laboratory .....	1 cr.
†ENC 1101	English Composition I .....	3 cr.
†MAC 1105	College Algebra .....	3 cr.
†SLS 1106	First Year Experience Orientation .....	3 cr.

**YEAR I – Second Semester**

†ENC	1102	English Composition II.....	3 cr.
†MAC	1147	Pre-Calculus Algebra and Trigonometry <i>or</i> †MAC 1114, Trigonometry <i>and</i> †MAC 1140, Pre-calculus Algebra.....	5-6 cr.
		†Humanities General Education CORE .....	3 cr.
		Behavioral Science/History/Economics General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†BSC	2011	Biological Science II.....	3 cr.
†BSC	2011L	Biological Science II Lab.....	1 cr.
*†CHM	2046	General Chemistry II.....	3 cr.
*†CHM	2046L	General Chemistry II Laboratory .....	1 cr.

**YEAR II – First Semester**

†CHM	2210	Organic Chemistry I.....	4 cr.
CHM	2210L	Organic Chemistry I Laboratory .....	1 cr.
*†PHY	2053	General Physics I.....	3 cr.
*†PHY	2053L	General Physics I Lab .....	1 cr.
†STA	2023	Elementary Statistics.....	3 cr.

**YEAR II – Second Semester**

†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†IDS	2891	Connections .....	1 cr.
†PHY	2054	General Physics II.....	3 cr.
†PHY	2054L	General Physics II Lab .....	1 cr.
†SPC	1608	Public Speaking .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.
		Humanities General Education .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Music Pathway****AA.MUSIC (65 credit hours)**

This pathway is for students who want to pursue a four-year degree in music, music education, therapy, publishing, or music history. Careers include performing, composing, teaching, music therapy, music critic, booking agent, concert manager, publishing, sales, music storeowner, instrument repair, and audio or sound technician.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

†MUS 1010 is required of all students enrolled in applied music courses.

**Music majors must demonstrate piano proficiency by exam. If proficiency is lacking, the student must take class piano, MVK 1111 (A & B).**

**YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
†MUL	1010	Introduction to Music .....	3 cr.
MUN	XXXX	Performance .....	1 cr.
†MUS	1010	Recital Attendance .....	0 cr.
†MUT	1111	Music Theory I.....	3 cr.
†MUT	1241L	Sight Singing and Ear Training I.....	1 cr.
MV_		Applied Music .....	2 cr.

**YEAR I – Second Semester**

†ENC	1102	English Composition II.....	3 cr.
MUN	XXXX	Performance .....	1 cr.
†MUS	1010	Recital Attendance .....	0 cr.
†MUT	1112	Music Theory II .....	3 cr.
†MUT	1242L	Sight Singing and Ear Training II.....	1 cr.



MV_	Applied Music .....	2 cr.
	Mathematics General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
		†Behavioral Science General Education CORE .....	3 cr.
		Biological Science General Education.....	3-4 cr.

**YEAR II – First Semester**

MUN	XXXX	Performance .....	1 cr.
†MUS	1010	Recital Attendance .....	0 cr.
†MUT	2116	Music Theory III .....	3 cr.
†MUT	2246L	Sight Singing and Ear Training III .....	1 cr.
MV_		Applied Music .....	2 cr.
		Humanities General Education .....	3 cr.
		Mathematics General Education .....	3 cr.

**YEAR II – Second Semester**

†IDS	2891	Connections .....	1 cr.
MUN	XXXX	Performance .....	1 cr.
†MUS	1010	Recital Attendance .....	0 cr.
†MUT	2117	Music Theory IV .....	3 cr.
†MUT	2247L	Sight Singing and Ear Training IV .....	1 cr.
MV_		Applied Music .....	2 cr.
		Behavioral Science/History/Economics General Education CORE .....	3 cr.
		Physical Science General Education .....	3-4 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Pharmacy Pathway****AA.PHAR (66 credit hours)**

This pathway is for students who want to pursue a degree in pharmacy.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

†ENC	1101	English Composition I .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
		†Humanities General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†ENC	1102	English Composition II .....	3 cr.
†MAC	1147	Pre-Calculus Algebra and Trigonometry .....	5 cr.
		†Behavioral Science General Education CORE .....	3 cr.

**YEAR I – Third Semester**

*†BSC	2010	Biological Science I .....	3 cr.
*†BSC	2010L	Biological Science I Laboratory .....	1 cr.
*†CHM	2045	General Chemistry I .....	3 cr.
*†CHM	2045L	General Chemistry I Laboratory .....	1 cr.

**YEAR II – First Semester**

*†BSC	2011	Biological Science II .....	3 cr.
*†BSC	2011L	Biological Science II Laboratory .....	1 cr.
†CGS	2100	Computer Information Technology and Literacy .....	3 cr.

*†CHM 2046	General Chemistry II.....	3 cr.
*†CHM 2046L	General Chemistry II Laboratory .....	1 cr.
†MAC 2311	Calculus and Analytic Geometry .....	5 cr.
	Behavioral Science/History/Economics General Education CORE .....	3 cr.

**YEAR II – Second Semester**

*†BSC 2085	Human Anatomy and Physiology I.....	3 cr.
*†BSC 2085L	Human Anatomy and Physiology I Laboratory .....	1 cr.
*†CHM 2210	Organic Chemistry I.....	4 cr.
*CHM 2210L	Organic Chemistry I Laboratory .....	1 cr.
*†PHY 2053	General Physics I.....	3 cr.
*†PHY 2053L	General Physics I Laboratory.....	1 cr.

**YEAR II – Third Semester**

*†BSC 2086	Human Anatomy and Physiology II.....	3 cr.
*†BSC 2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
†CHM 2211	Organic Chemistry II .....	4 cr.
CHM 2211L	Organic Chemistry II Laboratory .....	1 cr.
†IDS 2891	Connections .....	1 cr.
†PHY 2054	General Physics II.....	3 cr.
†PHY 2054L	General Physics II Laboratory .....	1 cr.
	Humanities General Education .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Philosophy Pathway****AA.PHI (60 credit hours)**

This pathway is for students who want to pursue a four-year degree in Philosophy.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

†ENC 1101	English Composition I.....	3 cr.
*†PHI 1010	Introduction to Philosophy .....	3 cr.
†SLS 1106	First Year Experience Orientation .....	3 cr.
	Mathematics General Education CORE .....	3 cr.
	Physical Science General Education .....	3-4 cr.

**YEAR I – Second Semester**

†ENC 1102	English Composition II.....	3 cr.
*†PHI 1600	Ethics.....	3 cr.
	Biological Science General Education.....	3-4 cr.
	Mathematics General Education .....	3 cr.

**YEAR I – Third Semester**

†HUM 2230	World Humanities: Early Modern to the Contemporary.....	3 cr.
*†PHI 1100	Elementary Logic .....	3 cr.
	†Behavioral Science General Education CORE .....	3 cr.
	Behavioral Science/History/Economics CORE.....	3 cr.

**YEAR II – First Semester**

†AMH 2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†CGS 2100	Computer Information Technology and Literacy .....	3 cr.
†SPC 1608	Public Speaking .....	3 cr.
	**Elective .....	6 cr.

**YEAR II – Second Semester**

†IDS 2891	Connections .....	1 cr.
	**Electives.....	12 cr.

**\*\*Select 18 credit hours from the following:**

†ARH	1000	Understanding Visual Art.....	3 cr.
†DAN	2100	Introduction to Dance.....	3 cr.
†HUM	2210	World Humanities: Prehistory to Early Modern Era.....	3 cr.
†HUM	2410	Asian Humanities.....	3 cr.
†HUM	2420	African Humanities.....	3 cr.
†HUM	2461	Latin-American Humanities.....	3 cr.
†LIT	2000	Introduction to Literature.....	3 cr.
†MUL	1010	Introduction to Music.....	3 cr.
†REL	2300	Introduction to Religion.....	3 cr.
THE	1000	Introduction to Theatre Arts.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Political Science Pathway

### AA.POS (60 credit hours)

This pathway is for students who want to pursue a four-year college/university degree in such fields as history, pre-law, political science, or international studies programs. The program is broadly designed to allow students to cater the major to their own interests; however, it is recommended that students meet with a full-time political science faculty member to discuss their program interests in their first semester at HCC.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

#### YEAR I – First Semester

†AMH	2010	Early American History.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†POS	1001	Introduction to Political Science.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
		Mathematics General Education CORE.....	3 cr.

#### YEAR I – Second Semester

†ENC	1102	English Composition II.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.
*†POS	2041	American Government.....	3 cr.
		Mathematics General Education.....	3 cr.

#### YEAR I – Third Semester

†PHI	1010	Introduction to Philosophy.....	3 cr.
†SYG	2000	Introduction to Sociology.....	3 cr.
		Physical Science General Education.....	3-4 cr.
		**Electives.....	3 cr.

#### YEAR II – First Semester

†AMH	2020	Modern American History.....	3 cr.
†PHI	1100	Elementary Logic.....	3 cr.
†POS	2112	State and Local Government.....	3 cr.
		Biological Science General Education.....	3 cr.

#### YEAR II – Second Semester

†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
†IDS	2891	Connections.....	1 cr.
†EUH	2000	The Western World: Origins to Early Modern Europe <i>or</i> †EUH 2001, The Western World: Modern Europe <i>or</i> LAH 2020, Survey of Latin American History.....	3 cr.
		**Electives.....	6 cr.

**\*\*Select 9 credit hours from the following:**

AMH	2090	History of Women in the United States.....	3 cr.
†ECO	2013	Principles of Macroeconomics.....	3 cr.

†HUM	2210	World Humanities: Pre-History to Early Modern .....	3 cr.
†HUM	2230	World Humanities: Early Modern to Contemporary .....	3 cr.
†HUM	2410	Asian Humanities.....	3 cr.
†HUM	2420	African Humanities.....	3 cr.
†HUM	2461	Latin-American Humanities .....	3 cr.
†PHI	1600	Ethics.....	3 cr.
†REL	2300	Introduction to Religion .....	3 cr.
†SPC	2300	Interpersonal Communication .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Psychology Pathway

### AA.PSY (60 credit hours)

This pathway is for students who want to pursue a four-year degree in Psychology.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†CLP	1000	Psychology of Personal Growth.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

#### YEAR I – Second Semester

†ANT	2000	Introduction to Anthropology.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
*†PSY	2012	General Psychology .....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.
		Behavioral Science/History/Economics General Education .....	3 cr.

#### YEAR I – Third Semester

†DEP	1004	Development Psychology of the Life Span.....	3 cr.
†EDP	2002	Educational Psychology .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.

#### YEAR II – First Semester

†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†DEP	2102	Child Development.....	3 cr.
†SYG	2000	Introduction to Sociology.....	3 cr.
		†Humanities General Education CORE .....	3 cr.
		Physical Science General Education .....	3-4 cr.

#### YEAR II – Second Semester

*†CLP	2140	Abnormal Psychology .....	3 cr.
†IDS	2891	Connections .....	3 cr.
		*Biological Science General Education (BSC prefix).....	3-4 cr.
		Humanities General Education .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Public Health Pathway

### AA.PUBLIC.HLTH (60 credit hours)

This pathway is for students who want to pursue a four-year degree in Public Health.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†HSC	2100	Health Education.....	3 cr.
PHC	2100	Introduction to Public Health.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
		Mathematics General Education CORE.....	3 cr.

#### YEAR I – Second Semester

†ENC	1102	English Composition II.....	3 cr.
†HSC	1531	Medical Terminology.....	3 cr.
†HSC	2130	Sex, Health and Decision Making.....	3 cr.
		Biological Science General Education CORE.....	3-4 cr.
		†Humanities General Education CORE.....	3 cr.

#### YEAR I – Third Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government.....	3 cr.
†PSY	2012	General Psychology.....	3 cr.

#### YEAR II – First Semester

†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
HSC	2017	Careers in Public Health.....	3 cr.
PHC	2321	Environmental Concepts in Public Health.....	3 cr.
*†STA	2023	Elementary Statistics.....	3 cr.

#### YEAR II – Second Semester

†HSA	2117	Health Care Delivery.....	3 cr.
†PHC	2040	Foundations in Epidemiology.....	3 cr.
†PHI	1600	Ethics.....	3 cr.
		Physical Science General Education.....	3-4 cr.

#### YEAR II – Third Semester

†IDS	2891	Connections.....	1 cr.
†SPC	1608	Public Speaking.....	3 cr.
		Behavioral Science/History/Economics General Education.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Religious Studies Pathway

### AA.REL (60 credit hours)

This pathway is for students who want to pursue a four-year degree in religion or religious studies. The broad nature of this pathway allows it to be appropriate for future studies in liberal arts programs, philosophy and other humanities-directed disciplines.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†HUM	1020	Introduction to Humanities.....	3 cr.
*†REL	2300	Introduction to Religion.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
		Mathematics General Education CORE.....	3 cr.

**YEAR I – Second Semester**

†ANT	2000	Introduction to Anthropology <i>OR</i> †SYG 2000, Introduction to Sociology.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
		†Humanities General Education CORE.....	3 cr.
		Mathematics General Education.....	3 cr.

**YEAR I – Third Semester**

†EUH	2000	The Western World: Origins to Early Modern Europe.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.
		Biological Science General Education.....	3-4 cr.

**YEAR II – First Semester**

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government.....	3 cr.
*REL	1210	Old Testament Survey.....	3 cr.
		** Electives.....	6 cr.
		Physical Science General Education.....	3-4 cr.

**YEAR II – Second Semester**

†CGS	2100	Computer Information Technology and Literacy.....	3 cr.
†IDS	2891	Connections.....	1 cr.
†PHI	1600	Ethics.....	3 cr.
*†REL	1240	New Testament Survey.....	3 cr.
		**Humanities Electives.....	3 cr.

**\*\*Select 9 credit hours from the following humanities courses if not previously taken:**

†ARH	1000	Understanding Visual Art.....	3 cr.
†DAN	2100	Introduction to Dance.....	3 cr.
†HUM	2210	World Humanities: Prehistory to Early Modern Era.....	3 cr.
†HUM	2230	World Humanities: Early Modern to Contemporary.....	3 cr.
†HUM	2410	Asian Humanities.....	3 cr.
†HUM	2420	African Humanities.....	3 cr.
†HUM	2461	Latin-American Humanities.....	3 cr.
†LIT	2000	Introduction to Literature.....	3 cr.
†MUL	1010	Introduction to Music.....	3 cr.
†PHI	1010	Introduction to Philosophy.....	3 cr.
†PHI	1100	Elementary Logic.....	3 cr.
THE	1000	Introduction to Theatre Arts.....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AA • Sociology Pathway**

**AA.SYG (60 credit hours)**

This pathway is for students who want to pursue a four-year degree in sociology.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
†SLS	1106	First Year Experience Orientation.....	3 cr.
		Biological Science General Education with lab.....	4 cr.
		†Humanities General Education CORE.....	3 cr.

**YEAR I – Second Semester**

†ENC	1102	English Composition II.....	3 cr.
†MGF	1106	Topics in Mathematics.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.
*†SYG	2000	Introduction to Sociology.....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government.....	3 cr.
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†ANT	2000	Introduction to Anthropology <i>or</i> †PSY 2010, General Psychology .....	3 cr.
†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.

**YEAR II – First Semester**

†CHM	1020C	Chemistry and Society .....	3 cr.
†HUM	2210	World Humanities: Prehistory to Early Modern.....	3 cr.
†PHI	1600	Ethics <i>or</i> †REL 2300, Introduction to Religion.....	3 cr.
*†SYG	2010	Social Problems.....	3 cr.

**YEAR II – Second Semester**

†IDS	2891	Connections .....	3 cr.
†POS	1001	Introduction to Political Science <i>or</i> †EUH 2000, The Western World: Origins to Early Modern Europe .....	3 cr.
*†SYG	2012	Introduction to Globalization <i>or</i> *†SYG 2430, Marriage and Family.....	3 cr.
		**Elective .....	3 cr.

**\*\*Select 3 credit hours from the following elective course options:**

AFA	1001	Introduction to Black Culture.....	3 cr.
†ANT	2000	Introduction to Anthropology.....	3 cr.
†BSC	1025C	Nutrition and Drugs .....	3 cr.
†CCJ	1010	Introduction to Criminology .....	3 cr.
†HUM	2230	World Humanities: Early Modern to the Contemporary.....	3 cr.
†HUM	2410	Asian Humanities.....	3 cr.
†HUM	2420	African Humanities.....	3 cr.
†HUM	2461	Latin-American Humanities .....	3 cr.
MAN	2604	Intercultural Relations in Business.....	3 cr.
†MUL	1010	Introduction to Music .....	3 cr.
†PHI	1010	Introduction to Philosophy .....	3 cr.
†PHI	1600	Ethics.....	3 cr.
†PSY	2012	General Psychology .....	3 cr.
†REL	2300	Introduction to Religion .....	3 cr.
SOP	1740	Feminine Psychology.....	3 cr.
†SYG	2430	Marriage and Family .....	3 cr.
SYG	2930	Selected Topics in Sociology .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked by an asterisk (\*).

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Statistics Pathway

### AA.STA (60 credit hours)

This pathway is for students who want to pursue a four-year degree in Statistics.

Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.

**YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
*†MAC	1140	Pre-Calculus Algebra.....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
*†STA	2023	Elementary Statistics.....	3 cr.

**YEAR I – Second Semester**

†BSC	2010	Biological Science I and †BSC 2010L, Biological Science I Laboratory <i>or</i> †BSC 2085, Human Anatomy and Physiology I and †BSC 2085L, Human Anatomy and Physiology I Laboratory .....	4 cr.
†ENC	1102	English Composition II.....	3 cr.
†MAC	1114	Trigonometry .....	3 cr.
		†Humanities General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†CGS 1000	Introduction to Computers & Technology.....	3 cr.
†CHM 2045	General Chemistry I and †CHM 2045L, General Chemistry I Laboratory <b>or</b> †PHY 2053, General Physics I and †PHY 2053L, General Physics I Laboratory .....	4 cr.
*†MAC 2311	Calculus and Analytical Geometry I.....	5 cr.
	†Behavioral Science General Education CORE .....	3 cr.

**YEAR II – First Semester**

†AMH 2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
*†COP 1000	Programming Logic .....	3 cr.
*†MAC 2312	Calculus and Analytic Geometry II .....	5 cr.
	Behavioral Science/History/Economics General Education CORE .....	3 cr.

**YEAR II – Second Semester**

†IDS 2891	Connections .....	1 cr.
*†MAC 2313	Calculus and Analytic Geometry III.....	5 cr.
†MAP 2302	Differential Equations.....	3 cr.
	Humanities General Education .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

‡COP 1000 requires CGS 1000 as a prerequisite. If CGS 1000 is completed, it will satisfy the computer proficiency requirement; therefore, the student will not need to take CGS 2100 in addition to CGS 1000.

**AA • Supply Chain Management Pathway****AA.SCM (60 credit hours)**

This pathway is for students who want to pursue a four-year degree in the supply chain industry, which functions to facilitate the flow of goods, services, and finances among business on a global scale. Careers include positions in manufacturing, distribution, transportation, and retail.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement, and for most of the pathways, SLS 1106 is required for first-time-in-college students. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

**YEAR I – First Semester**

*†CGS 2100	Computer Information Technology and Literacy .....	3 cr.
†ENC 1101	English Composition I.....	3 cr.
*†MAC 1105	College Algebra .....	3 cr.
†SLS 1106	First Year Experience Orientation .....	3 cr.

**YEAR I – Second Semester**

*†ECO 2013	Principles of Macroeconomics .....	3 cr.
†ENC 1102	English Composition II.....	3 cr.
*†MAC 2233C	Calculus for Business and Social Science .....	3 cr.
	†Behavioral Science General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†AMH 2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†SPC 1608	Public Speaking .....	3 cr.
	Biological Science General Education.....	3-4 cr.

**YEAR II – First Semester**

*†ACG 2021	Financial Accounting.....	3 cr.
*†ECO 2023	Principles of Microeconomics.....	3 cr.
*†STA 2023	Elementary Statistics.....	3 cr.
	†Humanities General Education CORE .....	3 cr.

**YEAR II – Second Semester**

*†ACG 2071	Managerial Accounting .....	3 cr.
†IDS 2891	Connections .....	1 cr.
	Humanities General Education .....	3 cr.
	Physical Science General Education .....	3-4 cr.
	Elective(s) .....	3-4 cr.



**\*\*Select electives from the following. Elective hours are contingent on initial math sequence placement.**

†MAN	2500	Operations Management .....	3 cr.
†SCM	1010	Introduction to Supply Chain Management .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AA • Theatre Pathway

### AA.THE (60 credit hours)

This pathway is for students who wish to pursue a four-year degree in drama or theatre. This program provides a foundation in acting, technical design, back stage work and production. Additional careers include directing, writing and teaching.

**Please note only 60 of these credits are needed for AA degree completion. For each pathway, IDS 2891 is a degree requirement. CGS 2100 may be able to be tested out for no credit. Consult an academic advisor with questions related to pathways and course planning.**

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
*†THE	1000	Introduction to Theatre Arts.....	3 cr.
*TPP	1110	Acting I.....	3 cr.
		Mathematics General Education CORE.....	3 cr.4

#### YEAR I – Second Semester

*TPA	1200	Stagecraft.....	3 cr.
*TPP	1111	Acting II.....	3 cr.
*TPP	1160	Voice and Movement Techniques.....	3 cr.
		Mathematics General Education .....	3 cr.

#### YEAR I – Third Semester

		Biological Science General Education.....	3-4 cr.
		Humanities General Education (performing or visual arts related).....	3 cr.
		Physical Science General Education .....	3-4 cr.

#### YEAR II – First Semester

†ENC	1102	English Composition II.....	3 cr.
TPA	1248	Makeup for the Stage.....	3 cr.
*TPA	1290	Performance Workshop.....	3 cr.
		Behavioral Science/History/Economics General Education CORE.....	3 cr.

#### YEAR II – Second Semester

†AMH	2020	Modern American History <i>or</i> †POS 2041, American Government .....	3 cr.
†IDS	2891	Connections .....	1 cr.
*THE	1304	Script Analysis.....	3 cr.
		†Behavioral Science General Education CORE.....	3 cr.
		Humanities Elective (performing or visual arts related) .....	3 cr.

Common Course Prerequisites recommended by the State for successful transfer to the university are marked with an asterisk (\*).

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## Associate in Science Degree

Hillsborough Community College will award an associate in science (AS) degree if students complete a minimum of 60 credit hours in a curriculum designed to prepare students for employment. If students are interested in a specialized college program to prepare them for a job in business or industry, one of these degrees may be the right choice. If students decide to get a four-year degree, they may be able to transfer some or all of the courses taken here to a senior institution. Public universities in Florida now accept seven AS degrees to transfer to programs in their institutions. The AS degrees in this articulation agreement are Hospitality and Tourism Management, Computer Engineering, Electronics Engineering Technology, Nursing, Business Administration, Radiography and Criminal Justice Technology.

Other AS degrees may be transferred to a variety of four-year colleges and universities under individual agreements. For more information on current articulation agreements, consult an academic advisor or visit our website at <https://www.hccfl.edu/academics/articulation-agreements>.

### General Education Requirements for the AS Degree

**NOTE:** Prior to the award of an Associate in Science degree, students must complete at least (1) general education core course from each of the general education subject area listed below.

#### Communications/Humanities: 6 credits required:

- ENC 1101 and a general education core Humanities course.

#### Mathematics/Natural Science: 6 credits required:

- A general education core Mathematics course and a general education core Natural Science course.

#### Social Science: 3 credits required

- A general education core Social Science course.

**NOTE:** Students within an AS degree program must earn a grade of "C" or better in each applicable course in order to fulfill the college's general education requirements. A grade of "D" in a general education course can only be applied as elective credit.

General education courses are listed in the General Education section of this catalog. Consult an [advisor](#) or [counselor](#) for specific program requirements or consult the appropriate advising guide on the HCC website (<https://www.hccfl.edu/support-services/academic-advising/hawkgps>).

#### Terms/Definitions:

##### College Credit Certificate (CCC)

College credit programs are offered for those who seek to learn new skills or to refresh or upgrade their present skills.

##### Advanced Technical Certificate (ATC)

This short-term certificate provides students with advanced training above the associate in science degree.

##### Applied Technology Diploma (ATD)

The ATD is a college-credit certificate, job preparatory program.

##### Postsecondary Adult Vocational (PSAV) Certificate

The PSAV Certificate is a non-college-credit job preparatory program.

#### Occupational Programs Associate in Science Degrees

Accounting Technology  
 Aquaculture  
 Architectural Design/Construction Technology  
 Biotechnology Laboratory Technology  
 Business Administration  
 Business Intelligence Specialist  
 Cardiac Catheterization  
 Clinical Research Professional  
 Computer Engineering Technology  
 Computer Information Administrator  
 Computer Programming  
 Counseling and Human Services  
 Criminology and Criminal Justice Studies  
 Culinary and Dietetic Management  
 Culinary Management  
 Cybersecurity  
 Cybersecurity Operations  
 Database Technology  
 Dental Hygiene  
 Diagnostic Medical Sonography Technology  
 Digital Media/Multimedia Technology  
 Early Childhood Education  
 Echocardiography  
 Electronics Engineering Technology  
 Emergency Medical Services  
 Engineering Technology  
 Environmental Science Technology  
 Fire Science Technology  
 Health Navigator  
 Hospitality and Tourism Management  
 Industrial Management Technology  
 Interdisciplinary Entrepreneurship

Internet Services Technology  
 IT Project Management  
 Invasive Cardiovascular Technology  
 Medical Laboratory Science  
 Network Systems Technology  
 Nuclear Medicine Technology  
 Nursing  
 Office Administration  
 Opticianry  
 Paralegal Studies (Legal Assisting)  
 Radiation Therapy  
 Radio and Television Broadcast Programming  
 Radiography  
 Respiratory Care  
 Restaurant Management  
 Supply Chain Management  
 Surgical Technology  
 Veterinary Technology

### College Credit Certificates

Accounting Technology Management  
 Accounting Technology Operations  
 Accounting Technology Specialist  
 Advanced Network Infrastructure  
 Aquaculture Technology  
 AutoCAD Foundations  
 Automation  
 Biotechnology Specialist  
 Broadcast Production  
 Business Intelligence Professional  
 Business Management  
 Business Operations  
 Business Specialist  
 Chef's Apprentice  
 Clinical Research Coordinator  
 CNC Machinist  
 Computer Programming  
 Computer Programming Specialist  
 Crime Scene  
 Criminal Justice Technology Specialist  
 Culinary Arts  
 Database Administrator  
 Digital Forensics  
 Digital Media/Multimedia Instructional Technology  
 Digital Media/Multimedia Production  
 Digital Media/Multimedia Video Production  
 Digital Media/Multimedia Web Production  
 Drafting  
 Early Childhood Education: Administrator  
 Early Childhood Education: Preschool  
 Electronics Technician  
 Emergency Medical Technician

Engineering Technology Support Specialist  
 Entrepreneurship and Innovation  
 Entrepreneurship Strategies  
 Entrepreneurship Ventures  
 Event Planning Management  
 Fire Officer Supervisor  
 Food and Beverage Management  
 Food and Beverage Operations  
 Game Authoring  
 Graphic Design Production  
 Health Navigator Specialist  
 Healthcare Support Specialist  
 Help Desk Support Technician  
 Home Staging Specialist  
 Homeland Security Specialist  
 Human Resource Management  
 Internet Services Technology - Web Development  
 Specialist - Designer  
 Internet Services Technology - Web Development  
 Specialist - Developer  
 Laser and Photonics Technician  
 Lean Manufacturing  
 Logistics and Transportation Specialist  
 Mechatronics  
 Medical Information Coder - Medical Coder  
 Medical Office Administration  
 Medical Office Management  
 Microcomputer Repairer/Installer  
 Motion Picture Production Management  
 Network Enterprise Administration  
 Network Infrastructure  
 Network Security/Cybersecurity  
 Network Server Administration  
 Network Support Technician  
 Office Management  
 Office Specialist  
 Office Support  
 Ophthalmic Lab Technician  
 Paramedic  
 Pneumatics, Hydraulics and Motors  
 Project Manager Associate  
 Real Estate Paralegal  
 Robotics and Simulation  
 Sustainable Design  
 Technology Project Manager  
 Water Quality Technician

### Advanced Technical Certificates

Computed Tomography Advanced Imaging  
 Magnetic Resonance Imaging (MRI)  
 Medical Laboratory Science  
 Paralegal/Legal Assisting

Visual Assessment

**Postsecondary Adult Vocational  
Certificates**

Automotive Collision Technology Technician

Automotive Service Technology

Auxiliary Law Enforcement Officer

Bail Bonding

Bus Transit Technician

Correctional Officer

Cross-Over Correctional Officer to Law Enforcement  
Officer

Cross-Over Correctional Probation Officer to Law  
Enforcement Officer

Diesel Systems Technician

Dental Assisting

Firefighter

Heavy Equipment Service Technician

Law Enforcement

Private Investigator Intern

Welding Technology

Welding Technology - Advanced

# Health Sciences

## General Information

HCC offers associate degrees in the following health sciences areas: Cardiac Catheterization, Clinical Research Professional, Counseling and Human Services; Dental Hygiene; Diagnostic Medical Sonography Technology; Echocardiography, Emergency Medical Services; Health Navigator, Medical Laboratory Science, Nuclear Medicine Technology; Nursing; Opticianry; Radiation Therapy; Radiography; Respiratory Care and Surgical Technology. In addition to the degree programs, the College offers college credit certificate programs in Clinical Research Coordinator, Emergency Medical Technician, Health Navigator Specialist, Ophthalmic Laboratory Technician, Paramedic, and Visual Assessment; advanced technical certificates in Computed Tomography Advanced Imaging, Magnetic Resonance Imaging (MRI), and Medical Laboratory Science; and an advanced technical diploma in Dental Assisting. The college credit certificate programs are one-year programs for individuals who are pre-certified or licensed in a health science profession. Most health sciences and nursing programs are limited access programs with competitive application procedures because of the limited number of clinical placements the College has available for students to gain practical experience.

For more information about health science program admissions, contact the student services office at the Dale Mabry Campus at (813) 253-7364 or at <https://www.hccfl.edu/academics/subjects/health-and-medical/health-sciences-admissions>

**Hillsborough Community College and its health science programs reserve the right to make changes in the regulations, offerings; prerequisites, requirements and any provision announced in this catalog at any time, as circumstances require.**

**Students who hold prior degrees and are taking preparatory coursework necessary for enrollment in an eligible program are eligible for loans for one consecutive 12-month period.**

## AS • Cardiac Catheterization (Invasive Cardiovascular Technology)

### AS.CARD.TECH.INV (77 Credit Hours)

Cardiac Catheterization Technologists works alongside physicians to diagnose and treat diseases of the heart and blood vessels using X-ray imaging. These technologists are imaging specialists who also train to act as surgical assistants and circulators during cardiac and vascular catheterization procedures.

A Cardiac Catheterization Technologist’s duties include assessment and care of the patient during the invasive procedure, surgically scrubbing to assist the physician, administration of medication under the physician’s supervision, controlling procedural instruments and imaging technologies, and documenting/recording the procedural activities. These specialists are trained in invasive diagnostic cardiac and vascular catheterization procedures, cardiac and vascular invasive interventions, emergency cardiac care, structural heart repair, and invasive cardiac electrophysiology.

**CAREER OPPORTUNITIES:** A Cardiac Catheterization Technologist most commonly work at large healthcare institutions in cardiovascular catheterization and cardiac electrophysiology labs. Cardiac Catheterization Technologists are trained in pediatric and adult catheterization procedures and can work in labs that specialize in specific heart and vascular conditions.

**Math and Science prerequisite courses must be completed within seven (7) years of the program’s admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

#### Prerequisite Courses Required for Application

†BSC	2085	Human Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Human Anatomy and Physiology I Laboratory .....	1 cr.
†BSC	2086	Human Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra.....	3 cr.
†PSY	2012	Introduction to Psychology.....	3 cr.

#### Program Required Courses

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
*CVT	1001	Introduction to Invasive Cardiovascular Technology .....	3 cr.
PHY	1020C	Conceptual Physics .....	3 cr.
		Humanities General Education CORE .....	3 cr.

#### YEAR I – First Semester

CVT	1800L	Invasive Cardiovascular Techniques I .....	3 cr.
CVT	1220	Cardiovascular Pharmacology .....	3 cr.
CVT	1260	Cardiopulmonary Anatomy and Physiology .....	3 cr.
CVT	2511	Radiation Biology and Safety .....	3 cr.

**YEAR I – Second Semester**

CVT	1801L	Invasive Cardiovascular Techniques II .....	4 cr.
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**YEAR I – Third Semester**

CVT	2420C	Invasive Cardiology I .....	6 cr.
CVT	2805C	Cardiovascular Interventional Pre-Practicum.....	3 cr.
CVT	2660C	Non-Invasive Cardiology.....	2 cr.
CVT	2110L	Invasive Cardiovascular Clinical II.....	3 cr.

**YEAR II – First Semester**

CVT	2845L	Invasive Cardiovascular Clinical III .....	4 cr.
CVT	2421C	Invasive Cardiovascular II.....	6 cr.
CVT	2211	Critical Care Applications.....	2 cr.

**YEAR II – Second Semester**

CVT	2846L	Invasive Cardiovascular Clinical IV .....	4 cr.
CVT	2921	Cardiovascular Technologist as a Profession .....	2 cr.

\*CVT 1001 must be successfully completed prior to start of the program.

**AS • Clinical Research Professional****AS.CLIN.RES (60 Credit Hours)**

The clinical research professional's primary role is to monitor clinical trials. The clinical research programs at HCC will build fundamental skills in adherence to IRB guidelines; safety for clinical research participants; coordination of clinical treatment and study visits; screening, recruitment and enrollment of study participants and clinical trial compliance with Federal and State regulatory laws. Those with clinical research professional training can expect to work in biological, pharmaceutical or social and behavioral clinical research settings.

**Program Required Courses****YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
†HSC	1531	Medical Terminology.....	3 cr.
†HSC	2732	Fundamentals of Clinical Research.....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.

**YEAR I – Second Semester**

†BSC	1005	Biological Foundations .....	3 cr.
†BSC	1005L	Biological Foundations Lab.....	1 cr.
†HIM	1442	Pharmacology.....	2 cr.
†HSC	2733	Fundamentals of Clinical Research II.....	3 cr.
†PHI	1010	Introduction to Philosophy.....	3 cr.

**YEAR I – Third Semester**

†HSC	2100	Health Education.....	3 cr.
†SYG	2000	Introduction to Sociology.....	3 cr.

**YEAR II – First Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†HSC	2739	Business of Clinical Research.....	3 cr.
†HSC	2734	Regulatory Affairs Clinical Research.....	3 cr.
†HSC	2660	Health Communications .....	3 cr.

**YEAR II – Second Semester**

†HSA	2322	Health Insurance .....	3 cr.
†HSC	2669	Prevention and Community Health .....	3 cr.
†HSC	2738	Quality Assurance Clinical Research.....	3 cr.
		*Elective.....	3 cr.

**YEAR II – Third Semester**

†HSC	2819	Clinical Research Practicum .....	3 cr.
		*Elective.....	3 cr.

**\*Select 6 credit hours from the following:**

†HSA	2010	Issues and Trends in Public Health .....	3 cr.
†HSC	2130	Sex, Health and Decision Making .....	3 cr.
†HSC	2721	Accessing and Analyzing Health Information .....	3 cr.
†PHC	2040	Foundations in Epidemiology .....	3 cr.
PHC	2321	Environmental Concepts in Public Health.....	3 cr.

**CCC • Clinical Research Coordinator****CCC.CLIN.RES (30 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†HIM	1442	Pharmacology .....	2 cr.
†HIM	1453	Anatomy & Physiology for Medical Coding <i>or</i> †BSC 2085, Human Anatomy and Physiology I <i>and</i> †BSC 2085L, Human Anatomy and Physiology I Laboratory.....	4 cr.
†HSC	2732	Fundamentals of Clinical Research I .....	3 cr.
†HSC	2739	Business of Clinical Research.....	3 cr.

**YEAR I – Second Semester**

†HSC	2100	Health Education.....	3 cr.
†HSC	2733	Fundamentals of Clinical Research II .....	3 cr.
†HSC	2738	Quality Assurance in Clinical Research .....	3 cr.
		*Elective.....	3 cr.

**YEAR I – Third Semester**

†HSC	2819	Clinical Research Practicum .....	3 cr.
		*Elective.....	3 cr.

**\*Select 6 credit hours from the following:**

†HSA	2010	Issues and Trends in Public Health .....	3 cr.
†HSA	2117	Health Care Delivery .....	3 cr.
†HSC	2734	Regulatory Affairs Clinical Research.....	3 cr.
HSC	2400	First Aid.....	3 cr.
†HSC	2561	Care for an Aging Population.....	3 cr.
†HSC	2669	Prevention & Community Health.....	3 cr.
†HSC	2721	Accessing/ Analyzing Health Information .....	3 cr.

**AS • Counseling and Human Services****AS.HUS (60 Credit Hours)**

This program prepares the student to work in the fields of counseling, social work, human services, and rehabilitation. Counseling and human services practitioners may, under supervision, provide individual and group counseling, lead workshops, provide training in daily living skills, assist with vocational planning, organize group activities, provide case management services, and complete records and reports. Further, they may act as mediators between clients and service agencies, direct clients to appropriate community facilities, and represent their clients before local service providers and government agencies.

Counseling and human services professionals serve clients of all ages and backgrounds in hospitals, halfway houses, detoxification and drug treatment centers, mental health clinics, residential facilities, outpatient programs, nursing homes, adult and adolescent criminal justice facilities, adoption agencies and schools. The counseling and human service practitioner usually functions as a member of a treatment team comprised of professionals from many disciplines, in order to provide effective and comprehensive care for individuals in need.

The class work in this program includes courses in counseling theory and applied therapeutic techniques, crisis intervention, psychology, sociology, human development, family therapy, substance use disorders, group counseling, multicultural issues, professionalism and ethics.

Supervised internships in community facilities and programs are a major component of the program. Students learn to translate theory into actual practice under the guidance of highly trained and experienced faculty members and community professionals. This “hands-on” experience helps the graduate of this program to easily find employment in the profession.

The Counseling and Human Services program is primarily an evening program in order to accommodate students who are working during the day. The curriculum provides a strong foundation for securing employment and for pursuing advanced studies. Many of the graduates of the program continue their studies to earn their bachelors and Masters degrees, often while employed in the profession.

The Counseling and Human Services program is accredited by the Council for Standards in Human Service Education (CSHSE), 3337 Duke Street, Alexandria, VA 22314, (571) 257-3959, [www.cshse.org](http://www.cshse.org).

**NOTE 1: The Counseling and Human Services program is an open enrollment program. Courses are not required to be taken in any particular order.**

**NOTE 2:** The program has transfer agreements for graduates who want to pursue their bachelor's degree at the following institutions: University of South Florida, Saint Leo University, and Indian River State College.

### Program Required Courses

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†HUS	1001	Introduction to Human Services.....	3 cr.
†HUS	1111	Interpersonal Skills in Human Services.....	3 cr.
†PSY	2012	General Psychology or †SYG 2000, Introduction to Sociology.....	3 cr.

#### YEAR I – Second Semester

†HUS	1024	Abnormal Behavior: Etiology and Treatment.....	3 cr.
†HUS	1200	Introduction to Group Process.....	3 cr.
†HUS	1406	Etiology and Treatment of Substance Use Disorders.....	3 cr.

#### YEAR I – Third Semester

†HUS	1540	Principles for Understanding and Working with Families.....	3 cr.
HUS	1820	Human Services Practicum I.....	2 cr.
		Humanities General Education CORE.....	3 cr.
		Mathematics General Education CORE (STA 2023 Recommended).....	3 cr.

#### YEAR II – First Semester

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
†GEY	1000	Issues of Aging.....	3 cr.
HUS	2821	Human Services Practicum II.....	3 cr.
†HUS	1550	Multicultural Perspective in Human Services.....	3 cr.
		Natural Science General Education CORE.....	4 cr.

#### YEAR II – Second Semester

†HUS	1320	Crisis Intervention.....	3 cr.
†HUS	2008	Psychotherapy: Theory and Practice.....	3 cr.
†HUS	2311	Strategies of Behavior Modification.....	3 cr.
HUS	2822	Human Services Practicum III.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Dental Hygiene

### AS.DENT (88 Credit Hours)

The Dental Hygiene Program leads to an associate in science degree and provides students with the skills and knowledge needed to complete national and state or regional board examinations to become licensed dental hygienists. A dental hygienist is a vital member of the dental team who performs dental procedures that include administration of local anesthesia, scaling, polishing and root planing procedures, exposing and processing radiographs, fluoride and dental sealant applications, and oral hygiene education. The graduate dental hygienist also becomes certified to perform expanded duties that are permitted by Florida Statute Title XXXII for dental auxiliaries. The dental hygiene curriculum includes five consecutive semesters of courses and requires a time commitment of 35-40 hours weekly. The program is offered on the Dale Mabry Campus only.

The Dental Hygiene program is accredited by the Commission on Dental Accreditation, 211 E. Chicago Avenue, Chicago, IL 60611, (312) 440-2500, <https://www.eatrightpro.org/acend/accreditation-standards-fees-and-policies/2017-standards>.

**NOTE:** Graduates must pass both the National Dental Hygiene Board examination and the Florida Dental Hygiene Board examination to become a registered dental hygienist.

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

### Prerequisite Courses Required for Admission

†BSC	2085	Human Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Human Anatomy and Physiology I Laboratory.....	1 cr.
†BSC	2086	Human Anatomy and Physiology II.....	3 cr.



†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
†CHM	1032	Chemistry for Health Sciences.....	3 cr.
†CHM	1032L	Chemistry for Health Sciences Laboratory .....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra <i>or</i> †MGF 1106 Topics in Mathematics .....	3 cr.
†MCB	2000	Microbiology and Human Disease .....	3 cr.
†MCB	2000L	Microbiology and Human Disease Laboratory.....	1 cr.

### Program Required Courses

#### YEAR I – First Semester

DEH	1002	Dental Hygiene Instrumentation .....	1 cr.
DEH	1002L	Dental Hygiene Instrumentation Laboratory .....	2 cr.
DEH	1720	Preventive Dentistry .....	1 cr.
DES	1020C	Oral, Head, and Neck Anatomy.....	2 cr.
DES	1200	Dental Radiology.....	2 cr.
DES	1200L	Dental Radiology Laboratory .....	1 cr.
DES	1800	Introduction to Clinical Procedures.....	2 cr.
DES	1800L	Introduction to Clinical Procedures Laboratory .....	1 cr.
**†HUN	2201	Fundamentals of Human Nutrition.....	3 cr.

#### YEAR I – Second Semester

†DEH	1130	Oral Embryology and Histology .....	1 cr.
DEH	1800C	Clinical Dental Hygiene I.....	3 cr.
†DEH	2400	General and Oral Pathology .....	2 cr.
†DEH	2602	Periodontology .....	2 cr.
†DES	1600	Dental Office Emergencies.....	1 cr.
DES	2051	Pain Control in Dentistry .....	2 cr.
†DES	2051L	Pain Control in Dentistry Laboratory.....	1 cr.

#### YEAR I – Third Semester

†DEH	1802C	Clinical Dental Hygiene II.....	2 cr.
†DES	1100	Dental Materials .....	2 cr.
†DES	1100L	Dental Materials Laboratory .....	1 cr.
†DES	1830C	Expanded Duties for Dental Hygienists.....	2 cr.
		*Humanities General Education CORE.....	3 cr.

#### YEAR II – First Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
DEH	2300	Pharmacology and Oral Medicine .....	3 cr.
DEH	2702	Community Dental Health.....	2 cr.
DEH	2804C	Clinical Dental Hygiene III .....	3 cr.
DEH	2809	Advanced Clinical Procedures .....	1 cr.
*†SPC	1608	Public Speaking .....	3 cr.

#### YEAR II – Second Semester

†DEH	1811	Dental Ethics, Jurisprudence .....	1 cr.
†DEH	2604	Periodontology II .....	1 cr.
†DEH	2702L	Community Dental Health Practicum.....	1 cr.
†DEH	2806C	Clinical Dental Hygiene IV .....	4 cr.
†DES	2502	Office Management.....	1 cr.
*†PSY	2012	General Psychology .....	3 cr.
*†SYG	2000	Introduction to Sociology.....	3 cr.

\* **NOTE:** May be taken in advance or after admission to the dental hygiene program and must be completed with a grade of “C” or higher prior to graduation.

\*\***NOTE:** HUN 2201 must be taken in the fall or spring term of the student’s first year.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Diagnostic Medical Sonography Technology

### AS.SON (77 Credit Hours)

Sonography is a medical specialty, which uses high-frequency sound waves to create images of the human body. These images are then analyzed, aiding in physician diagnosis. The sonographer is a skilled health care provider who provides imaging services under the supervision of a physician who is responsible for the use and interpretation of ultrasound procedures.

Upon completion of this program in abdomen, obstetrics and gynecology, and ultrasound physics and instrumentation, the graduate will be eligible to take the national registry examinations to become a certified sonographer. The examination is administered by the American Registry of Diagnostic Medical Sonographers.

The Diagnostic Medical Sonography program is accredited by the Commission on Accreditation for Allied Health Education Programs (CAAHEP), 1316 Park St. Clearwater, FL 33756. [www.caahep.org](http://www.caahep.org) upon the recommendation of the Joint review Committee for Diagnostic Medical Sonography (JRCEDMS).

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

### Prerequisite Courses Required for Admission

†BSC	2085	Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Anatomy and Physiology I Laboratory.....	1 cr.
†BSC	2086	Human Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Human Anatomy and Physiology II Laboratory.....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra <b>or</b> higher math course (MGF 1106 and MGF 1107 are not accepted) <i>or</i> †STA 2023, Elementary Statistics.....	3 cr.
†PHY	1025	Fundamentals of Physics.....	3 cr.
†PHY	1025L	Fundamentals of Physics Laboratory.....	1 cr.

### Program Required Courses

#### YEAR I – First Semester

SON	1000	Basic Sonography.....	3 cr.
SON	1311	Introduction to Cross Sectional Anatomy.....	1 cr.
SON	1804C	Introduction to Practicum I.....	2 cr.
		Humanities General Education CORE.....	3 cr.

#### YEAR I – Second Semester

RTE	1782	Pathology of Medical and Surgical Diseases.....	3 cr.
SON	1053	Sonographic Imaging of Medical/Surgical Diseases.....	1 cr.
SON	1100	Sonographic Scanning Protocol I.....	1 cr.
SON	1210	Introduction to Sonographic Physics and Instrumentation.....	3 cr.
SON	1312	Introduction to Cross Sectional Anatomy II.....	1 cr.
SON	1840	Introduction to Practicum II.....	1 cr.

#### YEAR I – Third Semester

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
†SON	1101	Sonographic Scanning Protocol II.....	1 cr.
SON	1850	Introduction to Practicum III.....	1 cr.
SON	1171C	Introduction to Vascular Technology.....	2 cr.

#### YEAR II – First Semester

SON	1313	Introduction to Cross Sectional Anatomy III.....	1 cr.
SON	2111	Abdominal Sonography I.....	3 cr.
SON	2121	Obstetrics and Gynecology Sonography I.....	4 cr.
SON	2814	Sonographic Clinical Practicum I.....	3 cr.

#### YEAR II – Second Semester

SON	2112	Abdominal Sonography II.....	3 cr.
SON	2122	Obstetrics and Gynecology Sonography II.....	3 cr.
SON	2211	Sonographic Physics and Instrumentation.....	3 cr.
SON	2211L	Sonographic Physics and Instrumentation Laboratory.....	1 cr.
SON	2824	Sonographic Clinical Practicum II.....	3 cr.

**YEAR II – Third Semester**

†SON	2061	Seminar in Sonography .....	3 cr.
SON	2834	Sonographic Clinical Practicum III .....	3 cr.
SON	2175C	Vascular Technology .....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Echocardiography (Non-Invasive Cardiovascular Technology)****AS.CARD.TECH (77 Credit Hours)**

This program is designed to prepare students for employment as cardiovascular technologists.

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

**Prerequisite Courses Required for Admission**

†BSC	2085	Human Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Human Anatomy and Physiology I Laboratory .....	1 cr.
†BSC	2086	Human Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra <i>or</i> †STA 2023, Elementary Statistics, <i>or</i> any higher math course.....	3 cr.
†PHY	1025	Fundamentals of Physics.....	3 cr.
†PHY	1025L	Fundamental of Physics Laboratory .....	1 cr.

**YEAR I – First Semester**

CVT	1000	Introduction to Cardiovascular Technology and Patient Care .....	3 cr.
†CVT	1191	Introduction to Cardiovascular Practicum I.....	3 cr.
CVT	1261	Cardiovascular Anatomy and Physiology.....	3 cr.
CVT	2500	Cardiovascular ECG .....	3 cr.

**YEAR I – Second Semester**

CVT	2320	Vascular Ultrasound I.....	3 cr.
CVT	2320L	Introduction to Cardiovascular Practicum II.....	3 cr.
CVT	2620	Cardiac Ultrasound I .....	3 cr.
SON	1210	Introduction to Sonography Physics and Instrumentation .....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CVT	2321	Vascular Ultrasound II .....	3 cr.
CVT	2840	Cardiovascular Practicum I .....	3 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR II – First Semester**

CVT	2621	Cardiac Ultrasound II.....	3 cr.
CVT	2621L	Cardiac Ultrasound II Laboratory.....	3 cr.
†CVT	2841	Cardiovascular Practicum II.....	3 cr.
CVT	2930	Seminar in Vascular Ultrasound .....	3 cr.

**YEAR II – Second Semester**

CVT	2842	Cardiovascular Practicum III.....	4 cr.
CVT	2920	Seminar in Cardiac Ultrasound.....	3 cr.
SON	2211	Sonographic Physics and Instrumentation .....	3 cr.
SON	2211L	Sonographic Physics and Instrumentation Laboratory.....	1 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Emergency Medical Services

### AS.EMST.TECH (73 Credit Hours)

If the student wants to become certified as an emergency medical technician or as a paramedic, the student will earn a college credit certificate.

All three levels are fully approved by the Florida Department of Health, and the student will be eligible to take the Florida or National Registry examination for EMT or paramedic upon completion of this program.

The Emergency Medical Services (EMS) program is fully credited by the Florida Department of Health, Bureau of Emergency Medical Services. Additionally, the Paramedic program is accredited by the Commission on Accreditation of Allied Health Educational Programs, [www.caahep.org](http://www.caahep.org) upon recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP).

This program provides paramedics with an opportunity to further their education by earning an associate in science degree. To be enrolled into the paramedic program the student must be currently certified as EMT in the State of Florida.

Statewide curriculum guidelines allow students who complete an ATD (Advanced Technical Diploma) at a vocational technical center to be awarded 11 college credits upon enrolling at HCC. These credit hours will be applied toward an associate in science degree in Emergency Medical Services.

#### Program Required Courses

##### YEAR I – First Semester

†BSC	2085	Human Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Human Anatomy and Physiology I Laboratory .....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
		Mathematics General Education CORE .....	3 cr.

##### YEAR I – Second Semester

†BSC	2086	Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Anatomy and Physiology II Laboratory .....	1 cr.
†AMH	2020	Modern American History or POS 2041, American Government .....	3 cr.
		Humanities General Education CORE .....	3 cr.

Completion of EMT College Credit Certificate..... **11 cr.**

Completion of Paramedic College Credit Certificate..... **42 cr.**

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## CCC • Emergency Medical Technician

### CCC.EMT (12 Credit Hours)

EMT training is a one-semester program designed to prepare students to provide basic life support measures, as a member of an ambulance crew, at the scene of an accident, during transport to a hospital or medical facility, and in the medical facility. Course work combines classroom lecture, practical skills laboratory and actual patient clinical experiences.

The lecture portion (seven credit hours) covers the National Emergency Medical Services Education Standards for the Emergency Medical Technician as well as skills required by the state.

The practical skills laboratory portion (two credit hours) includes application practice and performance testing in simulated patient care situations. The clinical portion (one credit hour) provides actual patient care during transport to a hospital and in the hospital setting. EMT is currently offered at the Dale Mabry, Plant City, and South Shore campuses.

**NOTE:** An additional cost for a criminal background check is required. Drug testing is required.

#### Program Required Courses

##### YEAR I – First Semester

†EMS	1119	Emergency Medical Technician.....	7 cr.
†EMS	1119L	Emergency Medical Technician Practicum.....	3 cr.
EMS	1431	Emergency Medical Technician (EMT) Clinical .....	2 cr.

#### EMT Re-tracking

Emergency Medical Technician (EMT) students have two years to successfully complete all course work and one year from course completion to obtain state certification. Students who do not successfully complete the EMT program within two years or who do not obtain state certification within one year after course completion must retake all courses of the EMT program.

## CCC • Paramedic

### CCC.PARA (42 Credit Hours)

In addition to performing the skills of an EMT, paramedics are trained in advanced life support techniques, including endotracheal intubation, electrocardiogram monitoring and interpretation, DC electrical counter shock and administration of intravenous fluids and medications.

The program is offered on different schedules with three admission dates per year (see the allied health admissions criteria and procedure section of this catalog).

Effective July 1, 2013, the Florida Department of Health and the Department of Education adopted the 2009 National Emergency Medical Service Education Standards for Paramedic Instruction Guidelines to replace the 1998 DOT EMT and Paramedic National Standard Curriculum. Paramedic is currently offered at the Dale Mabry and South Shore campuses.

### Program Required Courses

#### YEAR I – First Semester

†EMS	2621	Paramedic Phase I .....	7 cr.
EMS	2621L	Paramedic Phase I Practicum .....	4 cr.
EMS	2666	Paramedic Clinical I.....	3 cr.

#### YEAR I – Second Semester

†EMS	2622	Paramedic Phase II.....	8 cr.
EMS	2622L	Paramedic Phase II Practicum .....	4 cr.
EMS	2667	Paramedic Clinical II.....	3 cr.

#### YEAR I – Third Semester

†EMS	2617C	Assessment - Based Management Proficiency .....	2 cr.
†EMS	2623	Paramedic Phase III .....	6 cr.
EMS	2623L	Paramedic Phase III Practicum.....	2 cr.
EMS	2668	Paramedic Clinical III .....	3 cr.

## AS • Health Navigator

### AS.HLTH.NAV (60 Credit Hours)

This program is for the student interested in obtaining an AS degree with the intention of entering the workforce as a health navigator, patient navigator, or community health worker. The coursework would also give students the opportunity to pursue a bachelor's degree in public health, health education or related fields.

### Program Required Courses

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†HSA	2117	Health Care Delivery .....	3 cr.
†PSY	2012	General Psychology .....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.

#### YEAR I – Second Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†BSC	1005	Biological Foundations .....	3 cr.
†BSC	1005L	Biological Foundations Laboratory.....	1 cr.
†HSC	1531	Medical Terminology.....	3 cr.
†PHI	1010	Introduction to Philosophy .....	3 cr.

#### YEAR I – Third Semester

†CGS	1107	Introduction to Computers .....	1 cr.
†SPC	1608	Public Speaking .....	3 cr.

#### YEAR II – First Semester

†HSC	2100	Health Education.....	3 cr.
HSC	2400	First Aid.....	3 cr.
†HSC	2660	Health Communications .....	3 cr.
PHC	2100	Introduction to Public Health.....	3 cr.

#### YEAR II – Second Semester

†HSA	2322	Health Insurance .....	3 cr.
†HSC	2669	Prevention and Community Health .....	3 cr.

†HSC	2721	Accessing and Analyzing Health Information.....	3 cr.
		*Elective.....	3 cr.

**YEAR II – Third Semester**

†HSC	2810	Health Navigator Practicum.....	4 cr.
		*Elective .....	3 cr.

**\*Select 6 credit hours from the following list:**

†HSA	2010	Issues and Trends in Public Health .....	3 cr.
†HSC	2130	Sex, Health and Decision Making .....	3 cr.
†HSC	2561	Care for an Aging Population.....	3 cr.
†PHC	2040	Foundations in Epidemiology .....	3 cr.
PHC	2321	Environmental Concepts in Public Health.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**CCC • Health Navigator Specialist  
CCC.HLTH.NAV (31 Credit Hours)**

**Program Required Courses**

**YEAR I – First Semester**

†HSA	2117	Health Care Delivery .....	3 cr.
†HSC	2100	Health Education.....	3 cr.
†HSC	2660	Health Communications .....	3 cr.
PHC	2100	Introduction to Public Health.....	3 cr.

**YEAR I – Second Semester**

†HSA	2322	Health Insurance .....	3 cr.
†HSC	2669	Prevention and Community Health .....	3 cr.
†HSC	2721	Accessing and Analyzing Health Information.....	3 cr.
		*Elective.....	3 cr.

**YEAR I – Third Semester**

†HSC	2810	Health Navigator Practicum.....	4 cr.
		*Elective.....	3 cr.

**\*Select 6 credit hours from the following list:**

†HSA	2010	Issues and Trends in Public Health .....	3 cr.
†HSC	2130	Sex, Health and Decision Making .....	3 cr.
†HSC	2561	Care for an Aging Population.....	3 cr.
†PHC	2040	Foundations in Epidemiology .....	3 cr.
PHC	2321	Environmental Concepts in Public Health.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS Health Navigator.

**AS • Medical Laboratory Science  
AS.MED.LAB (76 Credit Hours)**

Applicants and potential students applying to the AS program will have earned an Advanced Technical Certificate in medical laboratory technology (or equivalent) with 40 credit hours that transfer from the technical college. Students will earn 36 credit hours at Hillsborough Community College to complete the AS degree.

**Articulated Credit and Electives ..... 40 cr.**

**Program Required Courses**

**YEAR I – First Semester**

†BSC 2085	Human Anatomy and Physiology <i>and</i> †BSC 2085L, Human Anatomy and Physiology Laboratory .....	4 cr.
†CHM 1032	Chemistry for Health Sciences <i>and</i> †CHM 1032L, Chemistry for Health Sciences Laboratory .....	4 cr.

†ENC 1101 English Composition I ..... 3 cr.

†MAC 1105 College Algebra ..... 3 cr.

#### YEAR I – Second Semester

†AMH 2020 Modern American History or †POS 2041, American Government ..... 3 cr.

†BSC 2086 Human Anatomy and Physiology II *and* †BSC 2086L, Human Anatomy and Physiology II Laboratory ..... 4 cr.

†CHM 2045 General Chemistry I and †CHM 2045L, General Chemistry I Laboratory ..... 4 cr.

#### YEAR I – Third Semester

†MCB 2000 Microbiology and Human Disease *and* †MCB 2000L, Microbiology and Human Disease Laboratory ..... 4 cr.

†MLS 2701 Principles of Laboratory Operations ..... 2 cr.

#### YEAR II – First Semester

MLS 2930 Medical Laboratory Seminar ..... 2 cr.

Humanities General Education CORE ..... 3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## ATC • Medical Laboratory Science

### ATC.MED.LAB (44 Credit Hours)

**NOTE: Student must have a bachelor's degree.**

#### Program Required Courses

##### YEAR I – First Semester

MLS 2304 Hematology I and Body Fluids ..... 3 cr.

MLS 2460 Medical Microbiology I ..... 3 cr.

†MLS 2551 Immunohematology and Immunology ..... 4 cr.

MLS 2001L Laboratory Technique I ..... 3 cr.

##### YEAR I – Second Semester

MLS 2307 Hematology II and Hemostasis ..... 3 cr.

MLS 2465 Medical Microbiology II ..... 3 cr.

MLS 2624 Clinical Chemistry I and Urinalysis ..... 3 cr.

MLS 2002L Laboratory Technique II ..... 4 cr.

##### YEAR I – Third Semester

MLS 2192 Molecular Diagnostics ..... 2 cr.

†MLS 2625 Advanced Clinical Chemistry ..... 3 cr.

MLS 2003L Laboratory Technique III ..... 2 cr.

†MLS 2701 Principles of Laboratory Operations ..... 2 cr.

MLS 2834 Medical Laboratory Clinical I ..... 2 cr.

##### YEAR II – First Semester

MLS 2835 Medical Laboratory Clinical II ..... 5 cr.

MLS 2930 Medical Laboratory Seminar ..... 2 cr.

## AS • Nuclear Medicine Technology

### AS.NMT (75 Credit Hours)

Nuclear medicine uses radioactive materials in the diagnosis and treatment of disease. Nuclear medicine technologists prepare and administer radiopharmaceutical materials, operate nuclear instruments, position patients for “imaging” procedures, perform lab tests and work up diagnostic data for physicians. Graduates of this program are eligible to take national registry examinations and Florida licensure for nuclear medicine technologists.

The Nuclear Medicine Technology program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology, 2000 W. Danforth Road, Suite 130 #203, Edmond, OK 73003, (405) 285-0546 or [jrcnmt@coxinet.net](mailto:jrcnmt@coxinet.net).

Clinical evaluations are used to assess a student's performance in the clinical environment.

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

### Prerequisite Courses Required for Admission

†BSC	2085	Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Anatomy and Physiology I Laboratory.....	1 cr.
†CHM	1025	Introductory Chemistry <i>and</i> †CHM 1025L, Introductory Chemistry Laboratory or any higher level four credit hour chemistry with laboratory .....	4 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra or higher .....	3 cr.
†PHY	1025	Fundamentals of Physics.....	3 cr.
†PHY	1025L	Fundamentals of Physics Laboratory .....	1 cr.
†BSC	2086	Human Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.

### Program Required Courses

#### YEAR I – First Semester

NMT	1002	Introduction to Nuclear Medicine Technology .....	2 cr.
NMT	1613	Nuclear Physics and Instrumental Applications .....	3 cr.
NMT	1705L	Nuclear Medicine Laboratory I .....	1 cr.
NMT	1713	Nuclear Medicine Methodology I .....	3 cr.
NMT	1714	Pathology and Immunology for the NMT .....	3 cr.

#### YEAR I – Second Semester

NMT	1103	Patient Care.....	2 cr.
NMT	1534	Instrumentation, Quality Control, and Quality Assurance .....	3 cr.
NMT	1706L	Nuclear Medicine Laboratory II.....	1 cr.
NMT	1723	Nuclear Medicine Methodology II.....	3 cr.
NMT	2430	Radiation Safety and Biology .....	3 cr.

#### YEAR I – Third Semester

NMT	1804	Nuclear Medicine Practicum I.....	3 cr.
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#### YEAR II – First Semester

NMT	1814	Nuclear Medicine Practicum II.....	4 cr.
NMT	2733	Nuclear Medicine Methodology III .....	4 cr.
NMT	2775C	PET/CT and Cross Sectional Anatomy.....	3 cr.
NMT	2910	Advanced Topics and Research Methods.....	2 cr.

#### YEAR II – Second Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
NMT	2051L	Nuclear Medicine Data Analysis.....	1 cr.
NMT	2061C	Nuclear Medicine Seminar.....	2 cr.
NMT	2824	Nuclear Medicine Practicum III .....	4 cr.
		Humanities General Education CORE .....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Nursing

### AS.NUR.NURB AS.NUR.NURT (72 Credit Hours)

Graduates of this program are eligible to apply for the nursing licensing examination administered by the National Council of State Boards of Nursing and, upon successful completion and review of all documentation may receive a Registered Nursing (RN) license.

The HCC Nursing (R.N.) program is accredited by the Accreditation Commission for Education in Nursing (ACEN) located at 3343 Peachtree Road NE, Suite 850, Atlanta, Georgia 30326, telephone (404) 975-5000 or fax (404) 975-5020 or <https://www.acenursing.org/>. Graduates of the associate in science degree nursing program are able to provide direct patient care to patients in hospitals and comparable health agencies.

The HCC Nursing program is offered at the Dale Mabry, Plant City, and South Shore campuses.

The duration of the program is six terms for the basic option. The program requires a full-time attendance commitment from the student. The program is offered in a day and evening format with both week day, evening, and weekend clinical experiences utilized.



Students, under the careful supervision of the nursing faculty, are provided valuable patient care experiences in participating hospitals, healthcare facilities and community agencies.

Enrollment in the nursing program is limited because of the availability of clinical placements for students to develop competence in their practical skills. Therefore, individuals must make application for consideration for admission to the nursing program. Individuals interested in applying to the program should obtain a nursing packet from Student Services on the Dale Mabry Campus, telephone (813) 253-7364 or online at <https://www.hccfl.edu/academics/subjects/health-and-medical/nursing>.

Individuals are selected for admission to the Fall and Spring semesters of each academic year.

Students will be required to take nationally normed tests throughout the curriculum.

## Minimum Progress Requirements

### Basic Student

All non-nursing courses must be completed with a minimum grade of "C" before entering into the final semester of the nursing program.

### Clinical Performance

A student who is determined to be unsafe in the clinical component of any nursing course may, at the discretion of the nursing faculty, be immediately removed from that course and will not be able to progress in the program. In addition any student who fails to follow guidelines related to credentialing policies, drug tests and background checks may be removed from their clinical and didactic courses for that semester.

**NOTE:** Beginning Fall Term 2000, all graduates of this program shall articulate into a Nursing baccalaureate degree in the designated university program under the provision of Rule 6A-10.024, Articulation Between Universities, Community Colleges, and School Districts.

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

### Prerequisite Courses Required for Admission

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†BSC	2085	Human Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Human Anatomy and Physiology I Laboratory .....	1 cr.
†BSC	2086	Human Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra <i>or</i> higher mathematics (†STA 2023, Elem Statistics is not accepted).....	3 cr.
†MCB	2000	Microbiology and Human Disease .....	3 cr.
†MCB	2000L	Microbiology and Human Disease Laboratory.....	1 cr.

## AS • Nursing - Basic Option

### AS.NUR.NURB

#### Program Required Courses

##### YEAR I – First Semester

†ENC	1102	English Composition II.....	3 cr.
NUR	1020	Fundamental Concepts of Nursing Practice.....	3 cr.
NUR	1020L	Fundamental Concepts of Nursing Practice Clinical.....	2 cr.
NUR	1023C	Essential Concepts of Patient Management.....	4 cr.
NUR	1024	Critical Thinking in Nursing Practice.....	2 cr.

##### YEAR I – Second Semester

NUR	1310C	Concepts of Pediatric Nursing.....	3 cr.
NUR	1421C	Concepts of Care for Woman and Infants.....	3 cr.
NUR	1520C	Concepts of Mental Health Nursing .....	4 cr.
		Humanities General Education CORE .....	3 cr.

##### YEAR I – Third Semester

\*Specified Electives .....

3 cr.

##### YEAR II – First Semester

NUR	2205C	Complex Simulation .....	2 cr.
†NUR	2210	Concepts of Adult Health I.....	5 cr.

NUR 2210L Concepts of Adult Health I Clinical..... 3 cr.

**YEAR II – Second Semester**

†NUR 2211 Concepts of Adult Health II..... 5 cr.  
 †NUR 2211L Concepts of Adult Health II Clinical ..... 3 cr.  
 NUR 2811C Role Transformation ..... 3 cr.

**Select 3 specified elective credits from the following:**

†BSC 1025C Nutrition and Drugs ..... 3 cr.  
 †CHM 1032 Chemistry for Health Sciences..... 3 cr.  
 †CHM 1032L Chemistry for Health Sciences Laboratory ..... 1 cr.  
 †DEP 1004 Developmental Psychology of Life Span ..... 3 cr.  
 †HUN 2201 Fundamentals of Human Nutrition..... 3 cr.  
 †PHI 1600 Ethics..... 3 cr.  
 PHI 2635 Biomedical Ethics ..... 3 cr.  
 †PSY 2012 General Psychology ..... 3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Nursing – LPN Transition Option**

**AS.NUR.NURT**

**Program Required Courses**

**NOTE: 10 credit hours of articulated credit or experiential credit may be awarded to individuals who are licensed practical nurses.**

**YEAR I – First Semester**

†ENC 1102 English Composition II..... 3 cr.  
 NUR 1022C Essential Concepts of Patient Care Management..... 2 cr.  
 NUR 1024 Critical Thinking in Nursing Practice..... 2 cr.  
 NUR 1440C Concepts of Family Nursing ..... 4 cr.  
 NUR 1522C Concepts of Mental Health Nursing ..... 3 cr.

**YEAR I – Second Semester**

NUR 2205C Complex Simulation ..... 2 cr.  
 †NUR 2210 Concepts of Adult Health I..... 5 cr.  
 NUR 2210L Concepts of Adult Health I Clinical..... 3 cr.  
 Humanities General Education CORE ..... 3 cr.

**YEAR I – Third Semester**

†NUR 2211 Concepts of Adult Health II..... 5 cr.  
 †NUR 2211L Concepts of Adult Health II Clinical ..... 3 cr.  
 NUR 2811C Role Transformation ..... 3 cr.  
 \*Specified Electives ..... 3 cr.

**\*Select 3 specified elective credits from the following:**

†BSC 1025C Nutrition and Drugs ..... 3 cr.  
 †CHM 1032 Chemistry for Health Sciences..... 3 cr.  
 †CHM 1032L Chemistry for Health Sciences Laboratory ..... 1 cr.  
 †DEP 1004 Developmental Psychology of Life Span ..... 3 cr.  
 †HUN 2201 Fundamentals of Human Nutrition..... 3 cr.  
 †PHI 1600 Ethics..... 3 cr.  
 PHI 2635 Biomedical Ethics ..... 3 cr.  
 †PSY 2012 General Psychology ..... 3 cr.  
 NUR 1060 Health Assessment..... 3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Opticianry

### AS.OPT (72 Credit Hours)

As an essential part of the “eye care delivery system,” opticians’ measure, fit and adapt eyeglasses and contact lenses to people with vision problems. Coursework covers basic ocular science including: optics, anatomy, contact lenses, and refractometry. It also allows the students to gain specific skills in professional management, eyewear fabrications, and dispensing. Clinical experience is gained in a state-of-the-art on-campus dispensary and at affiliate sites. Graduates of the program are eligible to take state and national certification and/or licensure exams for opticians. Campus based or Internet based programs available. The Opticianry Program is accredited by the Commission on Opticianry Accreditation, P.O. Box 592, Canton, NY 13617.

### Program Required Courses

#### YEAR I – First Semester

†OPT	1000	Ophthalmic Orientation .....	1 cr.
†OPT	1155	Ophthalmic Lens I.....	3 cr.
†OPT	1460	Ophthalmic Dispensing I.....	3 cr.
†OPT	1460L	Ophthalmic Dispensing I Laboratory.....	3 cr.
†OPT	2204	Anatomy and Physiology of the Eye.....	3 cr.

#### YEAR I – Second Semester

†OPT	1156	Ophthalmic Lens II .....	3 cr.
†OPT	1400L	Ophthalmic Laboratory I.....	3 cr.
†OPT	2500	Contact Lens Theory I.....	2 cr.
†OPT	2500L	Contact Lens Theory I Laboratory .....	3 cr.
†OPT	2800L	Vision Care Clinical I.....	2 cr.
		Mathematics General Education CORE .....	3 cr.

#### YEAR I – Third Semester

†OPT	2461	Ophthalmic Dispensing II.....	3 cr.
†OPT	2801L	Vision Care Clinical II.....	2 cr.
		Humanities General Education CORE .....	3 cr.

#### YEAR II – First Semester

†ENC	1101	English Composition I.....	3 cr.
†OPT	1430L	Ophthalmic Laboratory II .....	3 cr.
†OPT	2375	Refractometry .....	2 cr.
†OPT	2461L	Ophthalmic Dispensing Laboratory II.....	3 cr.
†OPT	2501	Contact Lens Theory II .....	2 cr.
†OPT	2802L	Vision Care Clinical III .....	2 cr.

#### YEAR II – Second Semester

†OPT	2375L	Refractometry Laboratory .....	2 cr.
†OPT	2463L	Ophthalmic Skills Laboratory I.....	2 cr.
†OPT	2501L	Contact Lens II Laboratory .....	2 cr.
†OPT	2803L	Vision Care Clinical IV .....	2 cr.
†OPT	2910	Directed Research.....	3 cr.
		Natural Science General Education CORE .....	3 cr.

#### YEAR II – Third Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†OPT	2030	Ophthalmic Board Review.....	1 cr.
†OPT	2376L	Refractometry II Laboratory .....	1 cr.
†OPT	2502L	Contact Lens III Laboratory .....	1 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**ATC • Visual Assessment****ATC.OPT (11 Credit Hours)**

This 11 credit hour program provides training in safety and sports vision, low vision and refraction for students who have already earned an associate degree in Opticianry.

**Program Required Courses****YEAR I – First Semester**

†OPT	1225	Low Vision .....	3 cr.
†OPT	1666	Safety and Sports Vision .....	3 cr.
†OPT	2375	Refractometry .....	2 cr.

**YEAR I – Second Semester**

†OPT	2375L	Refractometry Laboratory I.....	2 cr.
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**YEAR I – Third Semester**

†OPT	2376L	Refractometry Laboratory II .....	1 cr.
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†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**CCC • Ophthalmic Laboratory Technician****CCC.OPT.LAB.TECH (24 Credit Hours)**

This program teaches surfacing, finishing and other related tasks necessary to fabricate prescription eyewear. It will prepare you to work in a wholesale or retail optical laboratory. All credits from this certificate may be applied to the Opticianry degree.

**Program Required Courses****YEAR I – First Semester**

†OPT	1000	Ophthalmic Orientation .....	1 cr.
†OPT	1155	Ophthalmic Lens I.....	3 cr.
†OPT	1460	Ophthalmic Dispensing I .....	3 cr.
†OPT	1460L	Ophthalmic Dispensing I Laboratory .....	3 cr.
†OPT	2204	Anatomy and Physiology of the Eye .....	3 cr.

**YEAR I – Second Semester**

†OPT	1156	Ophthalmic Lens II .....	3 cr.
†OPT	1400L	Ophthalmic Laboratory I.....	3 cr.
†OPT	2500	Contact Lens Theory I.....	3 cr.
†OPT	2800L	Vision Care Clinical I .....	2 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Radiation Therapy****AS.RAT.GEN (77 Credit Hours)**

This program is designed for students who want to work directly with patients receiving high-energy treatments using state-of-the-art and cutting-edge technology. Students will work with a physician to administer patient treatment. Students' performance will be based on didactic and clinical competencies.

Upon successful completion of the program, students are eligible to apply for the national radiation therapy examination administered by the American Registry of Radiologic Technologists.

The Radiation Therapy program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182 (312) 704-5300 or <https://jrcert.org> or [mail@jrcert.org](mailto:mail@jrcert.org).

**NOTE:** All graduates of this program shall articulate into the University of South Florida bachelors of science in applied science (BSAS) degree program.

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

**Prerequisite Courses Required for Admission (Fall 2023 Entry)**

†BSC	2085	Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Anatomy and Physiology I Laboratory.....	1 cr.

†BSC	2086	Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Anatomy and Physiology II Laboratory .....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra <i>or</i> higher level math.....	3 cr.
†PHY	1025	Fundamentals of Physics.....	3 cr.
†PHY	1025L	Fundamentals of Physics Lab .....	1 cr.

### Prerequisite Courses Required for Admission (Fall 2022 Entry)

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†BSC	2085	Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Anatomy and Physiology I Laboratory.....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra <i>or</i> higher level math.....	3 cr.

### Program Required Courses

#### YEAR I – First Semester

†BSC	2086	Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Anatomy and Physiology II Laboratory .....	1 cr.
RAT	1614	Radiation Therapy Physics I.....	2 cr.
RAT	1691L	Introduction to Clinical Concepts .....	1 cr.
RAT	2001C	Introduction to Radiation Therapy .....	2 cr.
		Humanities General Education CORE .....	3 cr.

#### YEAR I – Second Semester

†ENC	1102	English Composition II.....	3 cr.
RAT	1618	Radiation Therapy Physics II.....	2 cr.
RAT	1800	Introduction to Radiation Therapy Clinic I .....	1 cr.
RTE	1157	Medical Imaging of Human Structures.....	3 cr.
RTE	1782	Pathology of Medical/Surgical Diseases .....	3 cr.

#### YEAR I – Third Semester

RAT	1810	Introduction to Radiation Therapy Clinic II.....	2 cr.
†RAT	2023	Principles and Practices of Radiation Therapy I .....	3 cr.
RAT	2303	Psychosocial Aspect of Oncology .....	2 cr.

#### YEAR II – First Semester

†RAT	2242	Principles and Practices of Radiation Therapy II.....	3 cr.
RAT	2620	Radiation Therapy Physics III .....	3 cr.
RAT	2804	Radiation Therapy Clinic I.....	3 cr.
†RAT	2901	Simulation Lecture I.....	1 cr.
RAT	2901L	Simulation Laboratory I .....	1 cr.

#### YEAR II – Second Semester

RAT	2021	Radiation Therapy Treatment Planning.....	3 cr.
RAT	2621C	Radiation Therapy Physics IV .....	3 cr.
RAT	2814	Radiation Therapy Clinic II.....	3 cr.
†RAT	2902	Simulation Lecture II .....	1 cr.
RAT	2902L	Simulation Laboratory II.....	1 cr.
RTE	2385	Radiation Biology.....	3 cr.

#### YEAR II – Third Semester

†RAT	2061	Radiographic Seminar .....	2 cr.
RAT	2619L	Computer Applications in Treatment Planning.....	2 cr.
RAT	2824	Radiation Therapy Clinic II.....	3 cr.
†RTE	2473L	Quality Assurance in Radiation Therapy.....	1 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Radiography

### AS.RTE (77 Credit Hours)

Radiographers perform diagnostic radiographic (X-ray) procedures and x-ray images of the human body which help diagnose and treat injury and disease. This program includes course work and practical experiences where students will work directly with patients in area clinical educational settings. Students will also simulate radiographic procedures in the program's state-of-the-art laboratory.

Graduates are eligible to take the national American Registry of Radiologic Technologists certification examination and will also be eligible for a Florida Radiographer license.

The Radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901, (312) 704-5300 or <https://www.jrcert.org>, [mail@jrcert.org](mailto:mail@jrcert.org).

**NOTE:** Beginning Fall Term 2000, all graduates of this program shall articulate into a Radiologic Technology baccalaureate degree in the designated university program under the provision of Rule 6A-10.024, Articulation Between Universities, Community Colleges, and School Districts.

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

### Prerequisite Courses Required for Admission

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†BSC	2085	Anatomy and Physiology I .....	3 cr.
†BSC	2085L	Anatomy and Physiology I Laboratory .....	1 cr.
†ENC	1101	English Composition I .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.

### Program Required Courses

#### YEAR I – First Semester

HSC	1220	Introduction to Health Sciences .....	1 cr.
RTE	1000	Introduction to Radiology .....	1.5 cr.
RTE	1111	Introduction to Radiography Patient Care .....	1.5 cr.
RTE	1503	Radiographic Positioning I .....	3 cr.
RTE	1503L	Radiographic Positioning I Laboratory .....	1 cr.
RTE	1607	Radiographic Science Principles .....	1 cr.
RTE	1800	Introduction to Radiography Practicum .....	2 cr.

#### YEAR I – Second Semester

RTE	1308	Radiation Protection and Safety .....	2 cr.
RTE	1418	Principles of Radiographic Exposure I .....	3 cr.
RTE	1418L	Principles of Radiographic Exposure I Laboratory .....	1 cr.
RTE	1513	Radiographic Positioning II .....	3 cr.
RTE	1513L	Radiographic Positioning II Laboratory .....	1 cr.
RTE	1804	Radiography Practicum I .....	3 cr.

#### YEAR I – Third Semester

†BSC	2086	Human Anatomy and Physiology II .....	3 cr.
†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
†RTE	1523	Radiographic Positioning III .....	3 cr.
†RTE	1523L	Radiographic Positioning III Laboratory .....	1 cr.
RTE	1814	Radiography Practicum II .....	3 cr.

#### YEAR II – First Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
RTE	1457	Principles of Radiographic Exposure II .....	1 cr.
RTE	1613	Radiographic Physics I .....	3 cr.
RTE	1824	Radiography Practicum III .....	3 cr.
RTE	2563	Special Radiographic Procedures .....	2.5 cr.

#### YEAR II – Second Semester

RTE	1782	Pathology of Medical/Surgical Disease .....	3 cr.
RTE	2385	Radiation Biology .....	3 cr.
RTE	2834	Radiography Practicum IV .....	3 cr.

Humanities General Education CORE ..... 3 cr.

### YEAR II – Third Semester

†RTE 2061 Radiographic Seminar ..... 2 cr.  
 †RTE 2473L Quality Assurance..... 1 cr.  
 RTE 2844 Radiography Practicum V..... 1.5 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## ATC • Computed Tomography Advanced Imaging

ATC.TOM (14 Credit Hours)

Program Required Courses

### YEAR I – First Semester

RTE 1597C Principles of Computed Tomography I..... 4 cr.  
 RTE 1805 CT Clinical Education I..... 3 cr.

### YEAR I – Second Semester

RTE 2596 Principles of Computed Tomography II ..... 4 cr.  
 RTE 2815 CT Clinical Education II ..... 3 cr.

## ATC • Magnetic Resonance Imaging

ATC.MRI (15 Credit Hours)

Program Required Courses

### YEAR I – First Semester

RTE 2760 MRI Anatomy ..... 3 cr.  
 RTE 2575 MRI Imaging I..... 3 cr.  
 RTE 2940 MRI Clinical I..... 1 cr.

### YEAR I – Second Semester

†RTE 2576 MRI Imaging II ..... 3 cr.  
 RTE 2941 MRI Clinical II..... 2 cr.

### YEAR I – Third Semester

RTE 2942 MRI Clinical III ..... 3 cr.

## AS • Respiratory Care

AS.RET (76 Credit Hours)

Respiratory care is an allied health discipline operating with medical direction in the treatment, management, control, diagnostic evaluation and rehabilitation of patients with abnormalities of the cardiopulmonary system.

Respiratory care includes the therapeutic use of the following: medical gases and administration devices, environmental control systems, humidification, aerosols, medications, ventilatory support, bronchopulmonary drainage, pulmonary rehabilitation, cardiopulmonary resuscitation, and airway management. Specific testing techniques are employed in respiratory care to assist in diagnosis, monitoring, treatment and research. Clinical evaluations will be used to evaluate performance in the clinical environment.

Students who complete this program will be eligible to take the national certification and registry exams administered by the National Board for Respiratory Care (NBRC). Upon completion of the exams, students will be a Registered Respiratory Therapist (RRT). Most states require a license to practice.

The Respiratory Care program is accredited by the Commission on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, TX, 76021-4244, <https://www.coarc.com/>.

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

### Prerequisite Courses Required for Admission

†AMH 2020 Modern American History or †POS 2041, American Government ..... 3 cr.  
 †BSC 2085 Anatomy and Physiology I..... 3 cr.  
 †BSC 2085L Anatomy and Physiology I Laboratory ..... 1 cr.  
 †BSC 2086 Anatomy and Physiology II ..... 3 cr.  
 †BSC 2086L Anatomy and Physiology II Laboratory ..... 1 cr.  
 †ENC 1101 English Composition I..... 3 cr.

†MAC	1105	College Algebra.....	3 cr.
†MCB	2000	Microbiology and Human Disease .....	3 cr.
†MCB	2000L	Microbiology Laboratory .....	1 cr.

**Program Required Courses****YEAR I – First Semester**

RET	1024	Introduction to Respiratory Care.....	4 cr.
RET	1024L	Introduction to Respiratory Care Laboratory.....	1 cr.
†RET	1350	Pharmacology for Respiratory Care .....	3 cr.
†RET	1485	Cardiopulmonary Anatomy and Physiology .....	3 cr.

**YEAR I – Second Semester**

RET	1274C	Basis Respiratory Care.....	6 cr.
†RET	1503	Cardiopulmonary Pathophysiology .....	3 cr.
RET	1832	Respiratory Care Clinic I.....	2 cr.

**YEAR I – Third Semester**

RET	1833	Respiratory Care Clinic II.....	1 cr.
RET	2264C	Principles of Mechanical Ventilation.....	5 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR II – First Semester**

RET	2283	Respiratory Intensive Care.....	3 cr.
RET	2714C	Pediatric and Neonatal Respiratory Care .....	3 cr.
RET	2834	Respiratory Care Clinic III .....	2 cr.

**YEAR II – Second Semester**

RET	2413C	Pulmonary Diagnostics .....	2 cr.
RET	2533C	Advanced Respiratory Care.....	8 cr.
RET	2835	Respiratory Care Clinic IV .....	2 cr.

**YEAR II – Third Semester**

RET	2836	Respiratory Care Clinic V .....	1 cr.
RET	2930	Respiratory Care Seminar .....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Respiratory Care - Transition****AS.RET.TRAN**

An individual who has earned the Certified Respiratory Therapist credential from the National Board for Respiratory Care (NBRC) is eligible to receive 23 hours of college credit\* toward the associate in science degree in Respiratory Care.

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

**Prerequisite Courses Required for Admission**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†BSC	2085	Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Anatomy and Physiology I Laboratory.....	1 cr.
†BSC	2086	Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Anatomy and Physiology II Laboratory .....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra .....	3 cr.
†MCB	2000	Microbiology and Human Disease .....	3 cr.
†MCB	2000L	Microbiology and Human Disease Laboratory.....	1 cr.
		Humanities General Education CORE .....	3 cr.

**Program Required Courses****YEAR I – First Semester**

RET	2264C	Principles of Mechanical Ventilation.....	5 cr.
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**YEAR I – Second Semester**

RET	2283	Respiratory Intensive Care.....	3 cr.
RET	2714C	Pediatric and Neonatal Respiratory Care .....	3 cr.
RET	2834	Respiratory Care Clinic III .....	2 cr.

**YEAR I – Third Semester**

RET	2413C	Pulmonary Diagnostics .....	2 cr.
RET	2533C	Advanced Respiratory Care.....	8 cr.
RET	2835	Respiratory Care Clinic IV .....	2 cr.

**YEAR I – First Semester**

RET	2836	Respiratory Care Clinic V .....	1 cr.
RET	2930	Respiratory Care Seminar .....	3 cr.

**\*Experiential Credit Awarded**

RET	1024	Introduction to Respiratory Care .....	4 cr.
RET	1053	Cardiopulmonary Pathophysiology .....	3 cr.
RET	1274C	Basis Respiratory Care.....	6 cr.
†RET	1350	Pharmacology for Respiratory Care .....	3 cr.
RET	1832	Respiratory Care Clinic I.....	2 cr.
RET	1833	Respiratory Care Clinic II.....	1 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Surgical Technology****AS.SURG.TECH (64 Credit Hours)**

Surgical technologists are allied health professionals who are an integral part of the team of medical practitioners providing surgical care to patients. Surgical technologists work under the supervision of a surgeon to facilitate the safe and effective conduct of invasive surgical procedures, ensuring that the operating room environment is safe, that equipment functions correctly, and that the operative procedure is conducted under conditions that maximize patient safety. Surgical technologists possess expertise in the theory and application of sterile and aseptic technique and combine the knowledge of human anatomy, surgical procedures, and implementation of instruments and technologies to facilitate a physician's performance of invasive therapeutic and diagnostic procedures.

The program and curriculum were built around the Association of Surgical Technologists' *Standards of Practice*. These standards and the *Core Curriculum for Surgical Technology* provide the foundation for the program. Upon graduation, students will be eligible to sit for the national certification examination administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

**Math and Science prerequisite courses must be completed within seven (7) years of the program's admissions deadline.**

All other prerequisite courses do not expire, but can be petitioned to be repeated for a better grade if the course is older than seven (7) years prior to the admissions cycle.

**Prerequisite Courses Required for Admission**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†BSC	2085	Human Anatomy and Physiology I.....	3 cr.
†BSC	2085L	Human Anatomy and Physiology I Laboratory .....	1 cr.
†BSC	2086	Human Anatomy and Physiology II.....	3 cr.
†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra <i>or</i> †STA 2023, Elementary Statistics, <i>or</i> any higher math course.....	3 cr.

**YEAR I – First Semester**

HSC	2006	Orientation to Perioperative Services.....	3 cr.
HSC	2006L	Orientation to Perioperative Services Laboratory.....	1 cr.
HSC	2520	Microbiology for Perioperative Services .....	3 cr.
STS	1300	Surgical Anatomy and Pathophysiology .....	4 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR I – Second Semester**

STS	1310	Surgical Techniques and Procedures.....	6 cr.
STS	1310L	Surgical Techniques and Procedures Laboratory .....	2 cr.

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STS	1340	Pharmacology and Anesthesia .....	3 cr.
STS	1940	Introduction to Surgery Clinical .....	2 cr.

**YEAR I – Third Semester**

STS	2323	Surgical Procedures I .....	4 cr.
STS	2323L	Surgical Procedures Simulation Laboratory I.....	1 cr.
STS	2944	Surgical Clinical I .....	3 cr.

**YEAR II – First Semester**

STS	2324	Surgical Procedures II.....	4 cr.
STS	2324L	Surgical Procedures Simulation II Laboratory .....	1 cr.
STS	2365	Professional Skills for the OR Team.....	1 cr.
STS	2936	Surgical Certification Symposium .....	2 cr.
STS	2945	Surgical Clinical II .....	3 cr.
STS	2954	Surgical Technologist Portfolio .....	1 cr.

## Associate in Science Degree/Technical Programs

### AS • Accounting Technology

This program will prepare students for a position as an accountant or as an accounting paraprofessional in advanced professional accounting occupations requiring analysis, evaluation, theory and design. The course work focuses on basic accounting functions as well as skills common to several fields of business, including finance, business law and general business topics.

#### AS • Financial Option

##### AS.ACG.TECH. FIN (60 Credit Hours)

###### Program Required Courses

###### YEAR I – First Semester

†ACG	2021	Financial Accounting .....	3 cr.
†CGS	2100	Computers Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

###### YEAR I – Second Semester

†ACG	2071	Managerial Accounting .....	3 cr.
ACG	2104	Intermediate Accounting I .....	3 cr.
†ECO	2013	Principles of Macroeconomics .....	3 cr.
†GEB	1011	Introduction to Business .....	3 cr.

###### YEAR I – Third Semester

†ACG	2450	Microcomputers in Accounting .....	3 cr.
†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.

###### YEAR II – First Semester

ACG	2061	Computers in Accounting .....	3 cr.
†GEB	2214	Business Communications and Technology .....	3 cr.
TAX	2000	Federal Tax Accounting I .....	3 cr.
		Humanities General Education CORE .....	3 cr.

###### YEAR II – Second Semester

ACG	2681	Financial Investigation .....	3 cr.
†ENT	1411	Small Business Accounting and Finance .....	3 cr.
†FIN	2001	Principles of Finance .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

###### YEAR II – Third Semester

ACG	2949	Cooperative Education Internship in Accounting .....	3 cr.
†ACG	2960	Comprehensive Examination – Financial Option .....	3 cr.

#### AS • Tax Option

##### AS.ACG.TECH. TAX (60 Credit Hours)

###### Program Required Courses

###### YEAR I – First Semester

†ACG	2021	Financial Accounting .....	3 cr.
†CGS	2100	Computers Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

###### YEAR I – Second Semester

†ACG	2071	Managerial Accounting .....	3 cr.
ACG	2104	Intermediate Accounting I .....	3 cr.
†ECO	2013	Principles of Macroeconomics .....	3 cr.
†GEB	1011	Introduction to Business .....	3 cr.

###### YEAR I – Third Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR II – First Semester**

ACG	2061	Computers in Accounting.....	3 cr.
†GEB	2214	Business Communications and Technology.....	3 cr.
TAX	2000	Federal Tax Accounting I.....	3 cr.
		Humanities General Education CORE.....	3 cr.

**YEAR II – Second Semester**

ACG	2681	Financial Investigation.....	3 cr.
ACG	2949	Cooperative Education Internship in Accounting.....	3 cr.
†FIN	1100	Personal Finance.....	3 cr.
†TAX	2010	Federal Tax Accounting II.....	3 cr.

**YEAR II – Third Semester**

†ACG	2961	Comprehensive Examination – Tax Option.....	3 cr.
†BUL	2241	Business Law I.....	3 cr.

†Courses symbolized above with a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Aquaculture****AS.AQUA (60 Credit Hours)**

This program will provide students with the knowledge and skills for an entry-level job in the aquaculture industry as a field/farm assistant or a laboratory technician. When students graduate they may also find employment in state agencies such as the Fresh Water Fish and Wildlife Commission that oversee environment and wildlife.

**Program Required Courses****YEAR I – First Semester**

†CGS	1107	Introduction to Computers.....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
†FAS	1012C	Aquacultural Organisms.....	3 cr.
ZOO	1450	Ichthyology.....	3 cr.
ZOO	1450L	Ichthyology Laboratory.....	1 cr.
		Mathematics General Education CORE.....	3 cr.

**YEAR I – Second Semester**

†CHM	1025	Introductory Chemistry.....	3 cr.
†CHM	1025L	Introductory Chemistry Laboratory.....	1 cr.
†ESC	1000	Earth Science <i>and</i> †ESC 1000L, Earth Science Laboratory <i>or</i> †OCB 2000, Marine Biology <i>and</i> †OCB 2000L, Marine Biology Laboratory.....	4 cr.
FAS	1401L	Aquacultural Laboratory Techniques.....	3 cr.
FAS	2263C	Aquacultural Reproductive Techniques.....	3 cr.

**YEAR I – Third Semester**

†EVR	1001C	Introduction to Environmental Science.....	3 cr.
†FAS	2941L	Aquacultural Field Experience I.....	3 cr.

**YEAR II – First Semester**

FAS	2240C	Aquacultural Nutritional Techniques.....	3 cr.
FAS	2253	Aquacultural Disease Processes.....	3 cr.
FAS	2253L	Aquacultural Disease Processes Laboratory.....	1 cr.
†FAS	2942L	Aquacultural Field Experience II.....	3 cr.
		Humanities General Education CORE.....	3 cr.

**YEAR II – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
FAS	1404C	Aquacultural Field Techniques.....	3 cr.
FAS	2353C	Aquacultural Management Practices.....	3 cr.
†FAS	2943L	Aquacultural Field Experience III.....	3 cr.
†SPC	1006	Speech Improvement.....	1 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Architectural Design and Construction Technology

### AS.ADCT (66 Credit Hours)

This program will prepare students for a position as a construction planner or as an assistant to an architect or an architectural engineer in the planning and designing of structures, using construction materials and working with contracts and specifications. If students pass the contractor's exam, they may become self-employed as contractors. The course work in this program focuses on using the latest technology to solve problems faced by the architect, the engineer and building contractor as they apply to the planning and construction of buildings.

#### Program Required Courses

##### YEAR I – First Semester

†BCN	1210	Construction Materials and Processes.....	3 cr.
BCN	1250	Introduction to Graphic Technology .....	3 cr.
†BCN	2272	Blueprint Reading .....	3 cr.
†TAR	2053	Introduction to Computer Aided Design and Drafting .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

##### YEAR I – Second Semester

†ARC	2461	Materials and Methods I .....	3 cr.
BCN	2760	Building Codes .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†TAR	1170C	B.I.M. I Revit Residential.....	3 cr.
†TAR	2054	Intermediate Computer Aided Design and Drafting .....	3 cr.

##### YEAR I – Third Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

##### YEAR II – First Semester

†ARC	2501	Architectural Structures I.....	4 cr.
†BCT	2770C	Construction Estimating.....	3 cr.
†TAR	1171C	B.I.M. II Revit Commercial.....	3 cr.
†TAR	1172C	B.I.M. III Revit M.E.P. ....	3 cr.

##### YEAR II – Second Semester

*†ARC	2304	Architectural Design IV.....	5 cr.
BCN	2049	Sustainable Design and Construction .....	3 cr.
BCN	2939C	Construction Capstone.....	3 cr.
SUR	2000C	Surveying I.....	3 cr.

\*May require additional coursework.

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Biotechnology Laboratory Technology

### AS.BIO.TECH (60 Credit Hours)

This program prepares students seeking positions as biotechnology laboratory technicians, biological technicians, and medical or clinical technicians. It will enable individuals currently employed in biotechnology occupations to update skills to address changing technologies for career advancement. Biotechnology is a high-skill, high-demand, high-wage industry.

#### Program Required Courses

##### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†MAC	1105	College Algebra .....	3 cr.
†MCB	2000	Microbiology and Human Disease .....	3 cr.
†MCB	2000L	Microbiology and Human Disease Laboratory.....	1 cr.

**YEAR I – Second Semester**

†BSC	2010	Biological Science I.....	3 cr.
†BSC	2010L	Biological Science I Laboratory .....	1 cr.
*†CHM	2045	General Chemistry I.....	3 cr.
*†CHM	2045L	General Chemistry I Laboratory .....	1 cr.
†STA	2023	Elementary Statistics.....	3 cr.

**YEAR I – Third Semester**

BSC	2420	Biotechnology I.....	3 cr.
BSC	2420L	Biotechnology I Laboratory .....	2 cr.
†CHM	2046	General Chemistry II.....	3 cr.
†CHM	2046L	General Chemistry II Laboratory .....	1 cr.
		Elective .....	3 cr.

**YEAR II – First Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
BSC	2427	Biotechnology II.....	3 cr.
BSC	2427L	Biotechnology II Laboratory .....	2 cr.
†BSC	2435C	Bioinformatics.....	3 cr.

**YEAR II – Second Semester**

†BSC	2419C	Plant and Animal Cell Culture .....	3 cr.
†PHI	1010	Introduction to Philosophy .....	3 cr.
		Elective .....	10 cr.

**\*Select 13 credit hours from the following:**

†BSC	1092	Human Biology .....	3 cr.
†BSC	1092L	Human Biology Laboratory .....	1 cr.
BSC	2943	Biotechnology Internship.....	3 cr.
†BSC	2011	Biological Science II.....	3 cr.
†BSC	2011L	Biological Science Laboratory II .....	1 cr.
†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†CHM	2210	Organic Chemistry I.....	4 cr.
CHM	2210L	Organic Chemistry I Laboratory .....	1 cr.
†CHM	2211	Organic Chemistry II .....	4 cr.
CHM	2211L	Organic Chemistry II Laboratory .....	1 cr.
†ETI	1110	Introduction to Quality.....	3 cr.
ETI	1701	Industrial Safety .....	3 cr.
ETI	1802	Introduction to Process Technology .....	3 cr.
†MAC	1106	Combined College Algebra/Pre-Calculus.....	5 cr.
†MAC	2311	Calculus and Analytic Geometry I.....	5 cr.
†MAC	2312	Calculus and Analytic Geometry II .....	5 cr.
†MAC	2313	Calculus and Analytic Geometry III.....	5 cr.
†MAP	2302	Differential Equations.....	3 cr.
†MCB	2910L	Guided Undergraduate Research .....	1 cr.
†PHI	1600	Ethics.....	3 cr.
†PHY	1025	Fundamental of Physics .....	3 cr.
†PHY	1025L	Fundamental of Physics Laboratory .....	1 cr.
†PHY	2053	General Physics I.....	3 cr.
†PHY	2053L	General Physics Laboratory I.....	1 cr.

\*Requires additional coursework.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Business Administration****AS.BUS.MAN/AS.BUS.MAN.INT (60 Credit Hours)****AS • Business Administration and Management****AS.BUS.MAN**

The associate in science degree in Business Administration and Management prepares students to assume management or supervisory positions in business, industry, and government. It provides basic skills in a broad range of business functions including accounting, computer usage, management, and marketing.

NOTE: Beginning Fall Term 2000, all graduates of this program shall articulate into a business administration baccalaureate degree (in those programs not accredited by AACSB, please note USF is AACSB accredited) in the designated university program under the provision of Rule 6A-10.024, Articulation between Universities, Community Colleges, and School Districts.

**Program Required Courses****YEAR I – First Semester**

†CGS	2100	Computers Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
†MAC	1105	College Algebra or †MAC 2233C, Calculus for Business and Social Science .....	3 cr.

**YEAR I – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†GEB	2214	Business Communications and Technology .....	3 cr.
†MAN	2021	Principles of Management .....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.

**YEAR I – Third Semester**

†ECO	2013	Principles of Macroeconomics .....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.
		*Electives offered during this term .....	3 cr.

**YEAR II – First Semester**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†BUL	2241	Business Law I.....	3 cr.
†MAR	2011	Principles of Marketing .....	3 cr.
		*Electives offered during this term .....	3 cr.

**YEAR II – Second Semester**

†ACG	2071	Managerial Accounting .....	3 cr.
†ECO	2023	Principles of Microeconomics.....	3 cr.
†SBM	2000	Small Business Management .....	3 cr.
		*Electives offered during this term .....	3 cr.

**\*Select 9 credit hours from the following:**

†BRC	1301	Introduction to Financial Institutions.....	3 cr.
†BUL	2242	Business Law II.....	3 cr.
†ENT	1000	Introduction to Entrepreneurship .....	3 cr.
†FIN	1100	Personal Finance.....	3 cr.
†FIN	2001	Principles of Finance .....	3 cr.
GEB	1949	Business Internship .....	3 cr.
†GEB	2350	Introduction to International Business Essentials.....	3 cr.
†MAN	2500	Operations Management.....	3 cr.
MAN	2604	Intercultural Relations in Business.....	3 cr.
†SCM	1010	Introduction to Supply Chain Management.....	3 cr.

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Business Administration – International Business Management****AS.BUS.MAN.INT (60 Credit Hours)****Program Required Courses****YEAR I – First Semester**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
MAC	1105	College Algebra or †MAC 2233C, Calculus for Business.....	3 cr.

**YEAR I – Second Semester**

†ACG	2071	Managerial Accounting.....	3 cr.
†CGS	2100	Computers Information Technology and Literacy.....	3 cr.
†MAR	2011	Principles of Marketing.....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
		Humanities General Education CORE.....	3 cr.
		Natural Science General Education CORE.....	3 cr.

**YEAR II – First Semester**

†ECO	2023	Principles of Microeconomics.....	3 cr.
†FIN	2001	Principles of Finance.....	3 cr.
†GEB	2350	Introduction to International Business Essentials.....	3 cr.
†MAN	2021	Principles of Management.....	3 cr.
MAR	2150	International Marketing.....	3 cr.

**YEAR II – Second Semester**

†ECO	2013	Principles of Macroeconomics.....	3 cr.
†FIN	2051	International Financial Management.....	3 cr.
GEB	2370	Introduction to International Business Policy Issues.....	3 cr.
MAN	2604	Intercultural Relations in Business.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Business Intelligence Specialist****AS.BIS (60 Credit Hours)****Program Required Courses****YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology.....	3 cr.
†MAC	1105	College Algebra.....	3 cr.
†CGS	2301	Management Information Systems.....	3 cr.
		*Specified Electives.....	3 cr.

**YEAR I – Second Semester**

†ENC	1101	English Comp I.....	3 cr.
STA	2303	Elementary Statistics.....	3 cr.
†COP	1000	Programming Logic.....	3 cr.
		*Specified Electives.....	3 cr.

**YEAR I – Third Semester**

†CGS	2541	Database Design.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
†HUM	1020	Introduction to the Humanities or †PHI 1010, Introduction to Philosophy.....	3 cr.

**YEAR II – First Semester**

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
†COP	1030	Introduction to Python Programming.....	3 cr.
†CTS	2440	Database Programming SQL.....	3 cr.
		*Specified Electives.....	3 cr.



**YEAR II – Second Semester**

COP	2050	R-Programming.....	3 cr.
ISM	2110	Business Intelligence I.....	3 cr.
†EVR	1001C	Introduction to Environmental Science or PHY 1020C, Conceptual Physics.....	3 cr.

**YEAR II – Third Semester**

ISM	2111	Business Intelligence II.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.

**\*Select at least 9 credit hours from any courses with prefix: CGS, CIS, COP, MAC, MAN, MAR, PSY, SOP, SYG**

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Computer Engineering Technology****AS.CET.UNIV (68 Credit Hours)**

This program will prepare students for employment in an entry-level position as a computer technician. The course work focuses on the diagnosis and repair of hardware and software in micro, mini and mainframe computers. With minimal additional specialized training, students may become a field or in-house shop technician.

**Program Required Courses****YEAR I – First Semester**

†CET	1112C	Basic Digital Systems.....	3 cr.
†EET	1036C	Basic AC and DC.....	3 cr.
†EET	1083C	Electronics Orientation.....	3 cr.
†MAC	1105	College Algebra.....	3 cr.

**YEAR I – Second Semester**

†CET	1123C	Introduction to Microprocessors/Microcontrollers.....	3 cr.
CET	2113C	Digital Systems Analysis.....	3 cr.
EET	1037C	Circuit Analysis.....	3 cr.
†EET	1141C	Solid State Devices.....	3 cr.
†MAC	1147	Pre-Calculus Algebra and Technology.....	5 cr.

**YEAR I – Third Semester**

†ENC	1101	English Composition I.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.
		Natural Science General Education CORE.....	3 cr.

**YEAR II – First Semester**

CET	2152C	Advanced Microprocessors.....	3 cr.
†EET	1142C	Solid State Circuits.....	3 cr.
†TAR	2053	Introduction to Computer Aided Design and Drafting.....	3 cr.

**YEAR II – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
†CET	2939	Computer Engineering Technology Capstone.....	3 cr.
EET	2155C	Linear Integrated Circuits.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.

**YEAR II – Third Semester**

CET	2335C	Total Microcomputer Systems.....	3 cr.
†EET	2326C	Communications Systems.....	3 cr.
		Humanities General Education CORE.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Computer Information Technology

### AS.CIA (60 Credit Hours)

This program prepares students for jobs in the field of PC support specialist, help desk specialist, software specialist, and information systems specialist.

#### Program Required Courses

##### YEAR I – First Semester

†CGS	1000	Introduction to Computers .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

##### YEAR I – Second Semester

†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
†CET	1174C	PC Upgrading and Repair: Software .....	3 cr.
†CGS	2301	Management Information Systems.....	3 cr.
†CTS	1303	Enterprise Operating Systems I.....	3 cr.
†CTS	1305	Introduction to Networking .....	3 cr.

##### YEAR I – Third Semester

†CGS	2541	Database Design.....	3 cr.
**†CTS	1306	Enterprise Operating Systems II .....	3 cr.

##### YEAR II – First Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CGS	1103	Project Management .....	3 cr.
*†CIS	2321	Systems Analysis.....	3 cr.
†CNT	1401	Introduction to Network Security .....	3 cr.
†OST	1335	Business Communications .....	3 cr.

##### YEAR II – Second Semester

†CGS	1555	Introduction to the Internet .....	3 cr.
†CIS	2939	Computer Information Administrator Capstone.....	3 cr.
		**Electives offered during this term.....	3 cr.

#### \*\*Select at least 3 credit hours from the following:

†CGS	1577	Presentation Systems .....	3 cr.
†CGS	1761	Computer Operating Systems .....	3 cr.
†CGS	2108	Advanced Computer Applications.....	3 cr.
CIS	2905	Special Topics in Computer Information .....	3 cr.
CIS	2932-36	Special Topics in Computer Information .....	3 cr.
†COP	1000	Programming Logic .....	3 cr.
†CTS	1106	Introduction to Linux .....	3 cr.

\*Permission of instructor required for concurrent enrollment with prerequisite.

\*\* May require additional coursework.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Computer Programming and Analysis

### AS.COP (60 Credit Hours)

This program prepares students for jobs in the field of computer programmer, junior programmer, senior programmer, data manager, programmer analyst, and mid-range computer specialist.

#### Program Required Courses

##### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
		Humanities General Education CORE .....	3 cr.

Natural Science General Education CORE .....	3 cr.
Mathematics General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†AMH 2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CGS 1761	Computer Operating Systems .....	3 cr.
†CGS 2301	Management Information Systems .....	3 cr.
†COP 1000	Programming Logic .....	3 cr.
†CTS 1305	Introduction to Networking .....	3 cr.

**YEAR II – First Semester**

†CGS 2541	Database Design .....	3 cr.
†COP 1220	Programming in C .....	3 cr.
†COP 2800	Java Programming .....	3 cr.
†OST 1335	Business Communications .....	3 cr.
	*Specified Elective .....	3 cr.

**YEAR II – Second Semester**

†CIS 2321	Systems Analysis .....	3 cr.
†COP 2360	Programming in C# .....	3 cr.
†COP 2805C	Java Advanced .....	3 cr.
†COP 2939	Computer Programming Capstone .....	3 cr.
	*Specified Elective .....	3 cr.

**\*Select at least 6 elective credit hours from the following:**

†COP 1030	Introduction to Python Programming .....	3 cr.
†COP 1120	COBOL, Beginning .....	3 cr.
†COP 1332	Visual BASIC, Beginning .....	3 cr.
†COP 1812	Introduction to XML Authoring .....	3 cr.
†COP 2224	Programming in C++ .....	3 cr.
COP 2654	Mobile Platform Application Development .....	3 cr.
†COP 2833	Database-driven Web Programming: Client .....	3 cr.
†COP 2836	Database-driven Web Programming: Server .....	3 cr.
COP 2930-35	Special Topics in Programming .....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Criminology and Criminal Justice Studies****AS.CJT (60 Credit Hours)**

The Criminal Justice associate in science degree program (AS to BS) offers students a broad background in the history, philosophy, organization, management and operation of the criminal justice system. Upon completion, this AS degree opens up entry-level, non-sworn positions in local, state, and federal agencies, i.e. juvenile justice, private security, law enforcement, corrections, probation and parole, detention centers and community-based intervention programs. It can also be the first step toward a career in law.

The AS degree will transfer into similar upper division programs in certain Florida universities and colleges, but students wishing to transfer must accept the responsibility for securing approval in advance from the transfer institution.

For students interested in a two-year degree in criminal justice, this program will prepare them to work in law enforcement agencies such as police departments, sheriff's offices, correctional institutions, criminal and juvenile courts, crime laboratories or crime scene units dealing with physical evidence and will also help them develop the educational skills needed to advance into and within various law enforcement related fields such as police work and corrections and law.

For more information, refer to the HCC Catalog or <https://www.hccfl.edu/academics/subjects/law-criminal-justice-security/criminology-and-criminal-justice-studies>

**Program Required Courses****YEAR I – First Semester**

†ENC 1101	English Composition I .....	3 cr.
†CCJ 1010	Introduction to Criminology <i>or</i> †CCJ 1010H, Honors Introduction to Criminology .....	3 cr.
†CCJ 1020	Introduction to Criminal Justice .....	3 cr.
†CGS 2100	Computer Information Technology and Literacy .....	3 cr.

**YEAR I – Second Semester**

†CJE	1000	Introduction to Law Enforcement.....	3 cr.
†CJE	2004	Career Choices in Criminal Justice .....	3 cr.
†POS	2041	American Government .....	3 cr.
		Natural Science General Education CORE (AST 1002C, EVR 1001C, or CHM 1020C recommended).....	3 cr.

**YEAR I – Third Semester**

		Behavioral Science General Education CORE .....	3 cr.
		*Criminal Justice Electives .....	3 cr.

**YEAR II – First Semester**

†CJJ	1002	Juvenile Delinquency.....	3 cr.
†CJL	1100	Criminal Law or CJL 1100H, Honors Criminal Law .....	3 cr.
		Humanities General Education CORE .....	3 cr.
		*Criminal Justice Electives .....	3 cr.

**Select 3 credit hours from the following:**

†CJL	1062	Constitutional Law.....	3 cr.
†CCJ	1488	Ethics in Criminal Justice or CCJ 1488H, Honors Ethics in Criminal Justice .....	3 cr.
†CCJ	2013	Introduction to Victimology .....	3 cr.

**YEAR II – Second Semester**

†CJE	2600	Criminal Investigation.....	3 cr.
†CJL	2130	Criminal Evidence and Procedure.....	3 cr.
		Mathematics General Education CORE (STA 2023 or MGF 1107 recommended) .....	3 cr.
		*Criminal Justice Elective.....	3 cr.

**YEAR II – Third Semester**

		*Criminal Justice Elective.....	3 cr.
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**\*Select 12 credit hours from the following criminal justice courses:**

†CCJ	2111	Introduction to Theories of Criminal Behavior .....	3 cr.
†CCJ	2191	Crisis Intervention in Criminal Justice .....	3 cr.
†CCJ	2358	Criminal Justice Communication and Reports.....	3 cr.
†CCJ	2509	Introduction to Gangs.....	3 cr.
†CCJ	2600	Criminal Deviant Behavior in Society .....	3 cr.
†CCJ	2610	Introduction to Criminal Typologies.....	3 cr.
†CCJ	2618	Forensic Psychology .....	3 cr.
†CCJ	2648	Organized Crime.....	3 cr.
†CCJ	2671	Race, Gender, and Ethnicity in Criminal Justice .....	3 cr.
†CCJ	2685	Domestic and Sexual Violence.....	3 cr.
†CCJ	2720	Introduction to Criminal Justice Research Methods.....	3 cr.
†CCJ	2910	Guided Independent Research .....	3 cr.
CCJ	2935-9	Seminar on Criminal Justice Issues.....	3 cr.
CCJ	2940	Criminal Justice Internship .....	3 cr.
†CJC	2162	Probation and Parole .....	3 cr.
†CJE	1640	Introduction to Criminalistics.....	3 cr.
CJE	1642C	Introduction to Crime Scene Technology.....	3 cr.
CJE	1643C	Advanced Crime Scene Technology .....	3 cr.
†CJE	1653	Introduction to Crime Analysis and Intelligence.....	3 cr.
†CJE	1680	Introduction to Computer Crimes .....	3 cr.
†CJE	2233	Drug Abuse and Crime .....	3 cr.
†CJE	2300	Police Administration and Organization .....	3 cr.
†CJE	2614	Serial Killers .....	3 cr.
†CJE	2664	Advanced Crime and Intelligence Analysis .....	3 cr.
†CJE	2704	Introduction to Child Protective Investigations.....	3 cr.
†CJL	1000	Introduction to Law and Legal Issues .....	3 cr.
†CJL	1500	Introduction to the Court System.....	3 cr.
†CJL	2072	Civil Rights and Liability in Criminal Justice.....	3 cr.
†CJL	2610	Courtroom Presentation of Scientific Evidence.....	3 cr.
†DSC	1002	Introduction to Terrorism .....	3 cr.

†DSC	1003	Introduction to Homeland Security .....	3 cr.
†DSC	2033	Introduction to Terrorist Tactics and Weapons.....	3 cr.
†DSC	2570	Introduction to Cyber-Terrorism .....	3 cr.
†DSC	2590	Intelligence Analysis and Security Management.....	3 cr.
SCC	1000	Introduction to Security .....	3 cr.
SCC	1001	Introduction to Private Investigation .....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

\*May be taken if not previously chosen from the “Select 3 credit hours from the following” category.

**NOTE 2:** Regardless of degree work completed, in order to be a sworn law enforcement, corrections, or probation officer in the State of Florida, candidates must successfully complete a state mandated training academy such as those offered by Hillsborough Community College’s Criminal Justice Institute.

**NOTE 3:** Students who have successfully completed a Florida police or correction academy will be eligible for the articulated credit shown below toward the AS degree. Refer to the Criminal Justice Technology website at <https://www.hccfl.edu/academics/subjects/law-criminal-justice-security/criminology-and-criminal-justice-studies> for specific details

CJC	2940	Criminal Justice Practicum-Basic Corrections Academy .....	9 cr.
CJE	2940	Criminal Justice Practicum-Basic Police Academy .....	12 cr.

## AS • Culinary Management

### AS.CUL.CULA (60 Credit Hours)

This program will provide students with the skills necessary for employment as a restaurant cook or chef. The Culinary Management program and courses are accredited by the American Culinary Federation Foundation’s Accrediting Commission at 180 Center Place Way, St. Augustine, Florida 32095.

**NOTE:** Beginning Fall term 2008, all graduates of this program are eligible to articulate the AS degree in Culinary Management to the BS degree in Hotel and Restaurant Management at the University of Houston, Conrad N. Hilton College of Hotel and Restaurant Management.

### Program Required Courses

#### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†FSS	1223C	Food Preparation for Managers .....	4 cr.
†FSS	2100	Menu Development and Marketing .....	3 cr.
†FOS	1201	Safety and Sanitation .....	2 cr.
		Mathematics General Education CORE .....	3 cr.

#### YEAR I – Second Semester

†CGS	1107	Introduction to Computers .....	1 cr.
†FSS	1063C	Food Specialty I (Baking) .....	3 cr.
†FSS	1500	Food and Beverage Control .....	3 cr.
FSS	1941	Food Practicum I .....	2 cr.
†HFT	2840	Maitre D’ and Dining Room .....	3 cr.

#### YEAR I – Third Semester

FSS	1942	Food Practicum II.....	2 cr.
FSS	1943	Food Practicum III.....	2 cr.

#### YEAR II – First Semester

†HFT	1000	Introduction to Hospitality Industry Management .....	3 cr.
†HFT	2210	Supervisory Development .....	3 cr.
†HFT	2600	Hospitality Law .....	3 cr.
†HUN	2203	Culinary Nutrition .....	3 cr.

#### YEAR II – Second Semester

FSS	1944	Food Practicum IV .....	2 cr.
†FSS	1248C	Food Specialties II (Garde Manger I).....	3 cr.
†FSS	2120	Food Purchasing and Storing .....	3 cr.

**YEAR II – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Culinary and Dietetic Management****AS.CUL.DIET (60 Credit Hours)****Program Required Courses****YEAR I – First Semester**

†ENC	1101	English Composition I .....	3 cr.
†FSS	2100	Menu Development and Marketing .....	3 cr.
†FOS	1201	Safety and Sanitation .....	2 cr.
†HFT	2210	Supervisory Development .....	3 cr.

**YEAR I – Second Semester**

DIE	1121	Management of Food and Nutrition Services .....	3 cr.
†FSS	1223C	Food Preparation for Managers .....	4 cr.
†FSS	1500	Food and Beverage Control .....	3 cr.
†FSS	2120	Food Purchasing and Storing .....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
DIE	2940	Dietary Manager Food Practicum .....	3 cr.

**YEAR II – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†FSS	1063C	Food Specialty I (Baking) .....	3 cr.
†HUN	2203	Culinary Nutrition .....	3 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR II – Second Semester**

DIE	2210	Nutrition Therapy .....	3 cr.
DIE	2271	Clinical Dietetics .....	3 cr.
†FSS	1248C	Food Specialties II (Garde Manger I) .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

**YEAR II – Third Semester**

DIE	2942	Dietary Manager Clinical Practicum .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**AS • Cybersecurity****AS.CYBER.SEC (60 Credits)**

This program prepares students for jobs in the fields of computer systems analyst, computer network specialist, computer support specialist or network systems engineer.

**Program Required Courses****YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Mathematics General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†COP	1000	Programming Logic .....	3 cr.
†CGS	2820	Web Authoring HTML .....	3 cr.
†CTS	1305	Introduction to Networking .....	3 cr.

**YEAR I – Third Semester**

†COP	2830	Scripting for the Web.....	3 cr.
†CNT	1401	Introduction to Network Security.....	3 cr.

**YEAR II – First Semester**

†CET	1600	Cisco Network Fundamentals.....	3 cr.
†CIS	2359C	Information Assurance Network Systems.....	3 cr.
†COP	2836	Database-driven Web Programming: Server.....	3 cr.
†CTS	1106	Introduction to Linux.....	3 cr.

**YEAR II – Second Semester**

†CET	1610	Cisco Switching, Routing, and Wireless Essentials.....	3 cr.
†CIS	2352C	Information Assurance Local Systems.....	3 cr.
†CIS	2353	Security Management and Penetration Testing.....	3 cr.
		Humanities General Education CORE.....	3 cr.

**YEAR II – Third Semester**

†CGS	2091	Information Technology: Ethical and Legal Issues.....	3 cr.
†CIS	2598	Cybersecurity Capstone.....	3 cr.

**AS • Cybersecurity Operations****AS.CYBER.OPR (60 Credits)****Program Required Courses****YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
		Mathematics General Education CORE.....	3 cr.
		Natural Science General Education CORE.....	3 cr.

**YEAR I – Second Semester**

†COP	1000	Programming Logic.....	3 cr.
†CTS	1106	Introduction to Linux.....	3 cr.
†CTS	1305	Introduction to Networking.....	3 cr.
†POS	2041	American Government.....	3 cr.

**YEAR I – Third Semester**

†CET	1600	Cisco Network Fundamentals.....	3 cr.
†CNT	1401	Introduction to Network Security.....	3 cr.

**YEAR II – First Semester**

†CGS	2820	Web Authoring HTML.....	3 cr.
†CET	1610	Cisco Switching, Routing, and Wireless Essentials.....	3 cr.
†CIS	2381C	Computer Forensics and Incident Response.....	3 cr.
CIS	2772	Cybersecurity Operations Fundamentals.....	3 cr.

**YEAR II – Second Semester**

COP	2344	Shell Scripting.....	3 cr.
†CTS	1303	Enterprise Operating Systems I.....	3 cr.
†CIS	2621	Cybersecurity Operations Implementations.....	3 cr.
		Humanities General Education CORE.....	3 cr.

**YEAR II – Third Semester**

†CGS	2091	Information Technology: Ethical and Legal Issues.....	3 cr.
†CIS	2598	Cybersecurity Capstone.....	3 cr.

## AS • Database Technology

### AS.DB.TECH (60 credit hours)

The Database Technology program provides students with a general approach to database design, programming and administration.

#### Program Required Courses

##### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Mathematics General Education CORE .....	3 cr.
		Humanities General Education CORE .....	3 cr.

##### YEAR I – Second Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CGS	1103	Project Management .....	3 cr.
†CGS	2541	Database Design .....	3 cr.
†COP	1000	Programming Logic .....	3 cr.
†CTS	1305	Introduction to Networking .....	3 cr.

##### YEAR I – Third Semester

†CNT	1401	Introduction to Network Security .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

##### YEAR II – First Semester

†CGS	2301	Management Information Systems .....	3 cr.
†CTS	2440	Database Programming SQL .....	3 cr.
†CTS	2441	Database Administration I .....	3 cr.
		ANY course with prefix CEN, CET, CGS, CIS, COP, CNT, or CTS offered during this term.....	6 cr.

##### YEAR II – Second Semester

†CIS	2321	Systems Analysis .....	3 cr.
†CTS	2442	Database Administration II .....	3 cr.
†CTS	2445	Database Programming Advanced .....	3 cr.
†CTS	2939	Database Technology Capstone .....	3 cr.

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Digital Media/Multimedia Technology

### AS.MMT (60 Credit Hours)

This program prepares students for jobs such as desktop publisher, production designer, electronic publisher, illustrator, multimedia specialist, multimedia presentation developer, interface designer, computer graphic designer, and project manager.

#### Game Design and Development

##### AS.MMT.GAME

#### Program Required Courses

##### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Mathematics General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

##### YEAR I – Second Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CAP	1023	Introduction to Game Development .....	3 cr.
†CGS	1871	Multimedia Authoring I .....	3 cr.
†CGS	2821	Graphics Design for Multimedia and Internet .....	3 cr.



**YEAR I – Third Semester**

\*Specified electives offered during this term..... 9 cr.

**YEAR II – First Semester**

†CAP 2042 Game Design and Development - Modeling..... 3 cr.  
 †CAP 2043 Game Design and Development - Rigging..... 3 cr.  
 †CGS 2876 Digital Audio/Video Design..... 3 cr.  
 Humanities General Education CORE..... 3 cr.

**YEAR II – Second Semester**

CAP 2041 Game Design and Development – Animation..... 3 cr.  
 †CAP 2044 Game Design and Development – Special Effects..... 3 cr.  
 †CGS 2827 Advanced Graphics Design for Multimedia and Internet..... 3 cr.  
 †CGS 2874 Multimedia Authoring II..... 3 cr.

**YEAR II – Third Semester**

†CAP 2939 Digital Media/Multimedia Technology Capstone..... 3 cr.

**\*Select at least 9 specified elective credits from the following:**

†CGS 2585 Desktop Internet Publishing..... 3 cr.  
 †CGS 2804 Vector Graphic Application..... 3 cr.  
 †CGS 2877 Digital Animation Design..... 3 cr.  
 \*\*†EME 2040 Introduction to Technology for Educators..... 3 cr.  
 ANY courses with prefix: CAP, CEN, CET, CGS, CIS, COP, CNT or CTS..... 7 cr.

\*\*Requires additional coursework.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Multimedia Developer****AS.MMT****Program Required Courses****YEAR I – First Semester**

†CGS 1000 Introduction to Computers and Technology..... 3 cr.  
 †ENC 1101 English Composition I..... 3 cr.  
 Mathematics General Education CORE..... 3 cr.  
 Natural Science General Education CORE..... 3 cr.

**YEAR I – Second Semester**

†AMH 2020 Modern American History or †POS 2041, American Government..... 3 cr.  
 †CGS 1577 Presentation Systems..... 3 cr.  
 †CGS 1871 Multimedia Authoring I..... 3 cr.  
 †CGS 2820 Web Authoring HTML..... 3 cr.  
 †COP 1000 Programming Logic..... 3 cr.

**YEAR I – Third Semester**

†CGS 2585 Desktop Internet Publishing..... 3 cr.  
 †CGS 2804 Vector Graphic Application..... 3 cr.  
 †COP 2830 Scripting for the Web..... 3 cr.

**YEAR II – First Semester**

†CGS 2821 Graphics Design for Multimedia and Internet..... 3 cr.  
 †CGS 2876 Digital Audio/Video Design..... 3 cr.  
 Humanities General Education CORE..... 3 cr.  
 \*Specified elective offered during this term..... 3 cr.

**YEAR II – Second Semester**

†CAP 2939 Digital Media/Multimedia Technology Capstone..... 3 cr.  
 †CGS 2827 Advanced Graphics Design for Multimedia and Internet..... 3 cr.  
 †CGS 2874 Multimedia Authoring II..... 3 cr.

†CGS 2877 Digital Animation Design ..... 3 cr.

**\*Select at least 3 specified elective credits from the following:**

ANY courses with prefix CAP, CEN, CET, CGS, CIS, COP, CNT or CTS offered in a specified term and not previously taken..... 3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Early Childhood Education

### AS • Early Childhood Education: Administrator Option

#### AS.CHILD.EDU (60 Credit Hours)

##### Program Required Courses

##### YEAR I – First Semester

†EDF 1005 Introduction to the Teaching Profession ..... 3 cr.  
 †EEC 1300 Planning the Early Childhood Program..... 3 cr.  
 †ENC 1101 English Composition I..... 3 cr.

##### YEAR I – Second Semester

†EDF 2085 Introduction to Diversity for Educators or \*†EME 2040, Introduction to Technology for Educators ..... 3 cr.  
 †EEC 1401 The Family and Early Childhood Education..... 3 cr.  
 †PSY 2012 General Psychology ..... 3 cr.

##### YEAR I – Third Semester

†DEP 2102 Child Development..... 3 cr.  
 †EEC 2732 Health, Safety and Nutrition for Young Children ..... 3 cr.  
 Humanities General Education CORE (HUM 1020 recommended) ..... 3 cr.

##### YEAR II – First Semester

†EEC 1521 Operation of Early Childhood Center Management ..... 3 cr.  
 †EEC 1601 Observing and Recording Children Behavior ..... 3 cr.  
 †EEC 1603 Child Guidance or †CGS 2100, Computer Information Technology and Literacy ..... 3 cr.  
 †EEC 2271 Children with Special Needs ..... 3 cr.  
 Natural Sciences General Education CORE (EVR 1001C recommended) ..... 3 cr.

##### YEAR II – Second Semester

†AMH 2020 Modern American History or †POS 2041, American Government ..... 3 cr.  
 †EEC 2527 Legal and Financial Issues in Child Care ..... 3 cr.  
 †EEC 1941 Child Care Practicum I ..... 3 cr.  
 Mathematics General Education CORE (MGF 1106 recommended)..... 3 cr.

##### YEAR II – Third Semester

†EEC 1943 Child Care Practicum II..... 3 cr.  
 †ENT 1000 Introduction to Entrepreneurship..... 3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

\*EME 2040 is a pre-requisite for entry into the Bachelor of Science program in Early Childhood Education within the State of Florida. Students who intend to transfer to a University program should complete EME 2040.

### AS • Early Childhood Education: Preschool Option

#### AS.CHILD.PRE (60 Credit Hours)

##### Program Required Courses

##### YEAR I – First Semester

†EDF 1005 Introduction to the Teaching Profession ..... 3 cr.  
 †EEC 1300 Planning the Early Childhood Program..... 3 cr.  
 †ENC 1101 English Composition I..... 3 cr.

##### YEAR I – Second Semester

†EDF 2085 Introduction to Diversity for Educators or \*†EME 2040, Introduction to

		Technology for Educators .....	3 cr.
†EEC	1401	The Family and Early Childhood Education.....	3 cr.
†PSY	2012	General Psychology .....	3 cr.

**YEAR I – Third Semester**

†DEP	2102	Child Development.....	3 cr.
†EEC	2732	Health, Safety and Nutrition for Young Children .....	3 cr.
		Humanities General Education CORE (HUM 1020 recommended) .....	3 cr.

**YEAR II – First Semester**

†EEC	1521	Operation of Early Childhood Center Management .....	3 cr.
†EEC	1601	Observing and Recording Children Behavior .....	3 cr.
†EEC	1603	Child Guidance.....	3 cr.
†EEC	2271	Children with Special Needs .....	3 cr.
		Natural Sciences General Education CORE (EVR 1001C recommended) .....	3 cr.

**YEAR II – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†EEC	1721	Physical Development in the Early Childhood Setting.....	3 cr.
†EEC	1941	Child Care Practicum I .....	3 cr.
		Mathematics General Education CORE (MGF 1106 recommended).....	3 cr.

**YEAR II – Third Semester**

†EEC	1943	Child Care Practicum II.....	3 cr.
†EEC	2270	Meeting Special Needs of Children in Groups.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

\*EME 2040 is a pre-requisite for entry into the Bachelor of Science program in Early Childhood Education within the State of Florida. Students who intend to transfer to a University program should complete EME 2040.

## AS • Electronics Engineering Technology

**AS.EET.UNIV (68 Credit Hours)**

This program will prepare a student for an entry-level position as an electronics engineering technician. Technicians assist engineers in planning, research, development and design.

The course work focuses on the skills needed for troubleshooting electronic equipment, performing operations, calculations, testing and reporting.

**Program Required Courses****YEAR I – First Semester**

†CET	1112C	Basic Digital Systems .....	3 cr.
†EET	1036C	Basic AC and DC.....	3 cr.
†EET	1083C	Electronics Orientation .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.

**YEAR I – Second Semester**

†CET	1123C	Introduction to Microprocessors/Microcontrollers.....	3 cr.
CET	2113C	Digital Systems Analysis.....	3 cr.
EET	1037C	Circuit Analysis.....	3 cr.
†EET	1141C	Solid State Devices .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.

**YEAR I – Third Semester**

†ENC	1102	English Composition II.....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR II – First Semester**

†EET	1142C	Solid State Circuits .....	3 cr.
†ETS	1603C	Fundamentals of Robotics and Simulation.....	3 cr.
†ETS	2210C	Introduction to Photonics.....	3 cr.
†MAC	1147	Pre-Calculus Algebra and Trigonometry .....	5 cr.

**YEAR II – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
EET	2155C	Linear Integrated Circuits .....	3 cr.
ETS	2230C	Introduction to Lasers.....	3 cr.
†TAR	2053	Introduction to Computer Aided Design and Drafting .....	3 cr.

**YEAR II – Third Semester**

†EET	2326C	Communications Systems I.....	3 cr.
EET	2939	Electronics Engineering Technology Capstone.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Engineering Technology****AS.ETI (60 Credit Hours)**

Engineering Technology is a comprehensive program covering introductory computer-aided drafting, electronics, instrumentation and testing, processes and materials, quality and safety. These skills align with the national Manufacturing Skill Standards Council (MSSC) Portable Production Technician certification. The engineering technology curriculum which emphasizes advanced manufacturing, prepares students for many high skill/high wage/high demand jobs in manufacturing and other high-technology industries.

**Program Required Courses****YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
†ETD	1320C	Computer Aided Drafting for Engineers .....	3 cr.
†ETI	1810C	Introduction to Electricity and Electronics .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.

**YEAR I – Second Semester**

†ETI	1110	Introduction to Quality.....	3 cr.
†ETI	1622	Concepts of Lean and Six Sigma .....	3 cr.
ETI	1701	Industrial Safety .....	3 cr.
†ETM	1010C	Mechanical Measurement and Instrumentation .....	3 cr.
		*Specified Electives .....	2 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
		Natural Science General Education CORE .....	3 cr.
		*Specified Electives .....	3 cr.

**YEAR II – First Semester**

†ETI	1420	Manufacturing Processes and Materials .....	3 cr.
†ETI	1843	Motors and Controls.....	3 cr.
†ETS	1542	Introduction to Programmable Logic Controllers .....	3 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR II – Second Semester**

†ETM	2315	Hydraulic and Pneumatic Systems.....	3 cr.
†ETM	2315L	Hydraulic and Pneumatic Laboratory.....	1 cr.
†ETS	2527	Electromechanical Components and Mechanisms .....	3 cr.
		*Specified Electives .....	6 cr.

**\*Select 11 specified elective credits from the following:**

†CGS	2100	Computers Information Technology and Literacy .....	3 cr.
†EGN	2122C	Geometric Dimensioning and Tolerancing.....	3 cr.
ENC	2210	Technical Writing.....	3 cr.
†ETD	2364C	Introduction to 3D Computer-Aided Design .....	3 cr.
†ETD	1340C	Intermediate CAD.....	3 cr.
†ETI	1644	Production and Inventory Control .....	3 cr.
ETI	1802	Introduction to Process Technology .....	3 cr.
ETI	1931	Special Topics in Modern Manufacturing.....	3 cr.
ETI	1949	Manufacturing Internship.....	2 cr.
†ETI	2950	Engineering Technology Capstone.....	3 cr.
ETS	1520	Process Measurement Fundamentals .....	3 cr.

†ETS	1535	Automated Process Control.....	3 cr.
ETS	1539	Instrumentation Systems Safety .....	3 cr.
†ETS	2604	Robotics Applications.....	3 cr.
PMT	1250C	Computer Numerical Control (CNC) I.....	3 cr.
PMT	2254C	Computer Numerical Control (CNC) II.....	3 cr.
†SLS	1106	First Year Experience Orientation .....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Environmental Science Technology

### AS.EVR.LAB/AS.EVR.ETEC (64 Credit Hours)

This program will prepare students for positions as environmental pollution control technicians or environmental technicians. The program curriculum will prepare students to conduct environmental surveys; conduct investigations and evaluations of noise, air, and water conditions for compliance with public laws and regulations; or to effectively manage natural resources.

### AS • Environmental Technician

#### AS.EVR.ETEC

#### Program Required Courses

##### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
		Environmental Program Core Requirements and Specified Electives as available.....	9-12 cr.

##### YEAR I – Second Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Environmental Program Core Requirements and Specified Electives as available.....	9-12 cr.

##### YEAR I – Third Semester

†BSC	1005	Biological Foundations .....	3 cr.
†BSC	1005L	Biological Foundations Laboratory.....	1 cr.
†CHM	1025	Introductory Chemistry.....	3 cr.
†CHM	1025L	Introductory Chemistry Laboratory .....	1 cr.
†MAC	1105	College Algebra .....	3 cr.

##### YEAR II – First Semester

†POS	2041	American Government .....	3 cr.
		Environmental Program Core Requirements and Specified Electives as available.....	9-12 cr.

##### YEAR II – Second Semester

EVS	2942L	Environmental Technology Practicum.....	3 cr.
		Environmental Program Core Requirements and Specified Electives as available.....	9-12 cr.

#### Environmental Program Core Classes

†EVR	2858	Environmental Law .....	4 cr.
†EVS	1001	Introduction to Environmental Sustainability.....	3 cr.
EVS	2891	Hydrology and Quality of Water Resources .....	4 cr.
EVS	2894C	Water Sampling and Analysis I .....	5 cr.
EVS	2895C	Water Sampling and Analysis II .....	5 cr.
EVS	2893C	Soil Sampling and Analysis .....	5 cr.
GIS	1041	Survey of GIS/GPS .....	1 cr.

Select 11 specified elective credits from the following:

#### Water Emphasis

EVS	1026	Chemistry and Biology of Natural Waters.....	4 cr.
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#### Geographic Information Systems/Global Position Systems

EVR	1041	Natural Resource Management w/Applications in GIS.....	4 cr.
†GIS	2040	Fundamentals of GIS .....	3 cr.

**Natural Resource Management**

EVR	1328	Natural Resource Conversation and Ecology.....	3 cr.
FNR	1001	Natural Resource Management.....	3 cr.
ORH	1523	Native Upland Plants .....	2 cr.
ORH	1524	Native Wetland Plants.....	2 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Laboratory Technician****AS.EVR.LAB****Program Required Courses****YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
EVS	2893C	Soil Sampling and Analysis .....	5 cr.
		Mathematics General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†BSC	2010	Biological Science .....	3 cr.
†BSC	2010L	Biological Science Laboratory.....	1 cr.
†CHM	1025	Introductory Chemistry.....	3 cr.
†CHM	1025L	Introductory Chemistry Laboratory .....	1 cr.
†SPC	1006	Speech Improvement.....	1 cr.
		Specified Electives.....	4 cr.

**YEAR I – Third Semester**

†CHM	2045	General Chemistry I.....	3 cr.
†CHM	2045L	General Chemistry I Laboratory .....	1 cr.
		Humanities General Education CORE .....	3 cr.
		Social/Behavioral Science General Education .....	3 cr.

**YEAR II – First Semester**

†CHM	2046	General Chemistry II.....	3 cr.
†CHM	2046L	General Chemistry II Laboratory .....	1 cr.
EVS	2894C	Water Sampling and Analysis I.....	5 cr.
EVS	1026	Chemistry and Biology of Natural Waters.....	4 cr.

**YEAR II – Second Semester**

CHM	2132C	Modern Chemical Instrumentation .....	4 cr.
EVS	2895C	Water Sampling and Analysis II .....	5 cr.
EVS	2942L	Environmental Technology Practicum.....	3 cr.
		Specified Electives.....	2 cr.

**Select 6 specified elective credits from the following:**

ETI	1701	Industrial Safety .....	2 cr.
EVS	1893	Comparative Sampling and Analysis Methods .....	3 cr.
†MCB	1060	Food Microbiology.....	3 cr.
†MCB	1060L	Food Microbiology Laboratory .....	1 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Fire Science Technology****AS.FIRE.UNIV (60 Credit Hours)**

This program will prepare students for jobs as fire science technicians, fire officers or fire safety inspectors, fire assistants, safety inspectors, building inspectors or jobs in fire insurance sales.

**Program Required Courses****YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
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†FFP	1000	Introduction to Fire Science .....	3 cr.
†FFP	1506	Fire Prevention and Investigation.....	3 cr.
		Mathematics General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†FFP	1810	Fire Fighting Tactics and Strategy I .....	3 cr.
†FFP	2604	Cause and Origin .....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†FFP	2120	Fire Service Building Construction.....	3 cr.
FFP	2303	Fire Service Hydraulics .....	3 cr.
†FFP	2521	Construction Documents and Plans Review .....	3 cr.
		Behavioral Science General Education CORE .....	3 cr.

**YEAR II – First Semester**

†FFP	1710	Company Officer.....	3 cr.
†FFP	2305	Apparatus Practices .....	3 cr.
†FFP	2740	Fire Service Course Delivery .....	3 cr.
†FFP	2811	Fire Fighting Tactics and Strategy II.....	3 cr.

**YEAR II – Second Semester**

†AMH	2020	Modern American History or POS 2041, American Government .....	3 cr.
†FFP	2510	Codes and Standards .....	3 cr.
†FFP	2540	Private Fire Protection Systems.....	3 cr.
†FFP	2741	Fire Service Course Development.....	3 cr.

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**NOTE 1:** The following classes are required for Florida Bureau of Fire Standards and Training Certification as a Fire Officer: FFP 1710, FFP 1810, FFP 2120, and FFP 2740.

**NOTE 2:** The following classes are required for Florida Bureau of Fire Standards and Training Certification as a Municipal Fire Safety Inspector: FFP 1506, FFP 2120, FFP 2510, FFP 2521, and FFP 2540.

## AS • Hospitality and Tourism Management

### AS.HFT.RESH (60 Credit Hours)

This program will prepare students for supervisory jobs in the hospitality industry as managers, motel managers, a recreation establishment manager or resort manager.

**NOTE 1:** Beginning Fall term 2000, all graduates of this program shall articulate into a Hospitality Administration/Management baccalaureate degree (in those programs not accredited by AACSB) in the designated university program under the provision of Rule 6A-10.024, Articulation between Universities, Community Colleges, and School Districts.

**NOTE 2:** Beginning Fall term 2008, all graduates of this program are eligible to articulate the AS degree in Culinary Management to the BS degree in Hotel and Restaurant Management at the University of Houston, Conrad N. Hilton College of Hotel and Restaurant Management.

### Program Required Courses

**YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
†FOS	1201	Sanitation and Safety Management .....	2 cr.
†FSS	1223C	Food Preparation for Managers .....	4 cr.
†FSS	2100	Menu Development and Marketing .....	3 cr.

**YEAR I – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†FSS	2120	Food Purchasing and Storage.....	3 cr.
HFT	1410	Front Desk Procedures .....	3 cr.

**YEAR I – Third Semester**

†ECO	2023	Principles of Microeconomics.....	3 cr.
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†HFT	1000	Introduction to Hospitality Industry Management .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

**YEAR II – First Semester**

†ACG	2021	Introduction to Financial Accounting .....	3 cr.
†HFT	2210	Supervisory Development .....	3 cr.
†HFT	2600	Hospitality Industry Law .....	3 cr.
†HFT	2750	Meeting, Convention and Exposition Industry .....	3 cr.

**YEAR II – Second Semester**

†FSS	1500	Food and Beverage Control .....	3 cr.
†HFT	1790	The Event Industry .....	3 cr.
†HFT	2840	Maître d’ and Dining Room Service .....	3 cr.
HFT	2941	Hospitality Management Internship .....	3 cr.

**YEAR II – Third Semester**

		Natural Science General Education CORE .....	3 cr.
		Humanities General Education CORE .....	3 cr.

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Industrial Management Technology**

**AS.INDM.ARR/AS.INDM.AST/AS.INDM.BCV /AS.INDM.TECO/(60 Credit Hours)**

This program will prepare students for jobs as industrial managers and for advancement in various technical fields. Students who have successfully completed one of the various Tampa Electric Company training programs that have been articulated with the program (lineman, field engineering, substation electrician, plant electrician and controls analyst) or the HCC PSAV Automotive Collision Technology Technician certificate program, or the HCC PSAV Automotive Service Technology certificate program, or the HCC PSAV Bus Transit Technician I, II, III, or one of the HCC apprenticeship programs (ABC or IEC). For more information on current articulation agreements, consult an academic advisor or visit our website at <https://www.hccfl.edu/academics/articulation-agreements>.

**Articulated Credit and Electives** ..... Variable articulated credits based on chosen technical field.

**Program Required Courses**

**YEAR I – First Semester**

†ENC	1101	English Composition I .....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
		Mathematics General Education CORE (MGF 1106, MGF 1107, or STA 2023 recommended).....	3 cr.
		Behavioral Science General Education CORE or ECO 2013 .....	3 cr.

**YEAR I – Second Semester**

†ENT	1000	Introduction to Entrepreneurship .....	3 cr.
†MAN	2021	Principles of Management .....	3 cr.
		Humanities General Education CORE (HUM 1020 or PHI 1010 recommended).....	3 cr.
		Natural Science General Education CORE (EVR 1001C or AST 1002C or CHM 1020C recommended) .....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CGS	2100	Computers Information Technology and Literacy .....	3 cr.
†FIN	1100	Personal Finance.....	3 cr.

**\*Specified Electives**

**†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†BUL	2241	Business Law I.....	3 cr.
ETI	2941	Industrial Management Practicum .....	30 cr.
†MAR	2011	Principles of Marketing .....	3 cr.
†SLS	1261	Personal Skills/Business .....	3 cr.

\*NOTE: The number of electives will be determined by the number of articulated credits awarded.

\*\*ACG 2021 should be taken in Year II.



†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Interdisciplinary Entrepreneurship

### AS.INT.ENT (60 Credit Hours)

This degree provides students with the opportunity to learn entrepreneurial skills including ideation, business and financial modeling, effectuation, rapid prototyping, and design thinking. Students will acquire a comprehensive set of 21<sup>st</sup> Century workforce skills that prepare them for working in either their own start-ups or large established companies across a variety of industries. Students who complete this degree are eligible for applying for HCC's Everyday Entrepreneur Venture SEED Fund.

#### Program Required Courses

##### YEAR I – First Semester

†ENC	1101	English Composition I.....	3 cr.
†ENT	1000	Introduction to Entrepreneurship.....	3 cr.
†FIN	1100	Personal Finance.....	3 cr.
†MAC	1105	College Algebra.....	3 cr.

##### YEAR I – Second Semester

†ENT	1031	Entrepreneurial Marketing and Sales.....	3 cr.
†ENT	1012	Entrepreneurship Management.....	3 cr.
†ENT	1411	Small Business Accounting and Finance.....	3 cr.
†OST	2854C	Office Applications for Business.....	3 cr.

##### YEAR I – Third Semester

†ECO	2013	Principles of Macroeconomics.....	3 cr.
†ENC	1102	English Composition II.....	3 cr.
†SPC	1608	Public Speaking.....	3 cr.

##### YEAR II – First Semester

†ENT	1612	Creativity, Innovation, and Human Centered Design.....	3 cr.
†STA	2023	Elementary Statistics.....	3 cr.
		Humanities General Education CORE.....	3 cr.
		Natural Science General Education CORE.....	3 cr.
		Specified Elective.....	3 cr.

##### YEAR II – Second Semester

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
ENT	2212	Entrepreneurial Leadership – Capstone.....	3 cr.
		Specified Elective.....	6 cr.

#### Select 9 specified elective credits from the following:

†ANT	2000	Introduction to Anthropology.....	3 cr.
†CGS	2800	Web Authoring.....	3 cr.
†CGS	1510	Spreadsheet Applications.....	1 cr.
†CRW	1001	Creative Writing I.....	3 cr.
DAA	2611	Dance Improvisation.....	2 cr.
†ECO	2023	Principles of Microeconomics.....	3 cr.
†ENC	2210	Technical Writing.....	3 cr.
†ETI	1622	Concepts of Lean and Six Sigma.....	3 cr.
†FIL	1000	Introduction to Motion Media: Film, Cinema and the Environment.....	3 cr.
†FIL	2931	Careers in Film and Video.....	1 cr.
†GRA	2111C	Graphic Design.....	3 cr.
†HFT	1000	Introduction to Hospitality Industry Management.....	3 cr.
†HUN	2203	Culinary Nutrition.....	3 cr.
†HUS	1200	Introduction Group Process.....	3 cr.
†MAN	2300	Introduction to Human Resource Management.....	3 cr.
†MAN	2500	Operations Management.....	3 cr.
OST	2797	Social Media for Business.....	3 cr.
OST	2858	Excel Spreadsheet for Business.....	3 cr.
†SYG	2000	Introduction to Sociology.....	3 cr.
†THE	1000	Introduction to Theatre Arts.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Internet Services Technology

### AS.WEB.TECH.OPT1/AS.WEB.TECH.OPT2 (60 Credit Hours)

This program prepares students for internet-related jobs such as Web designer, site designer and internet architect.

#### AS • Web Designer

##### AS.WEB.TECH.OPT1

#### Program Required Courses

##### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Mathematics General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

##### YEAR I – Second Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CGS	1103	Project Management .....	3 cr.
†CGS	1871	Multimedia Authoring I .....	3 cr.
*†CGS	2820	Web Authoring - HTML .....	3 cr.
†COP	1000	Programming Logic .....	3 cr.

##### YEAR I – Third Semester

†CGS	2585	Desktop/Internet Publishing .....	3 cr.
†CGS	2804	Vector Graphics Applications .....	3 cr.
†COP	2830	Scripting for the Web .....	3 cr.

##### YEAR II – First Semester

†CGS	2821	Graphics Design for Multimedia and Internet .....	3 cr.
†CGS	2822	Web Site Creation .....	3 cr.
†CGS	2876	Digital Audio/Video Design .....	3 cr.
		Humanities General Education CORE .....	3 cr.

##### YEAR II – Second Semester

†CGS	2827	Advanced Graphics Design for Multimedia and Internet .....	3 cr.
†CGS	2877	Digital Animation Design .....	3 cr.
†CGS	2939	Internet Services Technology Capstone .....	3 cr.
		Elective .....	3 cr.

#### Select 3 credit hours from the following:

†CGS	2874	Multimedia Authoring II .....	3 cr.
CGS	2930-35	Special Topics in Internet Services Technology .....	3 cr.

\*Permission of instructor required for concurrent enrollment with prerequisite.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

#### AS • Web Developer

##### AS.WEB.TECH.OPT2

This program prepares students for internet-related jobs such as Webmaster, Web developer, site developer and internet programmer.

#### Program Required Courses

##### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Mathematics General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†CGS	2541	Database Design .....	3 cr.
†CGS	2820	Web Authoring - HTML.....	3 cr.
†COP	1000	Programming Logic .....	3 cr.
		*Specified Electives .....	3 cr.

**YEAR I – Third Semester**

†CGS	2091	Information Technology Ethical and Legal Issues.....	3 cr.
†COP	2830	Scripting for the Web.....	3 cr.

**YEAR II – First Semester**

†CGS	2822	Web Site Creation.....	3 cr.
†COP	2836	Database-driven Web Programming: Server.....	3 cr.
†CTS	2440	Database Programming SQL .....	3 cr.
		*Specified Electives .....	3 cr.

**YEAR II – Second Semester**

†CGS	2939	Internet Services Technology Capstone .....	3 cr.
†COP	2833	Database-driven Web Programming: Client .....	3 cr.
		Humanities General Education CORE .....	3 cr.
		*Specified Electives .....	3 cr.

**YEAR II – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
		*Specified Electives .....	3 cr.

**\*Select at least 12 credit hours from any courses with prefix: CEN, CET, CGS, CIS, CNT, CTS**

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • IT Project Management****AS.IT.PRO.MAN (60 Credit Hours)**

In this program prepares students for jobs such as IT program manager, IT project manager or IT project analyst.

**Program Required Courses****YEAR I – First Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
		Mathematics General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
†CGS	1103	Project Management .....	3 cr.
†CGS	1555	Introduction to the Internet .....	3 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†CGS	2091	Information Technology: Ethical/Legal Issues .....	3 cr.
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**YEAR II – First Semester**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
CGS	2105	IT Project Management Software Applications.....	3 cr.
†CGS	1761	Computer Operating Systems .....	3 cr.
†CGS	2301	Management Information Systems .....	3 cr.
†OST	1335	Business Communications .....	3 cr.

**YEAR II – Second Semester**

*†CIS	2321	Systems Analysis.....	3 cr.
†CIS	2945	IT Project Management Capstone .....	3 cr.
†MAN	2300	Introduction to Human Resource Management .....	3 cr.

\*\*Elective ..... 3 cr.

\* May require additional coursework.

\*\*Select 3 credit hours of electives from any courses with prefix: CEN, CGS, CIS, CNT, COP, CTS

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Medical Office Administration**

**AS.OA.MED.BIL / AS.OA.MED.MAN (60 credit hours)**

This specialization prepares students for a position as a medical office manager, medical office assistant, medical coder, medical staff assistant, medical billing clerk, medical records clerk, insurance processor, medical transcriptionist, or executive assistant.

**AS • Medical Office Administration – Billing Option**

**AS.OA.MED.BIL**

**Program Required Courses**

**YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
†HIM	1000	Introduction to Health Information Management.....	3 cr.
†HSC	1531	Medical Terminology.....	3 cr.
†OST	2854C	Office Applications for Business.....	3 cr.

**YEAR I – Second Semester**

†HIM	1112C	Electronic Health Records.....	2 cr.
†OST	1335	Business Communications.....	3 cr.
†PSY	2012	General Psychology <i>or</i> †SYG 2000, Introduction to Sociology.....	3 cr.
		Mathematics General Education CORE.....	3 cr.

**YEAR I – Third Semester**

†HIM	1453	Anatomy and Physiology for Medical Coding <i>or</i> †BSC 2085, Human Anatomy and Physiology <i>and</i> †BSC 2085L, Human Anatomy and Physiology Laboratory.....	4 cr.
		Humanities General Education CORE.....	3 cr.

**YEAR II – First Semester**

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
†APA	1111	Basic Accounting.....	3 cr.
†HIM	1442	Pharmacology.....	2 cr.
†HIM	2272C	Billing and Insurance II.....	3 cr.
†HIM	2275C	Medical Billing and Insurance I.....	3 cr.
†MAN	2021	Principles of Management.....	3 cr.

**YEAR II – Second Semester**

†HIM	2253	CPT Coding.....	3 cr.
†HIM	2724	ICD-10 Coding.....	4 cr.
*†OST	2135	Medical Office Procedures.....	3 cr.
		Natural Science General Education CORE.....	3 cr.

\*Requires additional coursework.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Medical Office Administration – Management Option**

**AS.OA.MED.MAN**

**Program Required Courses**

**YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
†HIM	1000	Introduction to Health Information Management.....	3 cr.
†HSC	1531	Medical Terminology.....	3 cr.
†OST	2854C	Office Applications for Business.....	3 cr.

**YEAR I – Second Semester**

†HIM	1112C	Electronic Health Records .....	2 cr.
†OST	1335	Business Communications .....	3 cr.
†PSY	2012	General Psychology <i>or</i> †SYG 2000, Introduction to Sociology .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†HIM	1453	Anatomy and Physiology for Medical Coding <i>or</i> †BSC 2085, Human Anatomy and Physiology <i>and</i> †BSC 2085L, Human Anatomy and Physiology Laboratory .....	4 cr.
†MAN	2021	Principles of Management .....	3 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR II – First Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†APA	1111	Basic Accounting .....	3 cr.
†MAN	2300	Introduction to Human Resource Management .....	3 cr.
OST	2858	Excel Spreadsheets for Business .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR II – Second Semester**

†HIM	2275C	Medical Billing and Insurance I .....	3 cr.
†OST	1100C	Keyboarding and Document Processing .....	3 cr.
*†OST	2135	Medical Office Procedures .....	3 cr.

**Select 3 credit hours from the following:**

†HIM	2253	CPT Coding .....	3 cr.
†HIM	2272C	Billing and Insurance II .....	3 cr.
†PHI	1600	Ethics .....	3 cr.

\*Requires additional coursework. †Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Network Systems Technology****AS.NST.DIG.FOR/AS.NST.NA/AS.NST.INFR./AS.NST.SEC  
(60 Credit Hours)**

This collection of programs individually provides the skills necessary to plan, install, configure, monitor, troubleshoot, secure, and manage computer networks in a selected LAN/WAN environment. Students will be prepared to apply conceptual, theoretical and practical knowledge to the workplace utilizing technical skills learned during the program. Prepares student to be network control operators, data communications analysts, network technicians, computer security specialists, network specialists, network managers, network systems analysts, network systems technicians, network troubleshooters, WAN/LAN managers, or systems administrators, or continue education at a four-year university or college.

**AS • Digital Forensics****AS.NST.DIG.FOR****Program Required Courses****YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
*†CTS	1106	Introduction to Linux .....	3 cr.
*†CTS	1305	Introduction to Networking .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†POS	2041	American Government .....	3 cr.
†CET	1172C	PC Upgrading and Repair: Hardware .....	3 cr.
†CNT	1401	Introduction to Network Security .....	3 cr.
		Mathematics General Education CORE .....	3 cr.
		Elective .....	3 cr.

**YEAR I – Third Semester**

†CGS	1103	Project Management .....	3 cr.
†CGS	2091	Information Technology: Ethical and Legal Ethics Issues .....	3 cr.

**YEAR II – First Semester**

†CET	1174C	PC Upgrading and Repair: Software .....	3 cr.
†CIS	2359C	Information Assurance – Network Systems .....	3 cr.
†CIS	2381C	Computer Forensics and Incident Response .....	3 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR II – Second Semester**

†CEN	2939	Network Administrator Capstone .....	3 cr.
†CIS	2352C	Information Assurance – Local Systems .....	3 cr.
†CIS	2353	Security Management and Penetration Testing .....	3 cr.
		Elective .....	3 cr.

**Select 6 credit hours from the following:**

CEN	2904	Special Topics in Networking.....	3 cr.
CEN	2905	Special Topics in Networking.....	3 cr.
CEN	2930-33	Special Topics in Networking.....	3 cr.
†CET	1600	Cisco Network Fundamentals.....	3 cr.
†CET	1610	Cisco Switching, Routing, and Wireless Essentials .....	3 cr.
†CNT	2510	Wireless Networking .....	3 cr.
†CTS	1303	Enterprise Operating Systems I.....	3 cr.

\*Permission of instructor required for concurrent enrollment with prerequisite.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## **AS • Enterprise Network and Cloud Computing**

### **AS.NST.NA.**

**Program Required Courses****YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
*†CTS	1305	Introduction to Networking .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CNT	1401	Introduction to Network Security .....	3 cr.
†CTS	1145	Introduction to the Cloud .....	3 cr.
†CTS	1303	Enterprise Operating Systems I.....	3 cr.
		Mathematics General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†CGS	1103	Project Management .....	3 cr.
†CTS	1306	Enterprise Operating Systems II .....	3 cr.

**YEAR II – First Semester**

†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
†CTS	1106	Introduction to Linux .....	3 cr.
†CTS	2375	Enterprise and Cloud Computing .....	3 cr.
		Elective .....	3 cr.

**YEAR II – Second Semester**

†CEN	2939	Network Administrator Capstone .....	3 cr.
†CET	1174C	PC Upgrading and Repair: Software .....	3 cr.
†CNT	2510	Wireless Networking .....	3 cr.
†CTS	2301C	Linux Administration I.....	

\*Permission of instructor required for concurrent enrollment with prerequisite.

**\*\*Select 3 credit hours of electives from the following:**

CEN	2904	Special Topics in Networking.....	3 cr.
CEN	2905	Special Topics in Networking.....	3 cr.
CEN	2930-33	Special Topics in Networking.....	3 cr.
†CET	1600	Cisco Network Fundamentals.....	3 cr.
†CET	1610	Cisco Switching, Routing, and Wireless Essentials.....	3 cr.
†CGS	1555	Introduction to the Internet.....	3 cr.
†CGS	1761	Computer Operating Systems.....	3 cr.
†CGS	2301	Management Information Systems.....	3 cr.
†CGS	2541	Database Design.....	3 cr.

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Network Infrastructure**

**AS.NST.INFR**

**Program Required Courses**

**YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology.....	3 cr.
*†CTS	1305	Introduction to Networking.....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
		Humanities General Education CORE.....	3 cr.
		Natural Science General Education CORE.....	3 cr.

**YEAR I – Second Semester**

†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
†CET	1600	Cisco Network Fundamentals.....	3 cr.
†CNT	1401	Introduction to Network Security.....	3 cr.
†CTS	1303	Enterprise Operating Systems I.....	3 cr.
†POS	2041	American Government.....	3 cr.

**YEAR I – Third Semester**

†CET	1610	Cisco Switching, Routing, and Wireless Essentials.....	3 cr.
		Mathematics General Education CORE.....	3 cr.

**YEAR II – First Semester**

†CGS	1103	Project Management.....	3 cr.
†CET	1174C	PC Upgrading and Repair: Software.....	3 cr.
†CET	2615	Cisco Enterprise Networking, Security, and Automation.....	3 cr.
†CNT	2510	Wireless Networking.....	3 cr.

**YEAR II – Second Semester**

†CEN	2939	Network Administrator Capstone.....	3 cr.
CIS	2772	Cybersecurity Operations Fundamentals.....	3 cr.
†CTS	1106	Introduction to Linux.....	3 cr.
		**Elective.....	3 cr.

**\*\*Select 3 credit hours of electives from the following:**

CEN	2904	Special Topics in Networking.....	3 cr.
CEN	2905	Special Topics in Networking.....	3 cr.
CEN	2930-33	Special Topics in Networking.....	3 cr.
†CGS	1555	Introduction to the Internet.....	3 cr.
†CGS	1761	Computer Operating Systems.....	3 cr.
†CGS	2301	Management Information Systems.....	3 cr.
†CGS	2541	Database Design.....	3 cr.
CTS	1145	Introduction to the Cloud.....	3 cr.

\*Permission of instructor required for concurrent enrollment with prerequisite.

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Network Security**

**AS.NST.SEC**

**Program Required Courses**

**YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†CTS	1106	Introduction to Linux .....	3 cr.
*†CTS	1305	Introduction to Networking .....	3 cr.
†ENC	1101	English Composition I .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR I – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†CET	1172C	PC Upgrading and Repair: Hardware .....	3 cr.
†CNT	1401	Introduction to Network Security .....	3 cr.
†CTS	2301C	Linux Administration I .....	3 cr.
	**Elective	.....	3 cr.

**YEAR I – Third Semester**

†CGS	2091	Information Technology: Ethical and Legal Issues .....	3 cr.
†CTS	2322	Linux Administration II .....	3 cr.

**YEAR II – First Semester**

†CET	1174C	PC Upgrading and Repair: Software .....	3 cr.
†CIS	2359C	Information Assurance: Network Systems .....	3 cr.
		Mathematics General Education CORE .....	3 cr.
	**Elective	.....	3 cr.

**YEAR II – Second Semester**

†CEN	2939	Network Administrator Capstone .....	3 cr.
†CGS	1103	Project Management .....	3 cr.
†CIS	2353	Security Management and Penetration Testing .....	3 cr.
		Humanities General Education CORE .....	3 cr.

**\*\*Select 6 credit hours from the following:**

CEN	2904	Special Topics in Networking.....	3 cr.
CEN	2905	Special Topics in Networking.....	3 cr.
CEN	2930-33	Special Topics in Networking.....	3 cr.
†CET	1600	Cisco Network Fundamentals .....	3 cr.
†CET	1610	Cisco Switching, Routing, and Wireless Essentials .....	3 cr.
†CNT	2510	Wireless Networking .....	3 cr.
†CTS	1303	Enterprise Operating Systems I.....	3 cr.

\*Permission of instructor required for concurrent enrollment with prerequisite.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Office Administration**

**AS • Office Management**

**AS.OA.OMTS( 60 Credit Hours)**

This specialization prepares students for mid-management positions such as administrative office manager, office manager, equipment sales representative, administrative support manager, staff assistant, executive secretary, human resource technician, office manager, or executive assistant.

**Program Required Courses**

**YEAR I – First Semester**

†ENC	1101	English Composition I .....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
†OST	1100C	Beginning PC Typing.....	3 cr.

**YEAR I – Second Semester**

†MAN	2021	Principles of Management .....	3 cr.
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†OST	2854C	Office Applications for Business .....	3 cr.
†SYG	2000	Introduction to Sociology or †PSY 2012, General Psychology .....	3 cr.
		Mathematics General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†OST	1335	Business Communications .....	3 cr.
		Humanities General Education CORE .....	3 cr.

**YEAR II – First Semester**

†APA	1111	Basic Accounting.....	3 cr.
†MAN	2300	Introduction to Human Resource Management .....	3 cr.
†OST	2501	Office Administration.....	3 cr.
OST	2797	Social Media for Business.....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR II – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†OST	1813	Desktop Publishing.....	3 cr.
†OST	2357	Electronic Records Management.....	3 cr.
OST	2858	Excel Spreadsheet for Business.....	3 cr.

**YEAR II – Third Semester**

OST	1941	OST Internship.....	3 cr.
		*Electives .....	3 cr.

**\*Select 3 credit hours from the following:**

†BUL	2241	Business Law I.....	3 cr.
†CGS	1103	Project Management .....	3 cr.
†SLS	1261	Personal Skills for Business.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Paralegal Studies (Legal Assisting)****AS.LEGAL (64 Credit Hours)**

This program will prepare students for a paraprofessional career as a paralegal (legal assistant). Under the supervision and direction of a licensed attorney, paralegals may engage in legal research, case development, preparation of legal documents and trial exhibits, analyze information, interview clients, assist in office management, and other responsibilities unique to the legal profession. Graduates of the program are prepared to sit for national certification exams.

**NOTE 1:** All graduates of this AS degree program shall be granted admission into the Legal Studies baccalaureate degree program at Florida Gulf Coast University or St. Pete College.

**NOTE 2:** This program of study is a suggested pathway for the Paralegal Studies AS program. Please consult an advisor or counselor for more guidance.

**Program Required Courses****YEAR I – First Semester**

†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†PLA	1003	Introduction to the Paralegal Profession.....	3 cr.
†PLA	1104	Writing and Research I.....	3 cr.
†PLA	1271	Tort Law or †PLA 2421, Contract Law .....	3 cr.

**YEAR I – Second Semester**

†PLA	1433	Business Organizations .....	3 cr.
†PLA	2800	Family Law .....	3 cr.
†PLA	2114	Writing and Research II.....	3 cr.
†PLA	1271	Tort Law or †PLA 2421, Contract Law (if not previously taken).....	3 cr.
		Mathematics General Education CORE .....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†PLA	1203	Litigation Procedures I.....	3 cr.

†PLA	1600	Administering Wills/Trusts/Probate .....	3 cr.
		PLA elective offered during this term. ....	3 cr.
		Natural Science General Education CORE .....	3 cr.

**YEAR II – First Semester**

†ENC	1102	English Composition II.....	3 cr.
†PLA	1611	Real Estate Law/Property Transactions I.....	3 cr.
†PLA	2223	Litigation Procedures II.....	3 cr.
		Humanities General Education CORE .....	3 cr.
		PLA elective offered during this term. ....	3 cr.

**YEAR II – Second Semester**

†PLA	2932	Selected Topics in Legal Assisting .....	1 cr.
		PLA elective offered during this term. ....	3 cr.

**Select 9 specified PLA elective credits from the following:**

†ACG	2071	Managerial Accounting .....	3 cr.
†APA	1111	Basic Accounting.....	3 cr.
†PLA	1700	Legal Ethics and Professional Responsibility .....	3 cr.
PLA	1949	Paralegal Internship.....	3 cr.
†PLA	2303	Criminal Litigation.....	3 cr.
†PLA	2460	Bankruptcy Law .....	3 cr.
†PLA	2531	Elder Law .....	3 cr.
†PLA	2612	Real Estate Law/Property Trans II.....	3 cr.
†PLA	2732	Law Office Computer Applications.....	3 cr.
†PLA	2763	Law Office Management.....	3 cr.
PLA	2822	Sports and Entertainment Law.....	3 cr.
†PLA	2841	Immigration Law.....	3 cr.
†PLA	2933	Seminar in Legal Assisting Studies.....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Radio and Television Broadcast Programming****AS.RTV.BPG (64 Credit Hours)**

This hands-on, skills-based program will prepare students for careers in television, radio, and media production for the Internet. Students will learn to produce music videos, talk shows, sports programs, music shows, concerts, and news shows for television, radio and the Internet using professional video cameras, high-quality nonlinear video editing equipment, and professional audio editing software. Students can gain valuable experience by broadcasting on the college's radio station and the educational TV cable channel.

**Program Required Courses****YEAR I – First Semester**

†ENC	1101	English Composition I.....	3 cr.
†RTV	2000	Introduction to Broadcasting.....	3 cr.
†SPC	1608	Public Speaking .....	3 cr.
		*Program Specified Elective.....	3 cr.

**YEAR I – Second Semester**

†RTV	2510	Broadcasting Techniques .....	3 cr.
†RTV	2560	Radio Production and Programming .....	3 cr.
†RTV	2630	Broadcast News.....	3 cr.
		*Program Specified Elective.....	3 cr.

**YEAR I – Third Semester**

†RTV	1530	Electronic Field Production.....	3 cr.
RTV	1941	Radio and TV Internship I.....	3 cr.
		Mathematics General Education Core.....	3 cr.
		*Program Specified Elective .....	3 cr.

**YEAR II – First Semester**

†AMH	2020	Modern American History or POS 2041, American Government .....	3 cr.
RTV	2460	Broadcasting Practicum.....	3 cr.

Humanities General Education Core.....	3 cr.
*Program Specified Elective .....	3 cr.

**YEAR II – Second Semester**

†RTV 2512	Advanced Television Studio Production .....	3 cr.
RTV 2942	Radio and TV Internship II .....	3 cr.
	Behavioral Science General Education Core.....	3 cr.
	Natural Science General Education Core .....	3 cr.

**YEAR II – Third Semester**

FIL 2931	Careers in Film and Video .....	1 cr.
†RTV 2532	Advanced Electronic Field Production.....	3 cr.

**\*Select 12 specified elective credits from the following:**

†CGS 1000	Introduction to Computers and Technology .....	3 cr.
†CGS 1871	Multimedia Authoring I.....	3 cr.
†CGS 2821	Graphics Design for Multimedia and Internet .....	3 cr.
†ENC 1102	English Composition II.....	3 cr.
†ENT 1000	Introduction to Entrepreneurship .....	3 cr.
†FIL 1000	Introduction to Film.....	3 cr.
†FIL 1420C	Motion Media I.....	3 cr.
†FIL 2010	Films of Fantasy.....	3 cr.
†FIL 2905	Directed Independent Study: Film.....	3 cr.
RTV 2944	Internship III .....	3 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

**AS • Restaurant Management****AS.CUL.RES (60 Credit Hours)**

This program provides students with the skills necessary for employment as a manager of a hotel/motel, a restaurant, a cafe, a bar, a liquor establishment, a coffee shop, a catering agency or a fast food service.

The Restaurant Management program and courses are accredited by the American Culinary Federation Foundation's Accrediting Commission at 180 Center Place Way, St. Augustine, Florida 32095.

**NOTE:** Beginning Fall term 2008, all graduates of this program are eligible to articulate the AS degree in Culinary Management to the BS degree in Hotel and Restaurant Management at the University of Houston, Conrad N. Hilton College of Hotel and Restaurant Management.

**Program Required Courses****YEAR I – First Semester**

†ENC 1101	English Composition I.....	3 cr.
†FOS 1201	Sanitation and Safety Management .....	2 cr.
†FSS 1223C	Food Preparation for Managers .....	4 cr.
†FSS 2100	Menu Development and Marketing .....	3 cr.

**YEAR I – Second Semester**

†FSS 1063C	Food Specialty I (Baking) .....	3 cr.
†FSS 1500	Food and Beverage Control .....	3 cr.
†HFT 2840	Maitre d' and Dining Room Service .....	3 cr.

**YEAR I – Third Semester**

†CGS 1000	Introduction to Computers and Technology .....	3 cr.
	Mathematics General Education CORE .....	3 cr.

**YEAR II – First Semester**

†ACG 2021	Introduction to Financial Accounting.....	3 cr.
†HFT 1000	Introduction to Hospitality Industry Management .....	3 cr.
†HFT 2210	Supervisory Development .....	3 cr.
†HFT 2600	Hospitality Industry Law .....	3 cr.

**YEAR II – Second Semester**

†ENT 1000	Introduction to Entrepreneurship.....	3 cr.
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†FSS	1248C	Food Specialty II (Garde Manger I) .....	3 cr.
†FSS	2120	Food Purchase and Storage.....	3 cr.
†HFT	1790	The Event Industry .....	3 cr.

**YEAR II – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
		Humanities General Education CORE .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

†Courses symbolized by a dagger (+) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Supply Chain Management

### AS.SPLY.CHN.MGMT (60 Credit Hours)

This program is to prepares students for careers and further education in Transportation, Distribution and Logistics. The program reflects the cross-functional relationships prevalent in supply chain management. Students are exposed to standard operating procedures, negotiation techniques, planning, organizing, and accounting concepts, purchasing, sustainability, warehousing, project management, quality control, import/export, and asset management theory.

#### Program Required Courses

##### YEAR I – First Semester

†**CGS	2100	Computers Information Technology and Literacy .....	3 cr.
†ENC	1101	English Composition I.....	3 cr.
†**GEB	1011	Introduction to Business.....	3 cr.
†MAC	1105	College Algebra.....	3 cr.

##### YEAR I – Second Semester

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†BUL	2241	Business Law I.....	3 cr.
†SCM	1010	Introduction to Supply Chain Management.....	3 cr.
†*STA	2023	Elementary Statistics.....	3 cr.
		Electives offered during this term.....	3 cr.

##### YEAR I – Third Semester

†ECO	2013	Principles of Macroeconomics .....	3 cr.
†**MAN	2021	Principles of Management .....	3 cr.
		Humanities General Education CORE .....	3 cr.

##### YEAR II – First Semester

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
†ETI	1110	Introduction to Quality.....	3 cr.
†SCM	2270	Transportation and Distribution .....	3 cr.
		Electives offered during this term.....	3 cr.

##### YEAR II – Second Semester

†MAN	2500	Operations Management.....	3 cr.
†SCM	2150	Purchasing and Inventory Management.....	3 cr.
†SCM	2230	Warehouse Management .....	3 cr.
		Natural Science General Education CORE .....	3 cr.

#### Program Electives (6 credits required)

†ACG	2071	Managerial Accounting .....	3 cr.
†BUL	2242	Business Law II.....	3 cr.
†CGS	2301	Management Information Systems .....	3 cr.
†ETI	1622	Concepts of Lean and Six Sigma .....	3 cr.
†ETI	1644	Production and Inventory Control .....	3 cr.
†FIN	2001	Principles of Finance.....	3 cr.
†FIN	2051	International Financial Management.....	3 cr.
†GEB	2214	Business Communications and Technology .....	3 cr.
†GEB	2350	Introduction to International Business Essentials.....	3 cr.
MAN	2652	Global Management.....	3 cr.
**MAN	2930	Special Topics in Supply Chain Management .....	3 cr.
MAN	2942	Supply Chain Management Internship .....	3 cr.

†MAR	2011	Principles of Marketing .....	3 cr.
MAR	2150	International Marketing .....	3 cr.

\*Articulated with MSSC CLT Certification

\*\*Articulated with APICS GLA Certification

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## AS • Veterinary Technology

### AS.VET.TECH (73 Credit Hours)

Veterinary Technology is a rapidly growing field. Employment of veterinary technicians/technologists is expected to grow much faster than the average for all occupations through the year 2012, according to the most recent information from the U.S. Department of Labor. Graduates from this program will find careers in areas such as private practice, animal shelters and humane societies, agriculture (equine services, farms, and ranches), biomedical research, zoo/wildlife medicine, tourist/recreational facility animal care and research, and pharmaceutical and government. This program which awards the associate in science degree will prepare students to enter the workforce prepared for clinical practice, research animal husbandry, or clinical management.

The HCC Veterinary Technology program is accredited by the American Veterinary Medical Association. Graduates of this program are eligible to take the Veterinary Technician National Examination.

### Prerequisites for Admission

**NOTE:** Completion of prerequisites for admission with a grade of “C” or higher is required.

#### Prerequisite Courses Required for Admission

†ATE	1001	Introduction to Veterinary Technology.....	1 cr.
†ATE	1112	Animal Anatomy and Physiology I.....	3 cr.
†ATE	1113	Animal Anatomy and Physiology II.....	3 cr.
†ATE	1501	Veterinary Professional Development Ethics.....	1 cr.
†ATE	1741	Veterinary Medical Terminology.....	1 cr.
†ENC	1101	English Composition I.....	3 cr.
EVR	1001C	Introduction to Environmental Science.....	3 cr.
†MAC	1105	College Algebra <i>or</i> †MGF 1106, Topics in Mathematics <i>or</i> higher General Education Mathematics <i>or</i> †STA 2023, Elementary Statistics.....	3 cr.

**NOTE:** Completion of all general education and Veterinary Technology program required courses with a grade of “C” or higher is required for graduation.

### Program Required Courses

#### YEAR I – First Semester

ATE	1110L	Animal Anatomy Laboratory .....	1 cr.
ATE	1311L	Veterinary Office Procedures Laboratory .....	1 cr.
ATE	1650L	Veterinary Clinical Practice Laboratory I.....	1 cr.
ATE	2050	Small Animal Breeds and Behavior .....	1 cr.
ATE	2638	Animal Clinical Pathology I.....	3 cr.
ATE	2638L	Animal Clinical Pathology I Laboratory .....	2 cr.

#### YEAR I – Second Semester

†ATE	1943	Veterinary Work Experience I.....	1 cr.
ATE	2636C	Large Animal Nursing and Clinical Skills.....	2 cr.
ATE	1652L	Veterinary Clinical Practice Laboratory II .....	2 cr.
ATE	2661	Large Animal Diseases .....	2 cr.
ATE	2639	Animal Clinical Pathology II .....	3 cr.
ATE	2639L	Animal Clinical Pathology II Laboratory .....	2 cr.

#### YEAR I – Third Semester

ATE	1031	Applied Mathematics for Veterinary Technicians.....	1 cr.
ATE	1944	Veterinary Work Experience II.....	1 cr.
ATE	2611	Animal Medicine I.....	3 cr.
ATE	2671C	Medicine of Laboratory Animals .....	2 cr.
		Humanities General Education CORE .....	3 cr.

#### YEAR II – First Semester

ATE	2614	Animal Medicine II .....	3 cr.
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ATE	2630	Pharmacology for Veterinary Technicians.....	2 cr.
ATE	2631	Small Animal Nursing I .....	3 cr.
ATE	2631L	Small Animal Nursing Laboratory .....	2 cr.
ATE	2722	Avian and Exotic Pet Medicine .....	1 cr.
ATE	2945	Veterinary Work Experience III.....	1 cr.

**YEAR II – Second Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
ATE	2020C	Contemporary Clinical Issues.....	3 cr.
ATE	2634	Small Animal Nursing II .....	3 cr.
ATE	2710	Animal Emergency Medicine .....	2 cr.
†ATE	2946	Veterinary Work Experience IV .....	1 cr.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

## Bachelor Degree

The Bachelor’s degree is an upper-level degree that offers students an opportunity to continue their education beyond the Associate level. Hillsborough Community College offers a Bachelor of Science in Nursing (BSN).

### BS • Nursing

#### BS.NUR (48 Credit Hours)

The RN to BSN Program at Hillsborough Community College affords registered nurses with an associate degree in nursing from a regionally accredited institution the opportunity to obtain a Bachelor of Science degree in Nursing delivered in an online format. The RN to BSN program is designed for current RNs who are ready to collaborate with interdisciplinary healthcare partners seeking to improve patient outcomes and community health. The focus of the program is on healthcare needs of diverse populations, health promotion and risk reduction in communities, ethical and legal issues, evidence-based practice, and leadership and management. Nurses in the program will develop a solid foundation for advancing their career or preparing for graduate nursing study. Classes are offered online and are held in eight-week courses. Experiential learning hours are required for NUR4636C Community and Public Health Nursing and NUR4835C Leadership and Management in Professional Nursing (Capstone Course). These hours are independently arranged by the student, typically at a community agency or at the facility where the student is employed. Every course for the program is taught during every term to facilitate scheduling (i.e. fall, spring, & summer terms).

**NOTE 1:** This program of study is a suggested sequence of courses for the Nursing BSN program. Classes are offered in 8 weeks terms. Please consult an advisor or counselor for more guidance.

#### Program Required Courses

##### YEAR I – First Semester

†NUR 3145	Pharmacology .....	3 cr.
†*NUR 3805	Professional Roles and Dimensions of Nursing Practice .....	3 cr.
†PSY 2012	General Psychology or SYG 2000, Introduction to Sociology or any Humanities General Education .....	3 cr.
†SPC 1608	Public Speaking .....	3 cr.
†STA 2023	Elementary Statistics.....	3 cr.

##### YEAR I – Second Semester

†AMH 2020	Modern American History or †POS 2041, American Government .....	3 cr.
†NUR 3065	Health Assessment and Physical Appraisal .....	3 cr.
†NUR 3125	Pathophysiology.....	3 cr.
†NUR 4636C	Community and Public Health Nursing.....	3 cr.
	Humanities General Education .....	3 cr.
	Nursing Elective .....	3 cr.

##### YEAR I – Third Semester

†NUR 3826	Ethical and Legal Issues in Healthcare.....	3 cr.
†NUR 4169	Evidence Based Practice: Nursing Research.....	3 cr.
†**NUR 4835C	Leadership and Management in Professional Nursing.....	3 cr.
	Social Science General Education .....	3 cr.
	Nursing Elective .....	3 cr.

#### Select 6 specified elective credits from the following:

†NUR 3655	Transcultural Factors in Health Care Delivery.....	3 cr.
†NUR 3895	Teaching in Nursing .....	3 cr.
NUR 3955C	Nursing in Global Health Systems.....	3 cr.
†NUR 4177	Introduction to Holistic Nursing.....	3 cr.
†NUR 4284	Dynamics of Aging .....	3 cr.
†NUR 4257	Introduction to Critical Care.....	3 cr.
†NSP 4695	Forensic Nursing.....	3 cr.

\*NUR 3805 is a prerequisite for all the core courses, and it must be taken in the first term.

\*\*NUR 4835C is the capstone course, and it must be taken in the last 8 weeks of the program.

†Courses symbolized by a dagger (†) are offered online. Online availability may vary by academic term.

## College Credit Certificates

**A college credit certificate (CCC) may be awarded for programs of less than two years in selected technical areas leading to an associate in science degree. The CCC's are designed to prepare the student for entry into a particular field or to upgrade the skills of those already employed in the field.**

### ATC • Paralegal (Legal Assisting)

ATC.PLA (21 Credit Hours)

The Paralegal/Legal Assisting Advanced Technical Certificate is designed to enable students who already hold a bachelor's degree or higher to take paralegal courses at Hillsborough Community College and qualify to take the Certified Legal Assistant exam sponsored by the National Association for Legal Assistants. It further prepares those students for work of a legal nature in law offices, corporations or governmental agencies.

#### Program Required Courses

##### YEAR I – First Semester

†PLA	1003	Introduction to the Paralegal Profession.....	3 cr.
†PLA	1271	Tort Law .....	3 cr.
		*Any PLA specified elective offered during this term. ....	3 cr.

##### YEAR I – Second Semester

†PLA	1104	Writing and Research I.....	3 cr.
		*Any PLA specified elective offered during this term. ....	3 cr.

##### YEAR I – Third Semester

†PLA	2114	Writing and Research II.....	3 cr.
		*Any PLA specified elective offered during this term. ....	3 cr.

#### \*Select 9 credit hours from the following:

†PLA	1203	Litigation Procedures I .....	3 cr.
†PLA	1433	Business Organizations .....	3 cr.
†PLA	1600	Administration of Wills/Trusts/Probate.....	3 cr.
†PLA	1611	Real Estate Law/Property Transactions I .....	3 cr.
†PLA	1700	Legal Ethics and Professional Responsibility .....	3 cr.
†PLA	1949	Paralegal Internship.....	3 cr.
†PLA	2303	Criminal Litigation.....	3 cr.
†PLA	2421	Contract Law .....	3 cr.
†PLA	2460	Bankruptcy Law .....	3 cr.
†PLA	2531	Elder Law .....	3 cr.
†PLA	2612	Real Estate Law/Property Transaction II .....	3 cr.
†PLA	2732	Law Office Computer Applications.....	3 cr.
†PLA	2763	Law Office Management.....	3 cr.
†PLA	2800	Family Law .....	3 cr.
†PLA	2822	Sports and Entertainment Law.....	3 cr.
†PLA	2841	Immigration Law.....	3 cr.
†PLA	2933	Seminar In Legal Assisting Studies.....	3 cr.

NOTE: A grade of "C" or better must be attained for each course taken for this certificate.

NOTE: Coursework may be applied to the two-year AS degree Paralegal Studies program.

†Courses symbolized by a dagger (†) are offered online in addition to the traditional delivery method. Online availability may vary by academic term.

### CCC • Accounting Technology Management

CCC.ACG.TECH.MGMT (27 Credit Hours)

#### Program Required Courses

##### YEAR I – First Semester

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†CGS	2100	Computers Information Technology and Literacy .....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.



**YEAR I – Second Semester**

ACG	2061	Computers and Accounting.....	3 cr.
†ACG	2071	Managerial Accounting.....	3 cr.
†GEB	2214	Business Communications and Technology.....	3 cr.

**YEAR I – Third Semester**

†AMH	2020	Modern American History or †POS 2041, American Government.....	3 cr.
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**YEAR II – First Semester**

ACG	2104	Intermediate Accounting I.....	3 cr.
ACG	2681	Financial Investigation.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**CCC • Accounting Technology Operations****CCC.ACG.TECH.OP (18 Credit Hours)**

Program Required Courses

**YEAR I – First Semester**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†CGS	2100	Computers Information Technology and Literacy.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.

**YEAR I – Second Semester**

ACG	2061	Computers and Accounting.....	3 cr.
†ACG	2071	Managerial Accounting.....	3 cr.
†GEB	2214	Business Communications and Technology.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**CCC • Accounting Technology Specialist****CCC.ACG.TECH.SPEC (12 Credit Hours)**

Program Required Courses

**YEAR I – First Semester**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†CGS	2100	Computers Information Technology and Literacy.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
†GEB	2214	Business Communications and Technology.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**CCC • Advanced Network Infrastructure****CCC.ADV.NET.INF (36 Credit Hours)**

Program Required Courses

**YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology.....	3 cr.
*†CTS	1305	Introduction to Networking.....	3 cr.

**YEAR I – Second Semester**

†CET	1600	Cisco Network Fundamentals.....	3 cr.
†CNT	1401	Introduction to Network Security.....	3 cr.
**†CTS	1303	Enterprise Operating Systems I.....	3 cr.

**YEAR I – Third Semester**

*†CET	1610	Cisco Switching, Routing, and Wireless Essentials.....	3 cr.
†CTS	1306	Enterprise Operating Systems II.....	3 cr.

**YEAR II – First Semester**

†COP	1000	Introduction to Python Programming.....	3 cr.
†CET	2615	Cisco Enterprise Networking, Security, and Automation.....	3 cr.

**YEAR II – Second Semester**

CIS	2772	Cybersecurity Operations Fundamentals .....	3 cr.
†CIS	2353	Security Management and Penetration Testing .....	3 cr.
†CNT	2510	Wireless Networking .....	3 cr.

\*Permission of instructor required for concurrent enrollment with prerequisite.

\*\*May require additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Network Systems Technology program.

**CCC • Aquaculture Technology****CCC.AQUA (26 Credit Hours)**

This program will prepare students for employment in the field of aquaculture technology and transfers into the associate in science degree program titled Aquaculture.

## Program Required Courses

**YEAR I – First Semester**

†FAS	1012C	Aquacultural Organisms .....	3 cr.
ZOO	1450	Icthyology .....	3 cr.
ZOO	1450L	Icthyology Laboratory .....	1 cr.

**YEAR I – Second Semester**

FAS	1401L	Aquacultural Laboratory Techniques .....	3 cr.
FAS	2263C	Aquacultural Reproductive Techniques .....	3 cr.

**YEAR II – First Semester**

FAS	2240C	Aquacultural Nutritional Techniques .....	3 cr.
FAS	2253	Aquaculture Disease Processes .....	3 cr.
FAS	2253L	Aquaculture Disease Processes Laboratory .....	1 cr.

**YEAR II – Second Semester**

FAS	1404C	Aquacultural Field Techniques .....	3 cr.
FAS	2353C	Aquacultural Management Practices .....	3 cr.

NOTE: Coursework may be applied to the two-year AS degree Aquaculture program.

**CCC • AutoCAD Foundations****CCC.ADCT.CAD (15 Credit Hours)**

This certificate provides students with the AutoCAD skills needed to assist architects and construction engineers in planning, designing and detailing. Computer design techniques are emphasized in the certificate.

## Program Required Courses

**YEAR I – First Semester**

BCN	1250	Introduction to Graphic Technology .....	3 cr.
†BCN	2272	Blueprint Reading .....	3 cr.
*†TAR	2053	Introduction to Computer Design and Drafting .....	3 cr.

**YEAR I – Second Semester**

†ARC	2461	Materials and Methods I .....	3 cr.
*†TAR	2054	Intermediate Computer Aided Design and Drafting .....	3 cr.

\*May require additional coursework.

NOTE: Coursework may be applied to the two-year AS degree Architectural Design and Construction Technology program.

**CCC • Automation****CCC.EST (12 Credit Hours)**

This certificate prepares students for engineering technology support positions dealing with PLCs, automation, and control systems in high tech production, manufacturing, distribution, and engineering research and development facilities.

## Program Required Courses

**YEAR I – First Semester**

†ETI	1843	Motors and Controls .....	3 cr.
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†ETS 1542 Introduction to Programmable Logic Controllers ..... 3 cr.

#### YEAR I – Second Semester

†ETS 1535 Automated Process Control..... 3 cr.

†ETS 2604 Robotics Applications..... 3 cr.

NOTE: Coursework may be applied to the two-year AS degree Engineering Technology program.

### CCC • Biotechnology Laboratory Specialist

CCC.BIO.TECH.SPEC (19 Credit Hours)

#### Program Required Courses

##### YEAR I – First Semester

\*BSC 2420 Biotechnology I..... 3 cr.

\*BSC 2420L Biotechnology I Laboratory ..... 2 cr.

##### YEAR I – Second Semester

†BSC 2419C Plant and Animal Cell Culture ..... 3 cr.

BSC 2427 Biotechnology II..... 3 cr.

BSC 2427L Biotechnology II Laboratory ..... 2 cr.

##### YEAR I – Third Semester

†BSC 2435C Bioinformatics..... 3 cr.

†STA 2023 Elementary Statistics..... 3 cr.

\* Requires additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Biotechnology Laboratory Technology program.

### CCC • Broadcast Production

CCC.RTV (24 Credit Hours)

This certificate allows students to obtain basic training for a specific entry-level job in broadcast production.

#### Program Required Courses

##### YEAR I – First Semester

†RTV 1530 Electronic Field Production..... 3 cr.

†RTV 2000 Introduction to Broadcasting..... 3 cr.

†RTV 2560 Radio Production and Programming ..... 3 cr.

##### YEAR I – Second Semester

†RTV 2532 Advanced Electronic Field Production..... 3 cr.

†RTV 2510 Broadcasting Techniques ..... 3 cr.

†RTV 2630 Broadcast News..... 3 cr.

##### YEAR I – Third Semester

RTV 1941 Radio and TV Internship I..... 3 cr.

†RTV 2512 Advanced Television Studio Production ..... 3 cr.

NOTE: Coursework may be applied to the two-year AS degree Digital Television and Media Production program.

### CCC • Business Intelligence Professional

CCC.BUS.PRO (20 Credit Hours)

#### Program Required Courses

##### YEAR I – First Semester

†CGS 1000 Introduction to Computers and Technology ..... 3 cr.

STA 2023 Elementary Statistics..... 3 cr.

##### YEAR I – Second Semester

†COP 1000 Programming Logic ..... 3 cr.

†CGS 1540 Database Management ..... 1 cr.

**YEAR I – Third Semester**

†CGS	1510	Spreadsheet Applications I.....	1 cr.
†CGS	2541	Database Design.....	3 cr.

**YEAR II – First Semester**

COP	2050	R-Programming.....	3 cr.
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**YEAR II – Second Semester**

ISM	2110	Business Intelligence I.....	3 cr.
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**CCC • Business Management****CCC.BUS.MAN (24 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†CGS	2100	Computers Information Technology and Literacy .....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.

**YEAR I – Second Semester**

†ACG	2071	Managerial Accounting.....	3 cr.
†MAN	2021	Principles of Management .....	3 cr.
†MAR	2011	Principles of Marketing .....	3 cr.

**YEAR I – Third Semester**

†BUL	2241	Business Law I.....	3 cr.
†GEB	2214	Business Communications and Technology <i>or</i> †SPC 1608 Pubic Speaking .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Business Administration program.

**CCC • Business Operations****CCC.BUS.OPER (18 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
†MAN	2021	Principles of Management .....	3 cr.

**YEAR I – Second Semester**

†BUL	2241	Business Law I.....	3 cr.
†GEB	2214	Business Communications and Technology <i>or</i> †SPC 1608 Pubic Speaking.....	3 cr.
†MAR	2011	Principles of Marketing .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Business Administration program.

**CCC • Business Specialist****CCC.BUS.SPEC (12 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.

**YEAR I – Second Semester**

†GEB	2214	Business Communications and Technology <i>or</i> †SPC 1608 Public Speaking.....	3 cr.
†MAN	2021	Principles of Management .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Business Administration program.

**CCC • Chef's Apprentice****CCC.CUL.CHEF (12 Credit Hours)**

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in Culinary. It provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills for entry-level positions as a pantry cook, prep cook or lead cook.

## Program Required Courses

**YEAR I – First Semester**

†FSS	1223C	Food Preparation for Managers .....	4 cr.
†FOS	1201	Safety and Sanitation .....	2 cr.

**YEAR I – Second Semester**

†FSS	1063C	Food Specialty I (Baking) .....	3 cr.
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**YEAR II – First Semester**

†FSS	1248C	Food Specialties II (Garde Manger I) .....	3 cr.
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NOTE: Coursework may be applied to the two-year AS degree Culinary Management program.

**CCC • CNC (Computer Numerical Control) Machinist****CCC.CNC.MACH (12 Credit Hours)**

This program prepares students for careers in Computer Numerical Control (CNC) machining and includes computer aided drafting and design skills, technical communications, maintenance and operation of various industrial tools and equipment, quality control and testing, material handling protocols, proper usage of tools and instrumentation, and programming, among others.

## Program Required Courses

**YEAR I – First Semester**

†ETD	2364C	Introduction to 3D Computer-Aided Design .....	3 cr.
†ETI	1420	Manufacturing Processes and Materials .....	3 cr.

**YEAR I – Second Semester**

PMT	1250C	Computer Numerical Control (CNC) I.....	3 cr.
PMT	2254C	Computer Numerical Control (CNC) II.....	3 cr.

NOTE: Coursework may be applied to the two-year AS degree Engineering Technology program.

**CCC • Computer Programmer****CCC.COP.OPT1 (36 Credit Hours)**

This program prepares students for jobs in the field of computer programmer, junior programmer, senior programmer, data manager, programmer analyst, and mid-range computer specialist.

## Program Required Courses

**YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
		**Any specified electives offered during this term. ....	3 cr.

**YEAR I – Second Semester**

†CGS	2541	Database Design .....	3 cr.
†COP	1000	Programming Logic .....	3 cr.
		**Any specified electives offered during this term. ....	3 cr.

**YEAR I – Third Semester**

†CGS	2301	Management Information Systems .....	3 cr.
*†CIS	2321	Systems Analysis.....	3 cr.
		**Any specified electives offered during this term. ....	3 cr.

**YEAR II – First Semester**

\*\*Any specified electives offered during this term..... 12 cr.

**\*\*Select 21 credit hours from the following:**

†COP	1030	Introduction to Python Programming.....	3 cr.
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†COP	1120	COBOL, Beginning.....	3 cr.
†COP	1220	Programming in C.....	3 cr.
†COP	1332	Visual BASIC, Beginning.....	3 cr.
†COP	1812	Introduction to XML Authoring.....	3 cr.
*†COP	2224	Programming in C++.....	3 cr.
COP	2654	Mobile Platform Applications Development.....	3 cr.
†COP	2360	Programming in C#.....	3 cr.
†COP	2800	Java Programming.....	3 cr.
*†COP	2805C	Java, Advanced.....	3 cr.
†COP	2833	Database-driven Web Programming: Client.....	3 cr.
†COP	2836	Database-driven Web Programming: Server.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

\*Requires additional coursework.

NOTE: Coursework may be applied to the two-year AS degree Computer Programming program.

### CCC • Computer Programming Specialist

CCC.PROG.SPEC (18 Credit Hours)

Program Required Courses

#### YEAR I – First Semester

†CGS	1000	Introduction to Computers and Technology.....	3 cr.
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#### YEAR I – Second Semester

*†CIS	2321	Systems Analysis.....	3 cr.
†COP	1000	Programming Logic.....	3 cr.

#### YEAR II – First Semester

\*\*Any specified electives offered during this term..... 9 cr.

\*\*Select 9 credit hours from the following:

†COP	1120	COBOL, Beginning.....	3 cr.
†COP	1220	Programming in C.....	3 cr.
†COP	1332	Visual BASIC, Beginning.....	3 cr.
†COP	2360	Programming in C#.....	3 cr.
†COP	2800	Java Programming.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

\*Requires additional coursework.

NOTE: Coursework may be applied to the two-year AS degree Computer Programming program.

### CCC • Crime Scene

ccc.cs (28 Credit Hours)

This program is designed to prepare graduates for work in the field of crime scene investigations and forensics. For more information, students can refer to the Criminal Justice Technology website at [www.hccfl.edu/cjt](http://www.hccfl.edu/cjt) for specific details.

Program Required Courses

#### YEAR I – First Semester

†CCJ	1020	Introduction to Criminal Justice.....	3 cr.
†CJE	1640	Introduction to Criminalistics.....	3 cr.
CJE	1642C	Introduction to Crime Scene Technology.....	3 cr.
†CJE	2600	Criminal Investigation.....	3 cr.
CJE	2671C	Latent Fingerprint Development.....	2 cr.
CJE	2672C	Fingerprint Classification.....	2 cr.

#### YEAR I – Second Semester

CJE	1643C	Advanced Crime Scene Technology.....	3 cr.
CJE	2770C	Forensic Photography.....	3 cr.
†CJL	2130	Criminal Evidence and Procedure.....	3 cr.
†CJL	2610	Courtroom Presentation of Scientific Evidence.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Criminology and Criminal Justice Studies program.

### CCC • Criminal Justice Technology Specialist

CCC.CJT.SPEC (24 Credit Hours)

Program Required Courses

#### YEAR I – First Semester

†CCJ	1020	Introduction to Criminal Justice.....	3 cr.
†CGS	2100	Computer Information Technology and Literacy .....	3 cr.
†CJE	1000	Introduction to Law Enforcement.....	3 cr.
†CCJ	1488	Ethics in Criminal Justice .....	3 cr.

#### YEAR I – Second Semester

†CCJ	2618	Forensic Psychology .....	3 cr.
†CJJ	1002	Juvenile Delinquency.....	3 cr.
†CJL	2130	Criminal Evidence and Procedure.....	3 cr.
SCC	1000	Introduction to Private Security .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Criminology and Criminal Justice Studies program. For more information visit [www.hccfl.edu/cjt](http://www.hccfl.edu/cjt).

### CCC • Culinary Arts

CCC.CULA (35 Credit Hours)

The purpose of this program is to prepare students for employment in commercial and institutional positions such as bakers, pantry cooks, prep cooks, and lead cooks in the culinary industry and/or to provide supplemental training for persons previously or currently employed in these occupations.

Program Required Courses

#### YEAR I – First Semester

†FOS	1201	Safety and Sanitation .....	2 cr.
†FSS	1223C	Food Preparation for Managers .....	4 cr.
†FSS	2100	Menu Development and Marketing .....	3 cr.
†HFT	2210	Supervisory Development .....	3 cr.

#### YEAR I – Second Semester

†FSS	1063C	Food Specialty I (Baking) .....	3 cr.
†FSS	1500	Food and Beverage Control .....	3 cr.
†FSS	2120	Food Purchasing and Storing .....	3 cr.

#### YEAR I – Third Semester

†HFT	1000	Introduction to Hospitality Industry Management.....	3 cr.
†HUN	2201	Fundamentals of Human Nutrition.....	3 cr.
		Electives (Any FSS course).....	2 cr.

#### YEAR II – First Semester

†FSS	1248C	Food Specialties II (Garde Manger I).....	3 cr.
†HFT	2840	Maître D' and Dining Room .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Culinary Management program.

### CCC • Database Administrator

CCC.DB.ADMIN (15 Credit Hours)

This certificate prepares students for jobs such as a junior or entry-level database administrator.

Program Required Courses

#### YEAR I – First Semester

*†CGS	2541	Database Design.....	3 cr.
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**YEAR I – Second Semester**

†CTS	2440	Database Programming – SQL .....	3 cr.
†CTS	2441	Database Administration I.....	3 cr.

**YEAR I – Third Semester**

†CTS	2442	Database Administration II.....	3 cr.
†CTS	2445	Database Programming – Advanced .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

\*May require additional coursework.

**NOTE:** Coursework may be applied to the two-year AS Database Technology program.

**CCC • Digital Forensics**

**CCC.DIG.FOR (30 Credit Hours)**

Program Required Courses

**YEAR I – First Semester**

*†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
*†CTS	1305	Introduction to Networking .....	3 cr.

**YEAR I – Second Semester**

†CNT	1401	Introduction to Network Security .....	3 cr.
†CTS	1106	Introduction to Linux .....	3 cr.

**YEAR I – Third Semester**

†CGS	1761	Computer Operating Systems .....	3 cr.
†CGS	2091	Information Technology: Ethical and Legal Ethics Issues .....	3 cr.

**YEAR II – First Semester**

†CIS	2359C	Information Assurance – Network Systems .....	3 cr.
†CIS	2381C	Computer Forensics and Incident Response .....	3 cr.

**YEAR II – Second Semester**

†CIS	2352C	Information Assurance – Local Systems .....	3 cr.
†CIS	2353	Security Management and Penetration Testing .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

\*May require additional coursework.

**NOTE:** Coursework may be applied to the two-year AS Network Systems Technology program.

**CCC • Digital Media/Multimedia Instructional Technology**

**CCC.MMT.IT (15 Credit Hours)**

This certificate prepares students for initial employment as an instructional developer, instructional media integrator, or instructional media specialist.

Program Required Courses

**YEAR I – First Semester**

*†CGS	1577	Presentation Systems .....	3 cr.
*†CGS	1871	Multimedia Authoring I.....	3 cr.

**YEAR I – Second Semester**

*†CGS	2820	Web Authoring – HTML.....	3 cr.
*†CGS	2821	Graphics Design for Multimedia and Internet .....	3 cr.

**YEAR I – Third Semester**

*†EME	2040	Introduction to Education Technology .....	3 cr.
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†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

\*May require additional coursework.

**NOTE:** Coursework may be applied to the two-year AS degree Digital Media/Multimedia Technology program.



**CCC • Digital Media/Multimedia Production****CCC.MMT.PROD (15 Credit Hours)**

This certificate prepares students for initial employment as a videographers or video editors.

## Program Required Courses

**YEAR I – First Semester**

*†CGS	1577	Presentation Systems .....	3 cr.
*†CGS	1871	Multimedia Authoring I.....	3 cr.
*†CGS	2821	Graphics Design for Multimedia and Internet.....	3 cr.

**YEAR I – Second Semester**

†CGS	2876	Digital Audio/Video Design.....	3 cr.
†CGS	2877	Digital Animation Design.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

\*May require additional coursework.

NOTE: Coursework may be applied to the two-year AS degree Digital Media/Multimedia Technology program.

**CCC • Digital Media/Multimedia Video Production****CCC.MMT.VIDEO (12 Credit Hours)**

This certificate prepares students for initial employment as a videographers or video editors.

## Program Required Courses

**YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology.....	3 cr.
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**YEAR I – Second Semester**

†CGS	2821	Graphics Design for Multimedia and Internet.....	3 cr.
*†CGS	2876	Digital Audio/Video Design.....	3 cr.
*†CGS	2877	Digital Animation Design.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

\*Requires additional coursework.

NOTE: Coursework may be applied to the two-year AS degree Digital Media/Multimedia Technology program.

**CCC • Digital Media/Multimedia Web Production****CCC.MMT.WEB (15 Credit Hours)**

This certificate is designed to prepare the student for initial employment as a Web production assistant or Web production artist.

## Program Required Courses

**YEAR I – First Semester**

*†CGS	2820	Web Authoring - HTML.....	3 cr.
*†CGS	2821	Graphics Design for Multimedia and Internet.....	3 cr.

**YEAR I – Second Semester**

*†CGS	2876	Digital Audio/Video Design.....	3 cr.
*†CGS	2877	Digital Animation Design.....	3 cr.
*†COP	2830	Scripting for the Web.....	3 cr.

\*Requires additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Digital Media/Multimedia Technology program.

**CCC • Drafting****CCC.ADCT.DRAFT (24 Credit Hours)**

This certificate provides the students with the practical skills necessary to accept the challenges of a construction drafting career. Successful certificate holders may find employment as a draftsman in architects, engineers, or contractors offices; governmental agencies, corporate planning departments or other private industries.

## Program Required Courses

**YEAR I – First Semester**

BCN	1250	Introduction to Graphic Technology .....	3 cr.
†BCN	2272	Blueprint Reading .....	3 cr.
*†TAR	2053	Introduction to Computer-Aided Design and Drafting.....	3 cr.

**YEAR I – Second Semester**

†ARC	2461	Materials and Methods I .....	3 cr.
†TAR	1170C	B.I.M. I Revit Residential.....	3 cr.
*†TAR	2054	Computer Aided Design and Drafting.....	3 cr.

**YEAR II – First Semester**

†BCN	1210	Construction Materials and Processes.....	3 cr.
†TAR	1171C	B.I.M. II Revit Commercial.....	3 cr.

\*May require additional coursework.

**NOTE:** Coursework may be applied to the two-year AS degree Architectural Design and Technology program.

**CCC • Early Childhood Education: Administrator****CCC.CHILD.ADM (12 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†EEC	1521	Early Childhood Center Management .....	3 cr.
†EEC	2732	Health, Safety and Nutrition for Young Children .....	3 cr.

**YEAR I – Second Semester**

†EEC	2527	Legal and Financial Issues in Child Care.....	3 cr.
†ENT	1000	Introduction to Entrepreneurship.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Early Childhood Education program.

**CCC • Early Childhood Education: Preschool****CCC.CHILD.PRE (12 Credit Hours)****YEAR I – First Semester**

†EEC	1721	Physical Development in the Early Childhood Setting.....	3 cr.
†EEC	2732	Health, Safety and Nutrition for Young Children .....	3 cr.

**YEAR I – Second Semester**

†EEC	1603	Child Guidance.....	3 cr.
†EEC	2270	Meeting Special Needs of Children in Groups.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Early Childhood Education program.

**CCC • Electronics Technician****CCC.EET (31 Credit Hours)**

This program prepares individuals for employment as electrical and electronics technicians, electronic engineering technicians, or in related occupations in electronics. This program includes the Florida core electronics competencies as identified in the electronics industry. Graduates of this program will be able to assemble, install, operate, maintain, troubleshoot and repair electronic equipment used in industry.

## Program Required Courses

**YEAR I – First Semester**

†CET	1112C	Basic Digital Systems .....	3 cr.
†EET	1036C	Basic AC and DC.....	3 cr.
†EET	1083C	Electronics Orientation .....	3 cr.
†MAC	1105	College Algebra .....	3 cr.

**YEAR I – Second Semester**

CET	2113C	Digital Systems Analysis.....	3 cr.
EET	1037C	Circuit Analysis.....	3 cr.
†EET	1141C	Solid State Devices .....	3 cr.

**YEAR I – Third Semester**

CET	2335C	Total Microcomputer Systems.....	3 cr.
†EET	1142C	Solid State Circuits .....	3 cr.
		*Electives .....	4 cr.

**\*Select 4 credit hours from the following:**

†CET	1123C	Introduction to Microprocessors/Microcontrollers.....	3 cr.
†CGS	1510	Spreadsheet Applications.....	1 cr.
†CGS	1540	Database Management I.....	1 cr.
EET	2155C	Linear Integrated Circuits .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree in Electronics Engineering Technology.

**CCC • Engineering Technology Support Specialist****CCC.ET.SUP.SPEC (18 Credit Hours)**

This certificate prepares students for entry level technical jobs in high tech production, manufacturing, distribution and engineering research and development facilities. [It is aligned with the MSSC (Manufacturing Skill Standards Council) Certified Production Technician (CPT) certification.

## Program Required Courses

**YEAR I – First Semester**

†ETI	1110	Introduction to Quality.....	3 cr.
†ETI	1810C	Introduction to Electricity and Electronics .....	3 cr.
†ETM	1010C	Mechanical Measurement and Instrumentation .....	3 cr.

**YEAR I – Second Semester**

†ETD	1320C	Computer-Aided Drafting for Engineers.....	3 cr.
†ETI	1420	Manufacturing Processes and Materials .....	3 cr.
ETI	1701	Industrial Safety .....	3 cr.

NOTE: Coursework may be applied to the two-year AS degree Engineering Technology program.

**CCC • Entrepreneurship and Innovation****CCC.ENT.INN (12 Credit Hours)**

This program provides students the fundamental skills necessary to start and operate their own businesses including rapid learning through active scientific experimentation. The program focuses on the development of an entrepreneurial mindset, a way of thinking that enhances problem solving, creativity, critical thinking, communication and collaboration. Students who complete this degree are eligible for applying for HCC's Everyday Entrepreneur Venture SEED Fund. All credits earned in the Certificate program may be applied toward the Associate of Science degree in Interdisciplinary Entrepreneurship.

## Program Required Courses

**YEAR I – First Semester**

†ENT	1000	Introduction to Entrepreneurship .....	3 cr.
†ENT	1031	Entrepreneurship Marketing and Sales.....	3 cr.

**YEAR I – Second Semester**

†ENT	1411	Small Business Accounting and Finance.....	3 cr.
†ENT	1012	Entrepreneurship Management .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**CCC • Entrepreneurship Strategies****CCC.ENT.STR (25 Credit Hours)**

Building upon the 12 and 18 College Credit Certificates in Entrepreneurship, Innovation and Ventures, this program is designed to prepare students to start, execute, and grow a small business, or work as a value adding employee intrapreneur for an existing business. As an integral part of the program, each student is required to develop a deep understanding for strategic decision making related to entrepreneurial finance, marketing, budgeting, management, and entrepreneurial leadership.

Students who complete this degree are eligible for applying for HCC's Everyday Entrepreneur Venture SEED Fund. All credits earned in the Certificate program may be applied toward the Associate of Science degree in Interdisciplinary Entrepreneurship.

## Program Required Courses

**YEAR I – First Semester**

†ENT	1000	Introduction to Entrepreneurship .....	3 cr.
†ENT	1012	Entrepreneurship Management .....	3 cr.
†ENT	1031	Entrepreneurial Marketing and Sales.....	3 cr.
†FIN	1100	Personal Finance.....	3 cr.

**YEAR I – Second Semester**

†ECO	2013	Principles of Macroeconomics.....	3 cr.
†ENT	1411	Small Business Accounting and Finance.....	3 cr.
†ENT	1612	Creativity, Innovation, and Human Centered Design .....	3 cr.
ENT	2212	Entrepreneurial Leadership - Capstone .....	3 cr.
†CGS	1510	Spreadsheet Applications I or †FIL 2931, Career in Film and Video.....	1 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Interdisciplinary Entrepreneurship program.

**CCC • Entrepreneurship Ventures****CCC.ENT.VEN (18 Credit Hours)**

Building upon the 12 College Credit Certificate in Entrepreneurship and Innovation, this certificate program is designed for students who are interested in launching their own business venture or working in a small to medium sized business upon graduation. Students will engage in skill building related to new ventures that includes human centered problem solving, creativity, problem identification, level II business modeling, and rapid testing of new innovative prototypes and solutions. Students will also learn about social entrepreneurship, and gain a deeper understanding of small business finance and personal finance. Students who complete this degree are eligible for applying for HCC's Everyday Entrepreneur Venture SEED Fund. All credits earned in the Certificate program may be applied toward the Associate of Science degree in Interdisciplinary Entrepreneurship.

## Program Required Courses

**YEAR I – First Semester**

†ENT	1000	Introduction to Entrepreneurship .....	3 cr.
†ENT	1012	Entrepreneurship Management .....	3 cr.
†ENT	1031	Entrepreneurial Marketing and Sales.....	3 cr.
†FIN	1100	Personal Finance.....	3 cr.

**YEAR I – Second Semester**

†ENT	1411	Small Business Accounting and Finance.....	3 cr.
†ENT	1612	Creativity, Innovation, and Human Centered Design .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Interdisciplinary Entrepreneurship program.

### CCC • Event Planning Management

CCC.HFT.EVNT (24 Credit Hours)

This program prepares students for immediate employment in the hospitality industry with employable skills in the events planning area of hotels, resorts, convention centers, cruise ships and other hospitality-related areas. This technical certificate can help prepare students for the CSEP (Certified Special Events Professional) certification exam.

Program Required Courses

#### YEAR I – First Semester

†FSS	2100	Menu Development and Marketing .....	3 cr.
†HFT	1000	Introduction to Hospitality Industry Management .....	3 cr.
†HFT	2210	Supervisory Development .....	3 cr.
†HFT	2600	Hospitality Industry Law .....	3 cr.
†HFT	2750	Meeting, Convention and Exposition Industry .....	3 cr.

#### YEAR I – Second Semester

†ECO	2013	Principles of Macroeconomics <i>or</i> †ECO 2023, Principles of Microeconomics.....	3 cr.
†HFT	1790	The Event Industry .....	3 cr.
†HFT	2840	Maitre D' and Dining Room Service.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree in Hospitality and Tourism Management.

### CCC • Fire Officer Supervisor

CCC.FIRE.OFF.SUP (12 Credit Hours)

Program Required Courses

#### YEAR I – First Semester

†FFP	1710	Company Officer.....	3 cr.
†FFP	2120	Fire Service Building Construction.....	3 cr.

#### YEAR I – Second Semester

†FFP	1810	Fire Fighting Tactics and Strategy I .....	3 cr.
†FFP	2740	Fire Service Course Delivery .....	3 cr.

### CCC • Food and Beverage Management

CCC.FOOD.BEV.MGT (31 Credit Hours)

This certificate provides a program of study designed to prepare students for employment as supervisors and managers in the food and beverage sectors of the hospitality industry.

Program Required Courses

#### YEAR I – First Semester

†FOS	1201	Sanitation and Safety Management .....	2 cr.
†FSS	1223C	Food Preparation for Managers .....	4 cr.
†HFT	1000	Introduction to Hospitality Industry Management .....	3 cr.

#### YEAR I – Second Semester

†FSS	1500	Food and Beverage Control .....	3 cr.
†FSS	2120	Food Purchase and Storage.....	3 cr.
†HFT	2840	Maitre D' and Dining Room Service.....	3 cr.

#### YEAR I – Third Semester

†ECO	2023	Principles of Microeconomics.....	3 cr.
†SPC	1006	Speech Improvement .....	1 cr.

#### YEAR II – First Semester

†HFT	2210	Supervisory Development .....	3 cr.
†HFT	2600	Hospitality Industry Law .....	3 cr.
†HFT	2750	Meeting, Convention and Exposition Industry .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Restaurant Management program.

**CCC • Food and Beverage Operations**

CCC.FOOD.BEV.OP (18 credit hours)

Program Required Courses

**YEAR I – First Semester**

†FOS	1201	Safety and Sanitation Management .....	2 cr.
†FSS	2100	Menu Development and Marketing .....	3 cr.
†HFT	2210	Supervisory Development .....	3 cr.
†HFT	2600	Hospitality Law .....	3 cr.

**YEAR I – Second Semester**

†CGS	1107	Introduction to Computers .....	1 cr.
†FSS	2120	Food Purchase and Storage.....	3 cr.
†HFT	2840	Maitre D’ and Dining Room Service.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Restaurant Management program.

**CCC • Game Design and Development - Authoring**

CCC.MMT.AUTH (12 Credit Hours)

This certificate is designed to prepare students for initial employment as a digital media/multimedia author.

Program Required Courses

**YEAR I – First Semester**

*†CAP	1023	Introduction to Game Development.....	3 cr.
*†CGS	2827	Advanced Graphics for Multimedia and Internet .....	3 cr.

**YEAR I – Second Semester**

Specified Electives.....	6 cr.
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**\*Select 6 specified elective credits from the following list:**

†CAP	2042	Game Design and Development - Modeling.....	3 cr.
†CAP	2043	Game Design and Development - Rigging .....	3 cr.
CAP	2041	Game Design and Development – Animation .....	3 cr.
†CAP	2044	Game Design and Development – Special Effects .....	3 cr.

\*Requires additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Digital Media/Multimedia Technology program.

**CCC • Graphic Design Production**

CCC.GRA.PROD (27 Credit Hours)

Program Required Courses

**YEAR I – First Semester**

†ARH	1051	Art History II .....	3 cr.
†ART	1201C	Visual Studies Foundations I.....	3 cr.
†ART	1300C	Drawing I .....	3 cr.
†PGY	2401C	Photography I.....	3 cr.

**YEAR I – Second Semester**

†GRA	2111C	Graphic Design.....	3 cr.
†PGY	2801C	Digital Photography I.....	3 cr.

**YEAR I – Third Semester**

†ART	2600C	Digital Art .....	3 cr.
GRA	2156C	Digital Illustration.....	3 cr.
GRA	2206C	Introduction to Typography .....	3 cr.

NOTE: Coursework may be applied to the two-year AA Graphic Design pathway.

**CCC • Help Desk Support Technician****CCC.HELP.DESK (18 Credit Hours)**

This certificate prepares students for jobs such as help desk technician, junior or entry-level technical support, IT help desk support technician, or desktop support technician.

## Program Required Courses

**YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
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**YEAR I – Second Semester**

†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
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†CET	1174C	PC Upgrading and Repair: Software .....	3 cr.
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**YEAR I – Third Semester**

†CTS	1305	Introduction to Networking .....	3 cr.
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**YEAR II – First Semester**

†CNT	1401	Introduction to Network Security .....	3 cr.
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**YEAR II – Second Semester**

†CTS	1303	Enterprise Operating Systems I.....	3 cr.
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†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS Network Systems Technology program.

**CCC • Healthcare Support Specialist****CCC.HLTH.SUP.SPEC (21 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†AMH	2020	Modern American History or †POS 2041, American Government .....	3 cr.
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†ENC	1101	English Composition I.....	3 cr.
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†BSC	2085	Human Anatomy and Physiology .....	3 cr.
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†BSC	2085L	Human Anatomy and Physiology Laboratory.....	1 cr.
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**YEAR I – Second Semester**

†MAC	1105	College Algebra <b>or</b> STA 2023, Elementary Statistics <b>or</b> MGF 1106, Topics in Mathematics <b>or</b> higher math .....	3 cr.
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		Electives.....	8 cr.
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**\*\*Select 8 credit hours of electives from the following:**

†BSC	2086	Human Anatomy and Physiology II.....	3 cr.
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†BSC	2086L	Human Anatomy and Physiology II Laboratory .....	1 cr.
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†HIM	1000	Introduction to Health Information Management.....	3 cr.
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†HIM	1112C	Electronic Health Records .....	2 cr.
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†HSC	1531	Medical Terminology.....	3 cr.
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†MCB	2000	Microbiology and Human Disease .....	3 cr.
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†MCB	2000L	Microbiology and Human Disease Laboratory.....	1 cr.
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PHY	1025	Fundamental of Physics .....	3 cr.
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PHY	1025L	Fundamental of Physics Laboratory .....	1 cr.
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CHM	1025	Introductory Chemistry.....	3 cr.
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CHM	1025L	Introductory Chemistry Laboratory .....	1 cr.
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CHM	1032	Chemistry for Health Sciences.....	3 cr.
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CHM	1032L	Chemistry for Health Sciences Laboratory .....	3 cr.
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†PSY	2012	General Psychology .....	3 cr.
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†SYG	2000	Introduction to Sociology .....	3 cr.
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†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**CCC • Home Staging Specialist****CCC.HM.STG.SPEC (12 Credit Hours)**

The purpose of this program is to prepare students for careers in the interior design industry as home staging specialists. Home staging specialists are trained to design room layouts for the home furnishings and decor retail industry and prepare interior room layouts to market homes for the real estate industry.

## Program Required Courses

**YEAR I – First Semester**

†ARC	1180	Introduction to Digital Architecture.....	3 cr.
IND	1020C	Introduction to Interior Design.....	3 cr.
IND	1420	Materials and Methods.....	3 cr.
IND	1606C	Functions and Psychology of Space.....	3 cr.

**CCC • Homeland Security Specialist****CCC.HSS (9 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†DSC	1003	Introduction to Homeland Security.....	3 cr.
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**Select 6 credit hours from the following:**

†DSC	1002	Introduction to Terrorism.....	3 cr.
†DSC	2590	Intelligence Analysis and Security Management.....	3 cr.
†DSC	2033	Introduction to Terrorist Tactics and Weapons.....	3 cr.
†DSC	2570	Introduction to Cyber-Terrorism.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS Criminology and Criminal Justice Studies program. For more information visit [www.hccfl.edu/cjt](http://www.hccfl.edu/cjt).

**CCC • Human Resource Management****CCC.OSS.HRS (21 Credit Hours)**

This program teaches students the process of accomplishing administrative support functions for human resources managers in the areas of employee benefits, recruitment and staffing, training and development, salary and compensation, employee relations, and safety and worker's compensation.

Students are prepared for such positions as human resource assistant, employment interviewer, labor relations assistant, and human resource specialist.

## Program Required Courses

**YEAR I – First Semester**

†GEB	1011	Introduction to Business.....	3 cr.
†MAN	2021	Principles of Management.....	3 cr.
†OST	1100C	Keyboarding and Document Processing.....	3 cr.
†OST	2854C	Office Applications for Business.....	3 cr.

**YEAR I – Second Semester**

†MAN	2300	Introduction to Human Resource Management.....	3 cr.
†OST	1335	Business Communications.....	3 cr.
†OST	2357	Electronic Records Management.....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Office Administration program.

**CCC • Internet Services Technology Web Development Specialist - Designer****CCC.WEB.OPT1 (35 Credit Hours)**

This program prepares students for internet-related jobs such as Web designer, site designer or internet architect, and transfers into the associate degree program titled Internet Services Technology-Web Designer.

## Program Required Courses

**YEAR I – First Semester**



†CGS	1000	Introduction to Computers and Technology .....	3 cr.
*†CGS	2820	Web Authoring - HTML.....	3 cr.

**YEAR I – Second Semester**

†CGS	1871	Multimedia Authoring I.....	3 cr.
†CGS	2821	Graphics Design for Multimedia and Internet .....	3 cr.
†CGS	2822	Web Site Creation.....	3 cr.

**YEAR II – First Semester**

†CGS	2585	Desktop Internet Publishing.....	3 cr.
†CGS	2786	Web 2.0 Applications.....	3 cr.
†CGS	2876	Desktop Audio/Video Design/ Animation .....	3 cr.

**YEAR II – Second Semester**

†CGS	2827	Advanced Graphics Design for Multimedia and Internet .....	3 cr.
†CGS	2877	Digital Animation Design .....	3 cr.
†COP	2830	Scripting for the Web.....	3 cr.

**Select any 2 credit hours from any of the following courses prefixes: CAP, CEN, CET, CGS, CIS, CNT, COP, CTS**

\*Permission of instructor required for concurrent enrollment with prerequisite.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Internet Services Technology program.

**CCC • Internet Services Technology Web Development Specialist - Developer**

**CCC.WEB.OPT2 (35 Credit Hours)**

This program prepares students for internet-related jobs such as Webmaster, Web developer, site developer and internet programmer.

## Program Required Courses

**YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
†COP	1000	Programming Logic .....	3 cr.

**YEAR I – Second Semester**

*†CGS	2541	Database Design .....	3 cr.
*†CGS	2820	Web Authoring - HTML.....	3 cr.

**YEAR I – Third Semester**

†CGS	1103	Project Management .....	3 cr.
†COP	1812	Introduction to XML.....	3 cr.

**YEAR II – First Semester**

†COP	2830	Scripting for the Web.....	3 cr.
†COP	2836	Database-Driven Web Program – Server .....	3 cr.
†CTS	2440	Database Programming – SQL .....	3 cr.

**YEAR II – Second Semester**

†CGS	2822	Web Site Creation.....	3 cr.
†COP	2833	Database-Driven Web Program – Client.....	3 cr.

**Select 2 credit hours from any of the following courses prefixes: CAP, CEN, CET, CGS, CIS, CNT, COP, CTS**

\*Permission of instructor required for concurrent enrollment with prerequisite.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

**NOTE:** Coursework may be applied to the two-year AS degree Internet Services Technology program.

**CCC • Laser and Photonics Technician**

**CCC.LAS.TECH (12 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†EET	1036C	Basic AC and DC.....	3 cr.
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**YEAR I – Second Semester**

†EET	1141C	Solid State Devices .....	3 cr.
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**YEAR II – First Semester**

†ETS	2210C	Introduction to Photonics.....	3 cr.
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**YEAR II – Second Semester**

ETS	2230C	Introduction to Lasers.....	3 cr.
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NOTE: Coursework may be applied to the two-year AS degree Electronics Engineering Technology program.

**CCC • Lean Manufacturing****CCC.ETM (12 Credit Hours)**

This certificate prepares students for engineering technology support positions dealing with quality systems and their implementation in high tech production, manufacturing, distribution, and engineering research and development facilities.

**Program Required Courses****YEAR I – First Semester**

†ETI	1110	Introduction to Quality.....	3 cr.
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†ETM	1010C	Mechanical Measurement and Instrumentation .....	3 cr.
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**YEAR I – Second Semester**

†ETI	1622	Concepts of Lean and Six Sigma .....	3 cr.
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†ETI	1644	Production and Inventory Control .....	3 cr.
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NOTE: Coursework may be applied to the two-year AS degree Engineering Technology program.

**CCC • Logistics and Transportation Specialist****CCC.LOG.TRAN.SPEC (18 Credit Hours)**

This program is designed to develop the student's general employability by improving work attitudes, communication, critical thinking, technical skills, problem-solving skills and occupation-specific skills relative to supply chain management. This program prepares students for employment in roles such as: Integrated Logistics Planner, Purchasing Analyst, Cargo Scheduler, International Logistics Clerk, Quality Associate, Inventory Control Manager, Logistics Analyst, Junior Buyer, Customer Service Associate, Materials Analyst, Material Manager, Supply Manager, Dispatcher, Supply Technician, Operations Supervisor, Order Fulfillment Associate, Transportation Coordinator, Distribution Planning Analyst, Packing Supervisor, Transportation Clerk, Cargo Sales, Receiving/Shipping Supervisor, Transportation Specialist, Procurement Clerk, Product Tracing and Tracking Clerk, Warehouse Shift Supervisor, Import/Export Clerk, and Purchasing Agent.

**Program Required Courses****YEAR I – First Semester**

†ETI	1110	Introduction to Quality.....	3 cr.
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†SCM	1010	Introduction to Supply Chain Management.....	3 cr.
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†SCM	2270	Transportation and Distribution .....	3 cr.
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**YEAR I – Second Semester**

†MAN	2500	Operations Management.....	3 cr.
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†SCM	2150	Purchasing and Inventory Management.....	3 cr.
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†SCM	2230	Warehouse Management .....	3 cr.
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**CCC • Mechatronics****CCC.MECH (30 Credit Hours)**

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills. It provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all fundamental aspects of Mechatronics. The content includes but is not limited to instruction in maintenance techniques, computer aided drafting/design skills, technical communications, maintenance and operation of various industrial components, material handling protocols, and proper usage of tools and instrumentation.

**Program Required Courses****YEAR I – First Semester**

†ETD	1320C	Computer Aided Drafting for Engineers .....	3 cr.
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ETI	1701	Industrial Safety .....	3 cr.
†ETI	1810C	Introduction to Electricity and Electronics .....	3 cr.
†ETM	1010C	Mechanical Measurement and Instrumentation .....	3 cr.

**YEAR I – Second Semester**

†ETI	1420	Manufacturing Processes and Materials .....	3 cr.
†ETI	1843	Motors and Controls .....	3 cr.
†ETS	1542	Introduction to Programmable Logic Controllers .....	3 cr.
†ETS	2604	Robotics Application.....	3 cr.

**YEAR II – First Semester**

†ETM	2315	Hydraulic and Pneumatic Systems .....	3 cr.
†ETS	2527	Electromechanical components and Mechanisms .....	3 cr.

NOTE: Coursework may be applied to the two-year AS degree Engineering Technology program.

**CCC • Medical Information: Medical Coder****CCC.MED.CODE (37 Credit Hours)**

This program prepares students to be members of a health information service team. Coursework focuses on using a classification system to assign code numbers and letters to each symptom, diagnosis, disease, procedure, and operation on a patient's chart. A high degree of accuracy, critical thinking skills, a working knowledge of medical terminology, and skill development in coding and computer software are required. Career opportunities include hospital inpatient/outpatient coding specialist, reimbursement specialist, coding abstracting or insurance claim analyst, managed-care coding specialist, procedural coding specialist, and physician's office or clinical coding specialist.

## Program Required Courses

**YEAR I – First Semester**

†HIM	1453	Anatomy and Physiology for Medical Coding.....	4 cr.
†HSC	1531	Medical Terminology.....	3 cr.
†OST	2854C	Office Applications for Business .....	3 cr.

**YEAR I – Second Semester**

†HIM	1000	Introduction to Health Information Management.....	3 cr.
†HIM	1433	Principles of Disease .....	4 cr.
†HIM	1442	Pharmacology .....	2 cr.
†HIM	2275C	Medical Billing and Insurance I.....	3 cr.

**YEAR I – Third Semester**

†HIM	2253	CPT Coding.....	3 cr.
†HIM	2724	ICD-10 Coding.....	4 cr.

**YEAR II – First Semester**

†HIM	2283	Advanced Coding .....	3 cr.
HIM	2941	Clinical Coding Practicum .....	3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Office Administration program.

**CCC • Medical Office Management - Management****CCC.OA.MED.MAN (34 Credit Hours)**

Prepares individuals to support management by expediting and facilitating the maintenance and production of correspondence and records; to transcribe recordings, telecommunicate, maintain office budget, prepare correspondence and resolutions; to file and maintain documents; and to assist in the administration of policy.

## Program Required Courses

**YEAR II – First Semester**

†HIM	1000	Introduction to Health Information Management.....	3 cr.
†HSC	1531	Medical Terminology.....	3 cr.
†OST	2854C	Office Applications for Business .....	3 cr.

**YEAR I – Second Semester**

†APA	1111	Basic Accounting.....	3 cr.
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†HIM	1112C	Electronic Health Records.....	2 cr.
†OST	1335	Business Communications.....	3 cr.

**YEAR I – Third Semester**

†MAN	2021	Principles of Management.....	3 cr.
†OST	1100C	Keyboarding and Document Processing.....	3 cr.
†OST	2135	Medical Office Procedures.....	3 cr.

**YEAR II – First Semester**

†HIM	2272C	Billing and Insurance II.....	3 cr.
*†HIM	2275C	Medical Billing and Insurance I.....	3 cr.
		Electives.....	2 cr.

**Select 2 credit hours from the following:**

†CGS	1510	Spreadsheet Applications I.....	1 cr.
†CGS	1540	Database Applications.....	1 cr.
CGS	1554	Internet Basics.....	1 cr.
†CGS	2511	Spreadsheet Applications II.....	1 cr.

\*Requires additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Office Administration program.

**CCC • Medical Office Management - Billing**

**CCC.OA.MED.BIL (34 Credit Hours)**

Prepares individuals to support management by expediting and facilitating the maintenance and production of correspondence and records; to transcribe recordings, telecommunicate, maintain office budget, prepare correspondence and resolutions; to file and maintain documents; and to assist in the administration of policy.

**Program Required Courses**

**YEAR I – First Semester**

†HIM	1000	Introduction to Health Information Management.....	3 cr.
†HSC	1531	Medical Terminology.....	3 cr.
†OST	2854C	Office Applications for Business.....	3 cr.

**YEAR I – Second Semester**

†HIM	1112C	Electronic Health Records.....	2 cr.
†HIM	1453	Anatomy and Physiology for Medical Coding.....	4 cr.
†OST	1335	Business Communications.....	3 cr.

**YEAR I – Third Semester**

†APA	1111	Basic Accounting.....	3 cr.
†HIM	2724	ICD-10 Coding.....	4 cr.
†HIM	2253	CPT Coding.....	3 cr.

**YEAR II – First Semester**

*†HIM	2275C	Medical Billing and Insurance I.....	3 cr.
†HIM	2272C	Billing and Insurance II.....	3 cr.

\*Requires additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Office Administration program.

**CCC • Microcomputer Repairer/Installer**

CCC.GET.REPAIR (15 Credit Hours)

This certificate is designed to prepare students for employment as computer engineering technicians in electronics/information technology.

## Program Required Courses

**YEAR I – First Semester**

†CET	1112C	Basic Digital Systems .....	3 cr.
†EET	1036C	Basic AC and DC.....	3 cr.

**YEAR I – Second Semester**

CET	2113C	Digital Systems Analysis.....	3 cr.
†EET	1141C	Solid State Devices .....	3 cr.

**YEAR I – Third Semester**

CET	2335C	Total Microcomputer Systems.....	3 cr.
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NOTE: Coursework may be applied to the two-year AS degree Computer Engineering Technology program.

**CCC • Motion Picture Production Management**

CCC.MOV.PROD.MGMT (16 Credit Hours)

## Program Required Courses

**YEAR I – First Semester**

†FIL	1000	Introduction to Film.....	3 cr.
†FIL	1420C	Motion Media I.....	3 cr.

**YEAR I – Second Semester**

†FIL	2010	Films of Fantasy and Imagination.....	3 cr.
†RTV	1530	Electronic Field Production.....	3 cr.

**YEAR I – Third Semester**

†FIL	2905	Directed Independent Study: Film.....	3 cr.
†FIL	2931	Careers in Film and Video .....	1 cr.

NOTE: Coursework may be applied to the two-year AS degree Digital Television and Media Production.

**CCC • Network Enterprise Administration**

CCC.NST.ENT.ADM (27 Credit Hours)

This certificate prepares students for such jobs as junior or entry-level systems administrator, junior or entry-level network engineer.

## Program Required Courses

**YEAR I – First Semester**

*†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
*†CTS	1305	Introduction to Networking .....	3 cr.

**YEAR I – Second Semester**

†CET	1174C	PC Upgrading and Repair: Software .....	3 cr.
*†CTS	1303	Enterprise Operating Systems I.....	3 cr.

**YEAR I – Third Semester**

†CNT	1401	Introduction to Network Security .....	3 cr.
†CTS	1306	Enterprise Operating Systems II .....	3 cr.

**YEAR II – First Semester**

†CNT	2510	Wireless Networking .....	3 cr.
†CTS	1145	Introduction to the Cloud .....	3 cr.

**YEAR II – Second Semester**

†CTS	2375	Enterprise and Cloud Computing .....	3 cr.
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\*May require additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Network Systems Technology program.

### CCC • Network Infrastructure

#### CCC.NST.INF (21 Credit Hours)

This certificate prepares student for jobs such as junior or entry-level network infrastructure engineer, junior or entry-level infrastructure specialist.

#### Program Required Courses

##### YEAR I – First Semester

\*†CTS 1305 Introduction to Networking ..... 3 cr.

##### YEAR I – Second Semester

†CET 1600 Cisco Network Fundamentals ..... 3 cr.

†CNT 1401 Introduction to Network Security ..... 3 cr.

##### YEAR I – Third Semester

†CET 1610 Cisco Switching, Routing, and Wireless Essentials ..... 3 cr.

†CNT 2510 Wireless Networking ..... 3 cr.

##### YEAR II – First Semester

†CET 2615 Cisco Enterprise Networking, Security, and Automation ..... 3 cr.

CIS 2772 Cybersecurity Operations Fundamentals ..... 3 cr.

\*May require additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Network Systems Technology program.

### CCC • Network Security/Cybersecurity: Cisco

#### CCC.SEC.CYB.CISCO (30 Credit Hours)

This certificate prepares students for jobs such as junior or entry-level Cisco security technician, junior or entry-level network security technician.

#### Program Required Courses

##### YEAR I – First Semester

†CET 1600 Cisco Network Fundamentals ..... 3 cr.

\*†CNT 1401 Introduction to Network Security ..... 3 cr.

##### YEAR I – Second Semester

\*†CET 1610 Cisco Switching, Routing, and Wireless Essentials ..... 3 cr.

†CIS 2352C Information Assurance – Local Systems ..... 3 cr.

†CIS 2353 Security Management and Penetration Testing ..... 3 cr.

##### YEAR I – Third Semester

†CET 2615 Cisco Enterprise Networking, Security, and Automation ..... 3 cr.

†CGS 2091 Information Technology: Ethical and Legal Ethics Issues ..... 3 cr.

##### YEAR II – First Semester

CIS 2772 Cybersecurity Operations Fundamentals ..... 3 cr.

†CIS 2359C Information Assurance – Network Systems ..... 3 cr.

†CIS 2381C Computer Forensics and Incident Response ..... 3 cr.

\*Permission of instructor required for concurrent enrollment with prerequisite.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Network Systems Technology program.

**CCC • Network Security/Cybersecurity: Windows****CCC.SEC.CYB.WINDOWS (30 Credit Hours)**

This certificate prepares students for jobs such as junior or entry-level Windows Server systems engineer.

## Program Required Courses

**YEAR I – First Semester**

\*†CNT 1401 Introduction to Network Security ..... 3 cr.

**YEAR I – Second Semester**

†CIS 2352C Information Assurance – Local Systems ..... 3 cr.

†CIS 2353 Security Management and Penetration Testing ..... 3 cr.

\*†CTS 1303 Enterprise Operating Systems I ..... 3 cr.

**YEAR I – Third Semester**

†CGS 2091 Information Technology: Ethical and Legal Ethics Issues ..... 3 cr.

†CTS 1306 Enterprise Operating Systems II ..... 3 cr.

**YEAR II – First Semester**

†CIS 2359C Information Assurance – Network Systems ..... 3 cr.

†CIS 2381C Computer Forensics and Incident Response ..... 3 cr.

†CTS 1145 Introduction to the Cloud ..... 3 cr.

**YEAR II – Second Semester**

†CTS 2375 Enterprise and Cloud Computing ..... 3 cr.

\*Requires additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Network Systems Technology program.

**CCC • Network Security Cybersecurity: Linux****CCC.SEC.CYB.UL (30 Credit Hours)**

This certificate prepares students for jobs such as junior or entry-level Unix Security technician, junior or entry-level Linux Security technician.

## Program Required Courses

**YEAR I – First Semester**

\*†CNT 1401 Introduction to Network Security ..... 3 cr.

\*†CTS 1106 Introduction to Linux ..... 3 cr.

**YEAR I – Second Semester**

†CIS 2352C Information Assurance – Local Systems ..... 3 cr.

†CIS 2353 Security Management and Penetration Testing ..... 3 cr.

†CTS 2301C Linux Administration I ..... 3 cr.

**YEAR I – Third Semester**

†CGS 2091 Information Technology: Ethical and Legal Ethics Issues ..... 3 cr.

†CTS 2322 Linux Administration II ..... 3 cr.

CTS 2333 Linux Networking ..... 3 cr.

**YEAR II – First Semester**

†CIS 2359C Information Assurance – Network Systems ..... 3 cr.

†CIS 2381C Computer Forensics and Incident Response ..... 3 cr.

\*Requires additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Network Systems Technology program.

**CCC • Network Server Administration****CCC.NST.SVR.ADM (24 Credit Hours)**

This certificate prepares students for jobs such as junior or entry-level IT support and administration, junior or entry-level Windows Server administrator, junior or entry-level network administrator.

## Program Required Courses

**YEAR I – First Semester**

*†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
*†CTS	1305	Introduction to Networking .....	3 cr.

**YEAR I – Second Semester**

†CET	1174C	PC Upgrading and Repair: Software .....	3 cr.
†CTS	1303	Enterprise Operating Systems I.....	3 cr.

**YEAR I – Third Semester**

†CTS	1306	Enterprise Operating Systems II .....	3 cr.
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**YEAR II – First Semester**

†CNT	1401	Introduction to Network Security .....	3 cr.
†CTS	1145	Introduction to the Cloud .....	3 cr.

**YEAR II – Second Semester**

†CTS	2375	Enterprise and Cloud Computing.....	3 cr.
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\*Requires additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Network Systems Technology program.

**CCC • Network Support Technician****CCC.NST.SPT.TECH (21 Credit Hours)**

This certificate prepares students for such jobs as junior or entry-level network support technician, junior or entry-level network specialist, help desk technician, or support technician.

## Program Required Courses

**YEAR I – First Semester**

†CGS	1000	Introduction to Computers and Technology .....	3 cr.
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**YEAR I – Second Semester**

*†CTS	1303	Enterprise Operating Systems I.....	3 cr.
†CTS	1305	Introduction to Networking .....	3 cr.

**YEAR I – Third Semester**

†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
†CTS	1306	Enterprise Operating Systems II .....	3 cr.

**YEAR II – First Semester**

†CNT	1401	Introduction to Network Security .....	3 cr.
†CET	1174C	PC Upgrading and Repair: Software .....	3 cr.

\*May require additional coursework.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Network Systems Technology program.

**CCC • Office Management****CCC.OA.OFM (27 Credit Hours)**

## Program Required Courses

**YEAR I – First Semester**

†APA	1111	Basic Accounting.....	3 cr.
†GEB	1011	Introduction to Business.....	3 cr.
†OST	1100C	Keyboarding and Document Processing.....	3 cr.



†OST 2854C Office Applications for Business ..... 3 cr.

**YEAR I – Second Semester**

†MAN 2021 Principles of Management ..... 3 cr.  
 †OST 1335 Business Communications ..... 3 cr.  
 †OST 2501 Office Administration ..... 3 cr.  
 SPC 1608 Public Speaking ..... 3 cr.

**YEAR II – First Semester**

OST 1813 Desktop Publishing ..... 3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Office Administration program.

**CCC • Office Specialist  
 CCC.OA.SPEC (18 Credit Hours)**

Program Required Courses

**YEAR I – First Semester**

†OST 1100C Keyboarding and Document Processing ..... 3 cr.  
 †OST 1335 Business Communications ..... 3 cr.  
 †OST 2854C Office Applications for Business ..... 3 cr.

**YEAR I – Second Semester**

†APA 1111 Basic Accounting ..... 3 cr.  
 OST 1813 Desktop Publishing ..... 3 cr.  
 †OST 2501 Office Administration ..... 3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Office Administration program.

**CCC • Office Support  
 CCC.OA.OS (12 Credit Hours)**

Program Required Courses

**YEAR I – First Semester**

†APA 1111 Basic Accounting ..... 3 cr.  
 †OST 1100C Keyboarding and Document Processing ..... 3 cr.  
 †OST 1335 Business Communications ..... 3 cr.  
 †OST 2854C Office Applications for Business ..... 3 cr.

†Courses symbolized with a dagger (†) are offered online in addition to the traditional delivery methods. Online availability may vary by academic term.

NOTE: Coursework may be applied to the two-year AS degree Office Administration program.

**CCC • Pneumatics, Hydraulics and Motors for Manufacturing  
 CCC.MFG.PHM (13 Credit Hours)**

This certificate prepares students for engineering technology support positions dealing with facilities operations and maintenance in high tech production, manufacturing, distribution, and engineering research and development facilities.

Program Required Courses

**YEAR I – First Semester**

†ETI 1420 Manufacturing Processes and Materials ..... 3 cr.  
 †ETI 1810C Introduction to Electricity and Electronics ..... 3 cr.  
 †ETI 1843 Motors and Controls ..... 3 cr.

**YEAR I – Second Semester**

\*†ETM 2315 Hydraulic and Pneumatics Systems ..... 3 cr.  
 \*†ETM 2315L Hydraulic and Pneumatics Systems Laboratory ..... 1 cr.

\*May require additional coursework.

NOTE: Coursework may be applied to the two-year AS degree Engineering Technology program.

**CCC • Project Manager Associate****CCC.PRO.MAN.ASO (12 credit Hours)**

Program Required Courses

**YEAR I – First Semester**

†CGS 1000 Introduction to Computes and Technology..... 3 cr.

**YEAR I – Second Semester**

†CGS 1103 Project Management ..... 3 cr.

**YEAR II – First Semester**

CGS 2105 IT Project Management Software Applications..... 3 cr.

Specified Elective ..... 3 cr.

**Select 3 credit hours from the specified electives below:**

†CGS 2091 Information Technology: Ethical/Legal Issues ..... 3 cr.

†CGS 2541 Database Design ..... 3 cr.

†CGS 2301 Management Information Systems ..... 3 cr.

†OST 1335 Business Communications ..... 3 cr.

\*May require additional coursework.

**NOTE:** Coursework may be applied to the two-year AS degree Information Project Management.**CCC • Real Estate Paralegal****CCC.RES.LEGAL (12 Credit Hours)**

The Real Estate Paralegal certificate prepares individuals for entry into the legal field as Real Estate Paralegals, Title Company Professionals, and Escrow / Closing Officers. The course content includes property law, real property transactions, ethics and professional responsibility, contract law, and employability skills.

Program Required Courses

**YEAR I – First Semester**

†PLA 1003 Introduction to the Paralegal Profession..... 3 cr.

†PLA 1611 Real Estate Law/Property Transactions I ..... 3 cr.

†PLA 2421 Contract Law ..... 3 cr.

†PLA 2612 Real Estate Law/Property Transactions II..... 3 cr.

**CCC • Robotics and Simulation****CCC.ROB.SIM (12 Credit Hours)**

This certificate is designed to expose students to the basic fundamentals of robotics and simulation and also prepare students for employment as an entry level Robotics and Simulation technician.

Program Required Courses

**YEAR I – First Semester**

†EET 1036C Basic AC and DC..... 3 cr.

**YEAR I – Second Semester**

†CET 1123C Introduction to Microprocessors/Microcontrollers..... 3 cr.

†EET 1141C Solid State Devices ..... 3 cr.

**YEAR II – First Semester**

†ETS 1603C Fundamentals of Robotics and Simulation ..... 3 cr.

**CCC • Sustainable Design****CCC.ADCT.SUS (19 Credit Hours)**

Program Required Courses

**YEAR I – First Semester**

BCN 2049 Sustainable Design and Construction..... 3 cr.

BCN 2760 Building Codes ..... 3 cr.

\*†BCT 2770C Construction Estimating..... 3 cr.

†TAR 1172C B.I.M. III Revit M.E.P ..... 3 cr.

**YEAR I – Second Semester**

*†ARC	2501	Architectural Structures I.....	4 cr.
BCN	2939C	Construction Capstone.....	3 cr.

\*May required additional coursework.

**CCC • Technology Project Manager  
CCC.TECH.PRO.MAN (24 credit Hours)**

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers such as project managers and professionals incorporating IT project management strategies in their business activities in the Information Technology career cluster; provides technical skill proficiency, and competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Information Technology career cluster.

Program Required Courses

**YEAR I – First Semester**

†CGS	1000	Introduction to Computes and Technology.....	3 cr.
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**YEAR I – Second Semester**

†CGS	1103	Project Management .....	3 cr.
		Specified Elective .....	3 cr.

**YEAR I – Third Semester**

†CGS	2091	Information Technology: Ethical/Legal Issues .....	3 cr.
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**YEAR II – First Semester**

CGS	2105	IT Project Management Software Applications.....	3 cr.
		Specified Elective .....	3 cr.

**YEAR II – Second Semester**

†CGS	2301	Management Information Systems.....	3 cr.
		Specified Elective .....	3 cr.

**Select 9 credit hours from the specified electives below:**

†ACG	2021	Introduction to Financial Accounting.....	3 cr.
†CET	1172C	PC Upgrading and Repair: Hardware.....	3 cr.
†GEB	1011	Introduction to Business .....	3 cr.
MAN	2300	Introduction to Human Resource Management .....	3 cr.
†OST	1335	Business Communications .....	3 cr.

or any courses with prefix CAP, CEN, CGS, CIS, CNT, COP, CTS

NOTE: Coursework may be applied to the two-year AS degree Information Project Management.

**CCC • Water Quality Technician  
CCC. ENV.WQ.TECH (12 Credit Hours)**

This certificate is designed to prepare students for immediate entry into a career in the workforce as a water quality technician.

Program Required Courses

**YEAR I – First Semester**

†EVS	1001	Introduction to Environmental Sustainability.....	3 cr.
EVS	2894C	Water Sampling and Analysis I.....	5 cr.
		*Specified Elective .....	4 cr.

**\*Select 4 credit hours from the following:**

**EVS	1026	Chemistry and Biology of Natural Waters.....	4 cr.
EVS	2891	Hydrology and Quality of Water Resources .....	4 cr.

\*\*Requires additional coursework.

NOTE: Coursework may be applied to the two-year AS degree Environmental Science Technology program.

## Postsecondary Adult Vocational Programs

Hillsborough Community College will award a Postsecondary Adult Vocational (PSAV) certificate for completion of a specified course of study designed to prepare individuals for employment. PSAV programs are designed for those students interested in a specific job in business or industry.

PSAV Certificate credit requirements vary in the number of hours required for completion. Courses in these programs are not considered as college credit.

All PSAV programs require students to possess a standard high school diploma or high school equivalency diploma with the following exceptions: Apprenticeship programs, Automotive Collision Technology Technician; Automotive Service Technology; Bail Bond Agent; Diesel Systems Technician, Heavy Equipment Service Technician, Transit Technician; and Welding Technology.

For additional information about a particular certificate contact a counselor or advisor at one of the campus locations.

### PSAV • Alternative Fuels Technology

VOC.ALT.FUEL (750 Clock Hours)

The purpose of this program is to prepare students with the career ready practices in personal safety, engine operation, types of alternative fuels, hybrid, and electric vehicles.

#### Program Requirements

			Clock hr.	Voc. cr.
AER	0875	Alternative Fuels Maintenance Technician.....	300 hr.	10.0 cr.
AER	0876	Advanced Alternative Fuels Technician .....	300 hr.	10.0 cr.
AER	0877	CNG Fuels System Inspector .....	150 hr.	5.0 cr.

### PSAV • Automotive CNG/LPG Technology

VOC.AUTO.CNG.LPG (1200 Clock Hours)

#### Program Requirements

			Clock hr.	Voc. cr.
AER	0014	Automobile Services Assistor .....	300 hr.	10.0 cr.
AER	0360	Automotive Electrical/Electronic System Technician .....	300 hr.	10.0 cr.
AER	0503	Automotive Engine Performance Technician.....	300 hr.	10.0 cr.
AER	0871	Automotive Compressed Natural Gas Technician.....	150 hr.	5.0 cr.
AER	0872	Automotive Liquid Propane Gas Technician .....	150 hr.	5.0 cr.

### PSAV • Automotive Collision Technology Technician

VOC.ARR.TECH (1400 Clock Hours)

Students in the Automotive Collision Repair and Refinishing program learn automotive painting, body repair, frame straightening, trim and custom painting, tinting, welding, and glass and sheet metal installation.

#### Program Requirements

			Clock hr.	Voc. cr.
ARR	0022	Damage Analysis and Estimating .....	75 hr.	2.5 cr.
ARR	0112	Automotive Collision Welding, Cutting and Joining .....	75 hr.	2.5 cr.
ARR	0140	Automotive Collision Repair Helper/ Assistant .....	150 hr.	5.0 cr.
ARR	0141	Automotive Collision Refinish Technician .....	450 hr.	15.0 cr.
ARR	0295	Structural Repair Technician.....	350 hr.	11.6 cr.
ARR	0312	Non-Structural Damage Repair Technician.....	300 hr.	10.0 cr.

### PSAV • Automotive Service Technology

VOC.AST (1800 Clock Hours)

This program is designed for high school graduates who are interested in automotive technology as a career option or who desire postsecondary vocational training as a means of expanding or enhancing their career opportunities.

#### Program Requirements

			Clock hr.	Voc. cr.
AER	0014	Automobile Services Assistor .....	300 hr.	10.0 cr.
AER	0110	Engine Repair Technician .....	150 hr.	5.0 cr.
AER	0172	Automotive Heating and Air Conditioning Technician.....	150 hr.	5.0 cr.
AER	0257	Automatic Transmission and Transaxles Technician .....	150 hr.	5.0 cr.
AER	0274	Manual Transmissions and Drivelines .....	150 hr.	5.0 cr.

AER	0360	Automotive Electrical/Electronic System Technician .....	300 hr. ....	10.0 cr.
AER	0418	Automotive Brake Systems Technician.....	150 hr. ....	5.0 cr.
AER	0453	Automobile Suspension and Steering Technician.....	150 hr. ....	5.0 cr.
AER	0503	Automotive Engine Performance Technician.....	300 hr. ....	10.0 cr.

**PSAV • Auxiliary Law Enforcement Officer**

VOC.LAWE.AUX (364 Clock Hours)

Graduates are able to serve as a part-time volunteer law enforcement officer. Call the Criminal Justice Training Institute Public Service Program Manager at 253-7953 to obtain an application handbook. The program does have specified admission criteria that must be met for an individual to be considered for admission to an academy.

**Program Requirements**

			Clock hr.	Voc. cr.
CJK	0020	Law Enforcement Vehicle Operations .....	48 hr. ....	1.6 cr.
CJK	0023	Introduction to Law Enforcement.....	4 hr. ....	.13 cr.
CJK	0024	Legal Concepts .....	20 hr. ....	.66 cr.
CJK	0025	Patrol and Professional Communication .....	12 hr. ....	.40 cr.
CJK	0026	Interactions in a Diverse Community.....	12 hr. ....	.40 cr.
CJK	0027	Calls for Service and Arrest Procedures.....	24 hr. ....	.80 cr.
CJK	0028	Traffic Stops and Crash Investigations.....	28 hr. ....	.93 cr.
CJK	0029	Crime Scene and Courtroom Procedures.....	8 hr. ....	.26 cr.
CJK	0031	First Aid for Criminal Justice Officers .....	40 hr. ....	1.3 cr.
CJK	0040	Criminal Justice Firearms .....	80 hr. ....	2.7 cr.
CJK	0051	Criminal Justice Defensive Tactics .....	80 hr. ....	2.7 cr.
CJK	0422	Dart-Firing Stun Gun.....	8 hr. ....	.26 cr.

**PSAV • Bail Bonding**

VOC.BB (120 Clock Hours)

This program prepares student for licensing and employment as a bail bond agent in the State of Florida. The bail bonding/surety agent PSAV program prepares you for employment as a licensed surety agent or bail bonds agent. The bail bonding/surety agent pre-licensing certification course is the basic prerequisite course on the criminal justice system required to becoming licensed as a Surety Agent/Bail Bonds Agent in Florida and is approved by the Bureau of Licensing of the Florida Department of Financial Services. This course will cover the laws, rules, and practices involved in bail bonding including the issuance and execution of bail bonds, the supervision, apprehension, and surrender of defendants, as well as the operation of the criminal justice system. For more information, student can refer to the Criminal Justice Technology website at [www.hccfl.edu/bbc](http://www.hccfl.edu/bbc) for specific details.

**Program Requirements**

			Clock hr.	Voc. cr.
SCY	0010	Bail Bond.....	120 hr. ....	4.0 cr.

**PSAV • Bus Transit Technician I\***

VOC.TRANS.TECH1 (620 Clock Hours)

**Program Requirements**

			Clock hr.	Voc. cr.
DIM	0810	Transit Equipment Preventive Maintenance .....	200 hrs. ....	6.6 cr.
DIM	0811	Transit Basic Electrical Systems.....	120 hrs. ....	4.0 cr.
DIM	0812	Transit Wheelchair Lift/Ramp .....	60 hrs. ....	2.0 cr.
DIM	0813	Transit Diesel Engine Preventative Maintenance .....	120 hrs. ....	4.0 cr.
DIM	0814	Transit Steering and Suspension .....	120 hrs. ....	4.0 cr.

\*NOTE: This is a limited access program.

**PSAV • Bus Transit Technician II\***

VOC.TRANS.TECH2 (620 Clock Hours)

**Program Requirements**

			Clock hr.	Voc. cr.
DIM	0820	Transit Hydraulics .....	60 hrs. ....	2.0 cr.
DIM	0821	Transit Diesel Electrical and Diesel Engine Electronics.....	120 hrs. ....	4.0 cr.
DIM	0822	Transit Drive Train .....	120 hrs. ....	4.0 cr.
DIM	0823	Transit Intermediate Electrical Systems .....	120 hrs. ....	4.0 cr.

DIM	0824	Transit Brakes/ Air System.....	200 hrs.	6.6 cr.
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\*NOTE: This is a limited access program.

**PSAV • Bus Transit Technician III\***

VOC.TRANS.TECH3 (680 Clock Hours)

Program Requirements

			Clock hr.	Voc. cr.
DIM	0830	Transit Alternative Fuels Systems.....	120 hrs.	4.0 cr.
DIM	0831	Transit Advanced Electrical Systems.....	120 hrs.	4.0 cr.
DIM	0832	Transit Heating and A/C.....	200 hrs.	6.6 cr.
DIM	0833	Transmission Diagnosis, Rebuild and Repair.....	120 hrs.	4.0 cr.
DIM	0834	Diesel Engine Diagnosis.....	120 hrs.	4.0 cr.

\*NOTE: This is a limited access program.

**PSAV • Correctional Officer**

VOC.COFR (420 Clock Hours)

This program prepares students for employment as a correctional officer in a criminal justice facility. Please call the Criminal Justice Training Institute Program Manager at 253-7953 to obtain an application handbook.

Program Requirements

			Clock hr.	Voc. cr.
CJK	0300	Introduction to Corrections.....	32 hr.	1.1 cr.
CJK	0305	Communications.....	40 hr.	1.3 cr.
CJK	0310	Officer Safety.....	16 hr.	0.5 cr.
CJK	0335	Responding to Emergencies.....	16 hr.	0.5 cr.
CJK	0031	First Aid for Criminal Justice Officers.....	40 hr.	1.33 cr.
CJK	0040	Criminal Justice Firearms.....	80 hr.	2.66 cr.
CJK	0051	Criminal Justice Defense Tactics.....	80 hr.	2.66 cr.
CJK	0315	Facility and Equipment.....	8 hr.	0.3 cr.
CJK	0320	Intake and Release.....	18 hr.	0.6 cr.
CJK	0325	Supervising in a Correctional Facility.....	40 hr.	1.3 cr.
CJK	0330	Supervising Special Populations.....	20 hr.	0.7 cr.
CJK	0340	Officer Wellness and Physical Abilities.....	30 hr.	1 cr.

**PSAV • Cross-Over Correctional Officer to Law Enforcement Officer**

VOC.COLE.CO (518 Clock Hours)

The Criminal Justice Standards and Training Commission has established cross-over training programs to provide lateral movement of Florida certified Correctional Officers to Law Enforcement Officers.

Program Requirements

			Clock hr.	Voc. cr.
CJK	0002	Introduction to Law Enforcement.....	12 hr.	0.40 cr.
CJK	0016	Communication.....	24 hr.	0.80 cr.
CJK	0018	Legal.....	64 hr.	2.13 cr.
CJK	0019	Interviewing and Report Writing.....	56 hr.	1.86 cr.
CJK	0020	Law Enforcement Vehicle Operations.....	48 hr.	1.6 cr.
CJK	0021	Serving Your Community.....	34 hr.	1.13 cr.
CJK	0063	Fundamentals of Patrol.....	40 hr.	1.33 cr.
CJK	0072	Crimes against Persons.....	48 hr.	1.60 cr.
CJK	0073	Crimes Involving Property and Society.....	12 hr.	0.40 cr.
CJK	0079	Crime Scene Follow-Up Investigations.....	34 hr.	1.13 cr.
CJK	0093	Critical Incidents.....	44 hr.	1.46 cr.
CJK	0400	Traffic Incidents.....	12 hr.	0.40 cr.
CJK	0401	Traffic Stops.....	24 hr.	0.80 cr.
CJK	0402	Traffic Crash Investigations.....	30 hr.	1.00 cr.
CJK	0403	DUI Traffic Stops.....	24 hr.	0.80 cr.
CJK	0421	Dart-Firing Stun Gun.....	4 hr.	0.13 cr.
CJK	0393	Cross-Over Program Updates.....	8 hr.	0.27 cr.

**PSAV • Cross-Over Correctional Probation Officer to Law Enforcement Officer**

VOC.COLE.PRO (532 Clock Hours)

The Criminal Justice Standards and Training Commission has established cross-over training programs to provide lateral movement of Florida certified Correctional Probation Officers to Law Enforcement Officers.

## Program Requirements

			Clock hr.	Voc. cr.
CJK	0016	Communication.....	24 hr.	0.80 cr.
CJK	0018	Legal.....	64 hr.	2.13 cr.
CJK	0020	Law Enforcement Vehicle Operations.....	48 hr.	1.6 cr.
CJK	0021	Serving Your Community.....	34 hr.	1.13 cr.
CJK	0040	Criminal Justice Firearms.....	80 hr.	2.7 cr.
CJK	0063	Fundamentals of Patrol.....	40 hr.	1.33 cr.
CJK	0072	Crimes against Persons.....	48 hr.	1.60 cr.
CJK	0073	Crimes Involving Property and Society.....	12 hr.	0.40 cr.
CJK	0079	Crime Scene Follow-Up Investigations.....	34 hr.	1.13 cr.
CJK	0093	Critical Incidents.....	44 hr.	1.46 cr.
CJK	0400	Traffic Incidents.....	12 hr.	0.40 cr.
CJK	0401	Traffic Stops.....	24 hr.	0.80 cr.
CJK	0402	Traffic Crash Investigations.....	30 hr.	1.00 cr.
CJK	0403	DUI Traffic Stops.....	24 hr.	0.80 cr.
CJK	0421	Dart-Firing Stun Gun.....	4 hr.	0.13 cr.
CJK	0394	Cross-Over Program Updates.....	10 hr.	0.33 cr.

**PSAV • Dental Assisting**

VOC.DEA (1230 Clock Hours)

Dental Assisting offers the student a career that requires both interpersonal and technical skills; he or she will have the most comprehensive duties in the dental office. The dental assistant will expose and process X-rays, fabricate temporary crowns, take impressions for study models, place sealants, polish teeth, place fluoride treatments, place and remove rubber dams, place and remove temporary restorations, place oral surgical dressings, chart oral conditions, instruct the patient on oral home care, complete office management tasks, and keep the office in compliance with OSHA and blood borne pathogens mandates.

Career opportunities: a student who completes the program can be employed in the local private dental office in one of the following areas: general practice, orthodontics, periodontics, pediatric dentistry, oral surgery, endodontics, or in a dental clinic in the correctional facilities, military bases, and public health unit.

The Dental Assisting program is accredited by the Commission on Dental Accreditation, 211 East Chicago Avenue, Chicago, IL 60611, (312)440-4653 or <https://www.eatrightpro.org/acend/accreditation-standards-fees-and-policies/2017-standards>.

**NOTE:** The Dental Assisting program has specific criteria that must be met prior to admission and is twelve months in length if attended full-time. For further information call Ashish Dubal at (813) 253-7279 or email at [adubal@hccfl.edu](mailto:adubal@hccfl.edu).

## Program Requirements

			Clock hr.	Voc. cr.
DEA	0130	Allied Dental Theory.....	45 hr.	1.5 cr.
DEA	0134	Dental Office Emergencies.....	30 hr.	1.0 cr.
DEA	0800	Clinical Practice I.....	75 hr.	2.5 cr.
DEA	0800L	Clinical Practice I Lab.....	150 hr.	5.0 cr.
DEA	0801L	Dental Practicum.....	254 hr.	8.5 cr.
DEA	0931	Dental Assisting in Orthodontics.....	15 hr.	0.5 cr.
DEA	0931L	Dental Assisting in Orthodontics Lab.....	30 hr.	1.0 cr.
DES	0021	Head, Neck, and Dental Anatomy.....	45 hr.	1.5 cr.
DES	0021L	Head, Neck, and Dental Anatomy Lab.....	30 hr.	1.0 cr.
DES	0053	Dental Pharmacology/Pain Control.....	30 hr.	1.0 cr.
DES	0053L	Dental Pharmacology/Pain Control Lab.....	15 hr.	0.5 cr.
DES	0103	Dental Materials.....	45 hr.	1.5 cr.
DES	0103L	Dental Materials Lab.....	45 hr.	1.5 cr.
DES	0205	Dental Radiology.....	45 hr.	1.5 cr.
DES	0205L	Dental Radiology Lab.....	45 hr.	1.5 cr.
DES	0300	Dental Psychology.....	15 hr.	0.5 cr.

DES	0400	Dental Anatomy and Physiology .....	45 hr.	.....1.5 cr.
DES	0500	Computer Applications in Modern Dentistry .....	30 hr.	.....1.0 cr.
DES	0501	Dental Office Management.....	30 hr.	.....1.0 cr.
DES	0804	Intro to Clinical Procedures I .....	60 hr.	.....2.0 cr.
DES	0804L	Intro to Clinical Procedures I Lab.....	30 hr.	.....1.0 cr.
DES	0830	Expanded Functions for Dental Auxiliaries .....	15 hr.	.....0.5 cr.
DES	0830L	Expanded Functions for Dental Auxiliaries Lab.....	45 hr.	.....1.5 cr.
DES	0844	Preventive Dentistry.....	30 hr.	.....1.0 cr.
DES	0936	Dental Seminar .....	15 hr.	.....0.5 cr.
HSC	0003	Fundamentals of Allied Health Occupations.....	16 hr.	.....0.5 cr.

**PSAV • Diesel Systems Technician**

VOC.DIESEL.MECH (1800 Clock Hours)

This program provides entry level skills in heavy truck service and systems operation. The topics covered include shop safety, OSHA rules, applied math and science principles, identification and proper use of shop tools and equipment, heavy truck component identification, use of electronic service information, proper use of measuring tools, EPA rules on hazardous waste handling and disposal. Instruction will consist of classroom and laboratory activities designed to meet industry standards and safety.

**Program Requirements**

			Clock hr.	Voc. cr.
DIM	0101	Diesel Engine Mechanic Technician Helper .....	150 hr.	.....5 cr.
DIM	0102	Diesel Electrical and Electronics Technician.....	300 hr.	.....10 cr.
DIM	0103	Diesel Engine Preventative Maintenance Technician .....	150 hr.	.....5 cr.
DIM	0104	Diesel Engine Technician .....	300 hr.	.....10 cr.
DIM	0105	Diesel Brakes Technician .....	300 hr.	.....10 cr.
DIM	0106	Diesel Heating and A/C Technician.....	150 hr.	.....5 cr.
DIM	0107	Diesel Steering and Suspension Technician .....	150 hr.	.....5 cr.
DIM	0108	Diesel Drivetrain Technician.....	150 hr.	.....5 cr.
DIM	0109	Diesel Hydraulics Technician .....	150 hr.	.....5 cr.

**PSAV • Fire Fighter**

VOC.FIRE (492 Clock Hours)

Graduates are eligible to take the state certification examination administered by the Florida Bureau of Fire Standards and Training to become a certified fire fighter in Florida. Please call the Fire Fighter Program Manager at 253-7628 for more information.

**Program Requirements**

			Clock hr.	Voc. cr.
FFP	0030	Fire Fighter I.....	191 hr.	.....6.4 cr.
FFP	0031	Fire Fighter II .....	301 hr.	.....10.0 cr.

**PSAV • Heavy Equipment Service Technician**

VOC.HEQUIP.TECH (1800 Clock Hours)

This program provides entry level skills in heavy equipment service and systems operation. The topics covered include shop safety, OSHA rules, applied math and science principles, identification and proper use of shop tools and equipment, heavy equipment component identification, use of electronic service information, proper use of measuring tools, and EPA rules on hazardous waste handling and disposal. Instruction will consist of classroom and laboratory activities designed to meet industry standards and safety.

**Program Requirements**

			Clock hr.	Voc. cr.
DIM	0101	Diesel Engine Mechanic Technician Helper .....	150 hr.	.....5 cr.
DIM	0102	Diesel Electrical and Electronics Technician.....	300 hr.	.....10 cr.
DIM	0103	Diesel Engine Preventative Maintenance Technician .....	150 hr.	.....5 cr.
DIM	0104	Diesel Engine Technician .....	300 hr.	.....10 cr.
DIM	0106	Diesel Heating and A/C Technician.....	150 hr.	.....5 cr.
DIM	0107	Diesel Steering and Suspension Technician .....	150 hr.	.....5 cr.
DIM	0108	Diesel Drivetrain Technician.....	150 hr.	.....5 cr.



DIM	0110	Diesel Power Train Technician .....	150 hr. ....	5 cr.
DIM	0130	Diesel Brakes and Fluid Technician .....	300 hr. ....	10 hr.

**PSAV • Law Enforcement**

VOC.LAWE.GENR (770 Clock Hours)

This program prepares students for employment as a law enforcement officer. Please call the Criminal Justice Training Institute Public Service Program Manager at 253-7953 to obtain an application handbook. The program has specified admission criteria that students must meet to be considered for admission to an academy.

**Program Requirements**

			Clock hr.	Voc. cr.
CJK	0002	Introduction to Law Enforcement .....	12 hr. ....	0.40 cr.
CJK	0016	Communication .....	24 hr. ....	0.80 cr.
CJK	0018	Legal .....	64 hr. ....	2.13 cr.
CJK	0019	Interviewing and Report Writing .....	56 hr. ....	1.86 cr.
CJK	0020	Law Enforcement Vehicle Operations .....	48 hr. ....	1.6 cr.
CJK	0021	Serving Your Community .....	34 hr. ....	1.13 cr.
CJK	0031	First Aid for Criminal Justice Officers .....	40 hr. ....	1.3 cr.
CJK	0040	Criminal Justice Firearms .....	80 hr. ....	2.7 cr.
CJK	0051	Criminal Justice Defensive Tactics .....	80 hr. ....	2.7 cr.
CJK	0063	Fundamentals of Patrol .....	40 hr. ....	1.33 cr.
CJK	0072	Crimes against Persons .....	48 hr. ....	1.60 cr.
CJK	0073	Crimes Involving Property and Society .....	12 hr. ....	0.40 cr.
CJK	0079	Crime Scene Follow-Up Investigations .....	34 hr. ....	1.13 cr.
CJK	0093	Critical Incidents .....	44 hr. ....	1.46 cr.
CJK	0096	Criminal Justice Officer Physical Fitness Training .....	60 hr. ....	2.0 cr.
CJK	0400	Traffic Incidents .....	12 hr. ....	0.40 cr.
CJK	0401	Traffic Stops .....	24 hr. ....	0.80 cr.
CJK	0402	Traffic Crash Investigations .....	30 hr. ....	1.00 cr.
CJK	0403	DUI Traffic Stops .....	24 hr. ....	0.80 cr.
CJK	0421	Dart-Firing Stun Gun .....	4 hr. ....	0.13 cr.

**PSAV • Private Investigator Intern**

VOC.PI (40 Clock Hours)

This program is for individuals who are interested in becoming a licensed Class C Private Investigator. Florida Statutes 493 requires these individuals to take and successfully pass a Private Investigator Intern course, make a contractual obligation with a Class C licensed Private Investigator to become their mentor for the two (2) year period of their internship and then apply for their Class C license. Students must be 18 years of age, a U.S. Citizen or Legal Resident and be able to pass a criminal background check.

**Program Requirements**

			Clock hr.	Voc. cr.
SCY	0051	Private Investigation I .....	24 hr. ....	0.8 cr.
SCY	0052	Private Investigation II .....	16 hr. ....	0.5 cr.

**PSAV • Welding Technology**

VOC.WELDING.TECH (1050 Clock Hours)

This program is designed to prepare students for a career in the welding technologies field. Students will learn basic entry level welding skills in SMAW, GMAW, FCAW, and GTAW welding processes. They will also learn welding safety, symbols, and blueprint reading for welders.

**Program Requirements**

			Clock hr.	Voc. cr.
PMT	0070	Welder Assistant I .....	150 hrs. ....	5.0 cr.
PMT	0071	Welder Assistant II .....	150 hrs. ....	5.0 cr.
PMT	0072	Welder, SMAW I .....	150 hrs. ....	5.0 cr.
PMT	0073	Welder, SMAW II .....	150 hrs. ....	5.0 cr.
PMT	0074	Welder .....	450 hrs. ....	15.0 cr.

**PSAV • Welding Technology - Advanced**

VOC.WELDING.ADV (750 Clock Hours)

The Advanced program is designed for incumbent welders that need to develop and expand their existing skills

Program Requirements

			Clock hr.	Voc. cr.
PMT	0075	Advanced Welder I.....	600 hrs.	20.0 cr.
PMT	0076	Advanced Welder II.....	150 hrs.	5.0 cr.

## Program Placement Rates

In accordance with Florida House Bill 167, enacted as of July 1, 1992, the following are the graduate placement rates for the last three reported academic years.

### Associate in Science Degrees

Program Title	CIP*	Placement Rates		
		19/20	18/19	17/18
AS - Accounting Technology	1552030201	100%	100%	100%
AS - Aquaculture	1101030301	100%	100%	100%
AS - Architectural Design & Construction Technology	1604090100	75%	100%	81%
AS - Biotechnology Laboratory Technology	1341010100	100%	100%	87%
AS - Business Administration	1552020102	100%	100%	100%
AS - Cardiovascular Technology	1351090100	100%	N/A	N/A
AS - Clinical Research Professional	1351071902	No Grads	N/A	N/A
AS - Computer Engineering Technology	1615120100	100%	100%	100%
AS - Computer Information Technology	1511010307	86%	92%	100%
AS - Computer Programming & Analysis	1511020101	88%	100%	100%
AS - Criminal Justice Technology	1743010302	81%	89%	87%
AS - Culinary Management	1612050401	91%	100%	92%
AS - Cybersecurity	1511100308	100%	N/A	N/A
AS - Database Technology	1511010308	100%	100%	100%
AS - Dental Hygiene	1351060200	100%	100%	92%
AS - Diagnostic Medical Sonography Technology	1351091004	93%	81%	100%
AS - Dietetic Technician	1351310301	88%	67%	92%
AS - Digital Media/Multimedia Technology	1611080103	100%	100%	100%
AS - Digital Television and Media Production	1609070213	82%	92%	71%
AS - Early Childhood Management	1419070802	88%	83%	95%
AS - Electronics Engineering Technology	1615030301	86%	100%	100%
AS - Emergency Medical Services	1351090402	94%	100%	100%
AS - Engineering Technology	1615000001	57%	100%	100%
AS - Environmental Science Technology	1703010401	100%	100%	100%
AS - Fire Science Technology	1743020100	100%	100%	100%
AS - Health Navigator	1351221100	100%	N/A	N//A
AS - Hospitality and Tourism Management	1252090101	100%	89%	89%
AS - Human Services	1451159901	100%	92%	90%
AS - Industrial Management Technology	1652020501	100%	100%	100%
AS - Internet Services Technology	1511080103	33%	86%	75%
AS - Medical Office Administration	1552020404	100%	56%	-
AS - Network Systems Technology	1511100112	100%	94%	93%
AS - Nuclear Medicine Technology	1351090502	100%	100%	89%
AS - Nursing	1351380100	99%	100%	96%
AS - Office Administration	1552020401	100%	83%	100%
AS - Opticianry	1351180100	98%	96%	95%
AS - Optical Management	0351180202	100%	No Grads	50%
AS - Paralegal (Legal Assisting)	1722030200	92%	88%	96%
AS - Radiography	1351090700	100%	96%	94%
AS - Radiation Therapy	1351090701	90%	79%	61%
AS - Respiratory Care	1351090800	100%	100%	100%
AS - Restaurant Management	1252090500	100%	100%	100%

AS - Sign Language Interpretation	1713100301	No Grads	No Grads	100%
AS - Supply Chain Management	1652020901	No Grads	N/A	N/A
AS - Veterinary Technology	1351080800	67%	73%	100%

**College Credit Certificates**

Program Title	CIP*	19/20	18/19	17/18
CCC - Accounting Technology Management	0552030205	100%	100%	100%
CCC - Accounting Technology Operations	0552030203	100%	100%	100%
CCC - Accounting Technology Specialist	0552030204	100%	100%	100%
CCC - Advanced Network Infrastructure	0511100115	No Grads	100%	-
CCC - Aquaculture Technology	0101030302	60%	86%	100%
CCC - AutoCAD Foundations	0615130204	100%	89%	100%
CCC - Automation	0615040601	67%	100%	83%
CCC - Biotechnology Specialist	0626120101	100%	67%	67%
CCC - Broadcast Production	0610020216	No Grads	No Grads	71%
CCC - Business Development and Entrepreneurship	0552070306	No Match	No Grads	100%
CCC - Business Entrepreneurship	0552070308	100%	100%	100%
CCC - Business Management	0552070101	100%	100%	100%
CCC - Business Operations	0552020104	100%	100%	100%
CCC - Business Specialist	0552020103	100%	100%	99%
CCC - Chef's Apprentice	0612050302	88%	92%	100%
CCC - Cisco CCNA	0611020301	No Grads	No Grads	100%
CCC - Clinical Research Coordinator	0351071901	No Grads	N/A	N/A
ATC - Computed Tomography Advanced Imaging	0351091166	92%	-	No Grads
CCC - Computer Programmer	0511020200	100%	100%	100%
CCC - Computer Programming Specialist	0511020103	97%	100%	90%
CCC - Crime Scene Technician	0743010601	57%	78%	67%
CCC - Criminal Justice Technology Specialist	0743010304	80%	100%	100%
CCC - Culinary Arts	0612050301	100%	100%	83%
CCC - Digital Forensics	0511100119	50%	100%	100%
CCC - Digital Media/Multimedia Authoring	0609070209	No Grads	100%	100%
CCC - Digital Media/Multimedia Instructional Technology	0609070211	100%	100%	100%
CCC - Digital Media/Multimedia Production	0610010507	100%	100%	100%
CCC - Digital Media/Multimedia Video Production	0609070210	No Grads	100%	75%
CCC - Digital Media/Multimedia Web Production	0650010208	67%	100%	100%
CCC - Digital Video Fundamentals	0610030414	No Grads	No Grads	71%
CCC - Drafting Design	0615130101	100%	100%	67%
CCC - Electronics Technician	0615030309	No Grads	No Grads	100%
CCC - Emergency Medical Technician	0351090400	89%	90%	84%
CCC - Engineering Technology Support Specialist	0615000007	100%	100%	No Match
CCC - Event Planning Management	0252090905	100%	100%	100%
CCC - Eye Care Technician	0351180302	83%	No Grads	100%
CCC - Fire Officer Supervisor	0743020111	96%	100%	-
CCC - Food and Beverage Management	0252090503	100%	100%	100%
CCC - Food and Beverage Operations	0252090508	100%	No Grads	93%
CCC - Graphic Design Production	0611080303	89%	N/A	N/A
CCC - Health Navigator Specialist	0351221100	100%	N/A	N/A
CCC - Help Desk Support Technician	0511010313	100%	67%	100%

CCC - Homeland Security Specialist	0743010306	82%	82%	96%
CCC - Laser and Photonics Technician CCC	0615030411	100%	90%	100%
CCC - Lean Manufacturing	0615061302	50%	100%	100%
CCC - Linux System Administrator	0511100122	No Grads	No Grads	50%
CCC - Mechatronics	0615000013	No Grads	100%	No Match
CCC - Medical Information/Coder/Biller	0351070714	100%	-	73%
ATC - Medical Laboratory Technology	0351100466	100%	100%	100%
CCC - Medical Office Management	0551071605	100%	No Match	100%
CCC - Microcomputer Repairer/Installer	0647010406	80%	100%	100%
CCC - Motion Picture production Management	0650060206	Not Related	N/A	N/A
CCC - Network Enterprise Administration	0511100113	100%	100%	100%
CCC - Network Infrastructure	1511100114	100%	No Match	100%
CCC - Network Security	0511100118	100%	100%	100%
CCC - Network Server Administration	0511100112	90%	100%	100%
CCC - Network Support Technician	0511100121	100%	100%	94%
CCC - Office Management	0552020401	100%	100%	100%
CCC - Office Specialist	0552040704	100%	100%	100%
CCC - Office Support	0552020403	100%	100%	100%
CCC - Ophthalmic Laboratory Technician	0351100600	97%	100%	96%
ATC - Optician	0317070166	No Grads	No Grads	No Grads
CCC - Oracle Certified Database Administrator	0511020307	86%	100%	100%
ATC - Paralegal (Legal Assisting)	0722030266	93%	91%	92%
CCC - Paramedic	0351090405	99%	100%	98%
CCC - Pneumatics, Hydraulics & Motors for Manufacturing	0615061303	No Grads	100%	100%
CCC - Radiation Therapy Specialist	0351090703	100%	100%	100%
ATC - Radiography	0351090767	92%	100%	86%
CCC - Robotics and Simulation Technician	0615040514	88%	N/A	N/A
CCC - Sustainable Design	0630330106	100%	Not Related	100%
CCC - Television Studio Production	0610010513	No Grads	No Grads	78%
CCC - Video Editing & Post Production	0609040217	No Grads	No Match	80%
CCC - Water Quality Technician	0703010404	67%	100%	100%
CCC - Web Development Specialist	0511080103	100%	No Grads	100%

### Postsecondary Adult Vocational Certificates

Program Title	CIP*	<u>Placement Rates</u>		
		19/20	18/19	17/18
PSAV - Advanced Water Treatment Technologies	0715050606	No Grads	No Grads	100%
PSAV - Automotive Collision Technology Technician	0647060306	73%	64%	69%
PSAV - Automotive Service Technology	0647060405	67%	87%	85%
PSAV - Auxiliary Law Enforcement Officer	0743010701	100%	No Grads	88%
PSAV - Bail Bond Agent	0743019902	55%	48%	46%
PSAV - Correctional Officer	0743010200	100%	97%	97%
PSAV - Dental Assisting	0351060112	100%	93%	78%
PSAV - Fire Fighter	0743020300	92%	82%	90%
PSAV - Law Enforcement Officer	0743010700	99%	94%	94%
PSAV - Medium and Heavy Duty Truck and Bus Technician	0647060501	No Grads	67%	
PSAV - Private Investigator Intern	0743010907	60%	71%	77%
PSAV - Transit Technician I	0647061307	54%	100%	No Grads
PSAV - Transit Technician II	0647061308	100%	100%	No Grads

PSAV - Transit Technician III	0647061309	82%	No Grads	100%
PSAV - Welding Technology	068050805	81%	70%	91%

**Apprenticeship Programs**

Program Title	CIP*	<u>Placement Rates</u>		
		19/20	18/19	17/18
Air Conditioning, Refrigeration and Heating Technician	0847020103	No Grads	100%	No Grads
Carpentry	0846020105	100%	No Grads	No Grads
Electrician	0846030204	100%	95%	100%
Fire Sprinkler System Service Technician	0846080202	88%	100%	100%
Industrial Pipefitter	0846050303	No Grads	100%	100%
Sheet Metal Fabrication	0848050600	No Grads	67%	No Grads

\*CIP (Classification of Instructional Programs) is a code used for State reporting to classify instructional programs. Placement rates are reported by the State-recognized CIP number for each program. Individual program options are not reported separately.

“N/A” signifies that no placement rates available-new program

“No Grads” signifies that no placement rates available - there were no graduates located in the follow-up process.

“No Match” signifies that the graduates did not match state job placement records.

“Not Related” student completers found but their job is not related to training received here

# Course Information

## Florida's Statewide Course Numbering System

Courses in this catalog are identified by prefixes and numbers that were assigned by Florida's Statewide Course Numbering System (SCNS). This numbering system is used by all public postsecondary institutions in Florida and 37 participating non-public institutions. The major purpose of this system is to facilitate the transfer of courses between participating institutions. Students and administrators can use the online SCNS to obtain course descriptions and specific information about course transfer between participating Florida institutions. This information is at the SCNS website at <https://scns.fldoe.org>.

Each participating institution controls the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed for that purpose by the Florida Department of Education in Tallahassee. Individuals nominated to serve on these committees are selected to maintain a representative balance as to type of institution and discipline field or specialization.

The course prefix and each digit in the course number have a meaning in the SCNS. The list of prefixes and associated courses is referred to as the "SCNS taxonomy." Descriptions of the content of courses are referred to as "statewide course profiles."

Example of Course Identifier

Prefix	Level Code (first digit)	Century Digit (second digit)	Decade Digit (third digit)	Unit Digit (fourth digit)	Lab Code
ENC	1	1	0	1	
English Composition	Lower (Freshman) Level at this institution	Freshman Composition	Freshman Composition Skills	Freshman Composition Skills I	No laboratory component in this course

## General Rule for Course Equivalencies

Equivalent courses at different institutions are identified by the same prefixes and same last three digits of the course number and are guaranteed to be transferable between participating institutions that offer the course, with a few exceptions, as listed below in *Exception to Guaranteed Transferability*.

For example, a freshman composition skills course is offered by 65 different postsecondary institutions. Each institution uses "ENC\_101" to identify its freshman composition skills course. The level code is the first digit and represents the year in which students normally take the course at a specific institution. In the SCNS taxonomy, "ENC" means "English Composition," the century digit "1" represents "Freshman Composition," the decade digit "0" represents "Freshman Composition Skills," and the unit digit "1" represents "Freshman Composition Skills I."

In the sciences and certain other areas, a "C" or "L" after the course number is known as a lab indicator. The "C" represents a combined lecture and laboratory course that meets in the same place at the same time. The "L" represents a laboratory course or the laboratory part of a course that has the same prefix and course number but meets at a different time or place.

Transfer of any successfully completed course from one participating institution to another is guaranteed in cases where the course to be transferred is equivalent to one offered by the receiving institution. Equivalencies are established by the same prefix and last three digits and comparable faculty credentials at both institutions. For example, ENC 1101 is

offered at a community college. The same course is offered at a state university as ENC 2101. A student who has successfully completed ENC 1101 at a Florida College System institution is guaranteed to receive transfer credit for ENC 2101 at the state university if the student transfers. The student cannot be required to take ENC 2101 again since ENC 1101 is equivalent to ENC 2101. Transfer credit must be awarded for successfully completed equivalent courses and used by the receiving institution to determine satisfaction of requirements by transfer students on the same basis as credit awarded to the native students. It is the prerogative of the receiving institution, however, to offer transfer credit for courses successfully completed that have not been designated as equivalent.

**NOTE:** Credit generated at institutions on the quarter-term system may not transfer the equivalent number of credits to institutions on semester-term systems. For example, 4.0 quarter hours often transfers as 2.67 semester hours.

## The Course Prefix

The course prefix is a three-letter designator for a major division of an academic discipline, subject matter area, or subcategory of knowledge. The prefix is not intended to identify the department in which a course is offered. Rather, the content of a course determines the assigned prefix to identify the course.

## Authority for Acceptance of Equivalent Courses

[Section 1007.24 \(7\), Florida Statute](#) states: Any student who transfers among postsecondary institutions that are fully accredited by a regional or national accrediting agency recognized by the United States Department of Education and that participate in the statewide course numbering system shall be

awarded credit by the receiving institution for courses satisfactorily completed by the student at the previous institutions. Credit shall be awarded if the courses are judged by the appropriate statewide course numbering system faculty committees representing school districts, public postsecondary educational institutions, and participating nonpublic postsecondary educational institutions to be academically equivalent to courses offered at the receiving institution, including equivalency of faculty credentials, regardless of the public or nonpublic control of the previous institution. The Department of Education shall ensure that credits to be accepted by a receiving institution are generated in courses for which the faculty possess credentials that are comparable to those required by the accrediting association of the receiving institution. The award of credit may be limited to courses that are entered in the statewide course numbering system. Credits awarded pursuant to this subsection shall satisfy institutional requirements on the same basis as credits awarded to native students.

### **Exceptions to Guaranteed Transferability**

Since the initial implementation of the SCNS, specific disciplines or types of courses have been excepted from the guarantee of transfer for equivalent courses. These include variable topics courses that must be evaluated individually, or applied courses in which the student must be evaluated for mastery of skill and technique. The following courses are exceptions to the general rule for course equivalencies and will not transfer automatically. Transferability is at the discretion of the receiving institution.

- A. Courses not offered by the receiving institution.
- B. For courses at non-regionally accredited (private) institutions, courses offered prior to the established transfer date of the course in question.
- C. Courses in the \_900-999 series are not automatically transferable and must be evaluated individually. These include such courses as Special Topics, Seminars, Internships, Apprenticeships, Practicums, Study Abroad Experiences, Thesis and Dissertations (including any similar individualized courses with numbers other than those in the 900-999 series).
- D. College preparatory (developmental or remedial) and career preparatory courses.
- E. Graduate-level courses.
- F. Applied courses in the performing arts (Art [prefix ART], Dance [DAA], Interior Design, Music [MVB, MVH, MV], MVK, MVO, MVP, MVS, MVV, and MVW], and Theatre [TPP with numbers ranging from 000-299]) and skills courses in Criminal Justice are not automatically transferable. These courses need evidence of achievement (e.g., portfolio, audition, interview, etc.) and must be evaluated individually.

### **Courses at Non-regionally Accredited Institutions**

The SCNS makes available on its home page (<https://scns.fldoe.org>) a report entitled "Courses at Non-regionally Accredited Institutions" that contains a comprehensive listing of all non-public institution courses in the SCNS

inventory, as well as each course's transfer level and transfer effective date. This report is updated monthly.

Questions about the SCNS and appeals regarding course credit transfer decisions should be directed to Millie Garrido, [mgarridocaminero@hccfl.edu](mailto:mgarridocaminero@hccfl.edu) Curriculum Coordinator at the HCC-GWS District Administration Center or to the Florida Department of Education, Office of Articulation, 701 Turlington Building, Tallahassee, Florida 32399-0400. Special reports and technical information may be requested by calling the SCNS office at (850) 245-0427 or at <https://scns.fldoe.org>.



**Course Offerings by Prefix**

ACG	Accounting: General	EDP	Educational Psychology
AEB	Agricultural Economics and Business	EEC	Education: Early Childhood
AER	Automotive/Engine Repair	EET	Electronic Engineering Technology
AFA	Afro American Studies	EGN	Engineering: Support
AFR	Aerospace Studies	EME	Education: Technology and Media
AMH	American History	EMS	Emergency Medical Services
AML	American Literature	ENC	English Composition
ANT	Anthropology	ENG	English: General
APA	Applied Accounting	ENL	English Literature
ARC	Architecture	ENT	Entrepreneurship
ARH	Art History	EPI	Educator Prep Institute
ARR	Autobody Repair and Refinishing	ESC	Earth Science
ART	Art	ETD	Engineering Tech: Drafting
ASL	American Sign Language	ETI	Engineering Tech: Industrial
AST	Astronomy	ETM	Engineering Tech: Mechanical
ATE	Animal Science Technology	ETS	Engineering Technology Specialty
BCN	Building Construction	EUH	European History
BCT	Building Construction Trades	EVR	Environmental Studies
BRC	Banking: Related Course	EVS	Environmental Science
BSC	Biological Science	FAS	Aquacultural Science
BUL	Business Law	FFP	Fire Fighting and Protection
CAP	Computer Applications	FIL	Film
CCJ	Criminology and Criminal Justice	FIN	Finance
CEN	Computer Engineering	FNR	Forestry and Natural Resources
CET	Computer Engineering Tech	FOS	Food Science
CGS	Computers: General Studies	FRE	French Language
CHD	Child Development	FSS	Food Service Systems
CHM	Chemistry	GEB	General Business
CHS	Chemistry: Specialized	GER	German and Germanic Language
CIS	Computer and Information System	GEY	Gerontology
CJC	Corrections	GIS	Geography Information Science
CJE	Law Enforcement	GLY	Geology
CJJ	Juvenile Justice	GRA	Graphic Arts
CJK	Criminal Justice Basic Training	HEV	Home Economics Vocational
CJL	Law and Process	HFT	Hotel and Restaurant
CLP	Clinical Psychology	HIM	Health Information Management
CNT	Computer Networks	HIS	History: General
COM	Communication	HLP	Health, Leisure, Physical Education
COP	Computer Programming	HOS	Horticultural Sciences
CRW	Creative Writing	HSA	Health Services Administration
CTS	Computer Technology and Skills	HSC	Health Science
CVT	Cardiovascular Technology	HUM	Humanities
DAA	Dance Activities	HUN	Human Nutrition
DAN	Dance	HUS	Human Services
DEA	Dental Assisting	IDH	Interdisciplinary Honors
DEH	Dental Hygiene	IDS	Interdisciplinary Studies
DEP	Developmental Psychology	IHS	Interdisciplinary Health Sciences
DES	Dental Support	IND	Interior Design
DIE	Dietetics	INT	Sign Language Interpreting
DIM	Diesel Mechanics	IPM	Integrated Pest Management
DSC	Domestic Security	ISM	Information Systems Management
EAP	English Academic Purposes	JOU	Journalism
ECO	Economics	LAH	Latin American History
EDF	Education: Foundations	LDE	Landscape Design
		LIN	Linguistics

LIT	Literatures
MAC	Mathematics: Calculus and Pre-Calculus
MAD	Mathematics - Discrete
MAN	Management
MAP	Mathematics: Applied
MAR	Marketing
MAT	Mathematics: General
MCB	Microbiology
MET	Meteorology
MGF	Mathematics: General and Finite
MLS	Medical Laboratory Science
MMC	Mass Media Communication
MNA	Management: Applied
MSL	Military Science Leadership
MUL	Music: Literature
MUM	Music: Commercial
MUN	Music: Music Ensembles
MUS	Music
MUT	Music: Theory
MVB	Music: Brasses
MVK	Music: Keyboard
MVP	Music: Percussion
MVS	Music: Strings
MVV	Music: Voice
MVW	Music: Woodwinds
NMT	Nuclear Medical Technology
NSP	Nursing: Special
NUR	Nursing Practice and Theory
OCB	Oceanography: Biological
OCE	Oceanography, General
OPT	Ophthalmic Technology
ORH	Ornamental Horticulture
OST	Office Systems Technology
PCB	Process Biology: Cell and Molecular
PEL	Physical Education: Object Centered
PEM	Physical Education: Performance Centered
PEN	Physical Education: Water
PGY	Photography
PHC	Public Health Concentration
PHI	Philosophy
PHY	Physics
PLA	Paralegal/Legal Asst./Legal Administration
PMT	Precision Metals Technology
POS	Political Science
PSC	Physical Sciences
PSY	Psychology
PUR	Public Relations
RAT	Radiation Therapy
REA	Reading
REL	Religion
RET	Respiratory Therapy
RTE	Radiologic Technology
RTV	Radio Television
SBM	Small Business Management
SCC	Security

SCM	Supply Chain Management
SLS	Student Life Skills
SON	Sonography: Diagnostic Ultra
SOP	Social Psychology
SPA	Speech Pathology and Audiology
SPC	Speech Communication
SPN	Spanish Language
STA	Statistics
STS	Surgical Technology Studies
SUR	Surveying and Related Areas
SYG	Sociology: General
TAR	Technical Architecture
TAX	Taxation
THE	Theatre
TPA	Theatre Production and Administration
TPP	Theatre Performance and Training
ZOO	Zoology

### Course Offerings by Subject Matter

Accounting: General.....	ACG
Accounting: Occupational/Technical .....	ACO
Aerospace Studies .....	AFR
Afro American Studies .....	AFA
Agricultural Economics and Business .....	AEB
American History.....	AMH
American Literature.....	AML
American Sign Language.....	ASL
Animal Science Technology.....	ATE
Anthropology.....	ANT
Applied Accounting .....	APA
Aquacultural Science .....	FAS
Architecture.....	ARC
Art History .....	ARH
Art .....	ART
Astronomy.....	AST
Autobody Repair and Refinishing.....	ARR
Automotive/Engine Repair .....	AER
Banking: Related Course .....	BRC
Biological Science .....	BSC
Building Construction Trades .....	BCT
Building Construction .....	BCN
Business Law .....	BUL
Cardiovascular Technology.....	CVT
Chemistry.....	CHM
Chemistry: Specialized.....	CHS
Child Development.....	CHD
Clinical Psychology .....	CLP
Communications .....	COM
Computer and Information Systems.....	CIS
Computer Applications .....	CAP
Computer Engineering Technology.....	CET
Computer Engineering .....	CEN
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Computer Programming.....	COP
Computer Technology and Skills.....	CTS
Computers: General Studies.....	CGS

Corrections .....	CJC	Health Science .....	HSC
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Criminal Justice Basic Training .....	CJK	Health, Leisure, Physical Education .....	HLP
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Developmental Psychology .....	DEP	Information Systems Management .....	ISM
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Dietetics .....	DIE	Interdisciplinary Honors .....	IDH
Domestic Security .....	DSC	Interdisciplinary Health Sciences .....	IHS
Earth Science .....	ESC	Interdisciplinary Studies .....	IDS
Economics .....	ECO	Interior Design .....	IND
Economic Development (CE) .....	ECD	Journalism .....	JOU
Economic Development (CE – Computers) .....	ECX	Juvenile Justice .....	CJJ
Education: Early Childhood .....	EEC	Landscape Design .....	LDE
Education: Foundations .....	EDF	Latin American History .....	LAH
Education: General .....	EDG	Law and Process .....	CJL
Education: Technology and Media .....	EME	Law Enforcement .....	CJE
Educational Psychology .....	EDP	Linguistics .....	LIN
Educator Prep Institute .....	EPI	Literatures .....	LIT
Electronic Engineering Technology .....	EET	Management .....	MAN
Electronic Specialty Technology .....	EST	Management: Applied .....	MNA
Emergency Medical Services .....	EMS	Marketing .....	MAR
Engineering Technology: Drafting .....	ETD	Mass Media Communication .....	MMC
Engineering Technology: Industrial .....	ETI	Mathematics: Applied .....	MAP
Engineering Technology: Mechanical .....	ETM	Mathematics: Calculus and Pre-calculus .....	MAC
Electronic Technology Specialty .....	ETS	Mathematics: Discrete	
English Academic Purposes .....	EAP	Mathematics: General and Finite .....	MGF
English as a Second Language .....	ESL	Mathematics: General .....	MAT
English Composition .....	ENC	Mathematics: Topology and Geometry .....	MTG
English Literature .....	ENL	Medical Laboratory Sciences .....	MLS
English: General .....	ENG	Meteorology .....	MET
Environmental Science .....	EVS	Microbiology .....	MCB
Environmental Studies .....	EVR	Military Science Leadership .....	MSL
European History .....	EUH	Music .....	MUS
Film .....	FIL	Music: Brasses .....	MVB
Finance .....	FIN	Music: Commercial .....	MUM
Fire Fighting and Protection .....	FFP	Music: Keyboard .....	MVK
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GED Preparation .....	GED	Music: Theory .....	MUT
General Business .....	GEB	Music: Voice .....	MVV
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Geology .....	GLY	Nuclear Medical Technology .....	NMT
German and Germanic Language .....	GER	Nursing Practice and Theory .....	NUR
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Health Information Management .....	HIM	Office Systems Technology .....	OST

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Ophthalmic Technology .....	OPT
Ornamental Horticulture .....	ORH
Paralegal/Legal Asst./Legal Administration .....	PLA
Philosophy .....	PHI
Photography .....	PGY
Physical Education: Object Centered .....	PEL
Physical Education: Performance Centered .....	PEM
Physical Education: Tai Chi .....	PEO
Physical Education: Water .....	PEN
Physical Sciences .....	PSC
Physics .....	PHY
Political Science .....	POS
Precision Metals Technology .....	PMT
Process Biology: Cellular and Molecular .....	PCB
Psychology .....	PSY
Public Health Concentration .....	PHC
Public Relations .....	PUR
Radiation Therapy .....	RAT
Radio Television .....	RTV
Radiologic Technology .....	RTE
Reading .....	REA
Religion .....	REL
Respiratory Therapy .....	RET
Security .....	SCC
Sign Language Interpreting .....	INT
Small Business Management .....	SBM
Social Psychology .....	SOP
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Surveying and Related Areas .....	SUR
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Theatre .....	THE
Zoology .....	ZOO

## Credit Course Descriptions

### ACG 2021

#### Introduction to Financial Accounting

3 Credits

Covers theory and logic that underlie accounting procedures. Course content includes an introduction to accounting concepts, procedures for reading business transactions, preparation of financial statements, accounting for merchandising concerns, corporations, bonds, and other procedures to calculate and maintain accounting information.

Prerequisites: College level reading, writing and math skills are required.

### ACG 2021H

#### Honors Introduction to Financial Accounting

3 Credits

The same course description as AGC 2021 with honors content.

### ACG 2030

#### Capstone Review for Accounting Principles

3 Credits

This course guides the student in dealing with ethics, internal control, fraud and financial statement analysis in the accounting environment, including confronting and resolving accounting problems by integrating and applying skills and techniques acquired in their previous courses, aiding students in developing a personal code of ethics by exploring ethical dilemmas and pressures that they will face as accountants, and helping the student understand financial statement analysis and its relationship to fraud and fraud detection. College level reading, writing, and math skills required.

Prerequisites: ACG 2021, ACG 2071, ACG 2104, ACG 2450, ACG 2061.

### ACG 2061

#### Computers and Accounting

3 Credits

This course teaches various computerized accounting applications, including the use of Excel, to prepare accounting records and reports and interpret accounting information. College reading, writing, and math skills required.

Prerequisites: ACG 2021

Co-requisite: ACG 2071

### ACG 2071

#### Managerial Accounting

3 Credits

Focuses on analyzing accounting records and using the results in making management decisions. College level reading, writing and math skills are required.

Prerequisite: ACG 2021

### ACG 2071H

#### Honors Managerial Accounting

3 Credits

The same course description as ACG 2071 with honors content. Honors Program permission required.

Prerequisite: ACG 2021

### ACG 2104

#### Intermediate Accounting I

3 Credits

This course reviews accounting procedures and then expands into the specialized treatment of financial statements, current assets, current liabilities, long-term plant assets and tax procedures. College level reading, writing, and math skills required.

Prerequisite: ACG 2021

### ACG 2450

#### Microcomputers in Accounting

3 Credits

This course introduces the student to the use of computers for preparing and analyzing accounting records.

Prerequisites: ACG 2021, ACG 2071, CGS 1000

### ACG 2681

#### Financial Investigation

3 Credits

This course examines the field of fraud examination and how fraud occurs and is detected within financial statements. College level reading, writing, and math skills required.

Prerequisite: ACG 2021

### ACG 2949

#### Cooperative Education Internship in Accounting

3 Credits

This course provides the student with a practical application of knowledge acquired in the classroom, including: experience accounting in a business setting; provide real-life situations and applications of accounting; encourage critical thinking and problem-solving; and develop teamwork and interpersonal communication skills. College level reading, writing, and math skills required.

Prerequisites: ACG 2021, ACG 2030, ACG 2071, ACG 2104, ACG 2450

### ACG 2961

#### Comprehensive Examination – Tax Option

3 Credits

This course guides the student in dealing with ethical and tax accounting issues of individuals and businesses. In addition, students utilize their knowledge of the tax law, integrating and applying skills and techniques acquired in their previous courses to pass the Accredited Tax Preparer (ATP) certification exam. College level reading, writing, and math skills required.

Prerequisites: ACG 2021, ACG 2071, ACG 2104, ACG 2681, TAX 2000, TAX 2010.

### ACG 2960

#### Comprehensive Examination – Financial Option

3 Credits

This course guides the student in dealing with accounting theory, internal control and error correction in the accounting environment, including confronting and resolving accounting problems by integrating and applying skills and techniques acquired in their previous courses. College level reading, writing, and math skills required.

Prerequisites: ACG 2021, ACG 2061, ACG 2071, ACG 2104, ACT 2681, TAX 2000.

**AFA 1000****Introduction to Black Studies**

3 Credits

Includes the nature and meaning of the Afro-American experience from its beginning to the present, with an emphasis on visual arts, music, literature, philosophic thought and social history.

**AFA 1001****Introduction to Black Culture**

3 Credits

Examines the black person's interactions in the American culture, with emphasis on social values, attitudes, behaviors and processes that identify black Americans as an ethnic group.

**AFR 1101****The Foundation of the U.S. Air Force, Part I**

1 Credit

This course serves as an introduction to the Air Force Reserve Officer Training Corps (AFROTC) and U.S. Air Force (USAF) lessons in officership/professionalism and an introduction to communications skills. Enrollment is limited to students who are also enrolled in the USF ROTC program.

**AFR 1120****The Foundation of the U.S. Air Force, Part II**

1 Credit

A study of Air Force installations, core values, leadership, team building, and diversity within the armed forces. Enrollment is limited to students who are also enrolled in the USF ROTC program.

**AFR 2001****Air Force ROTC Leadership Laboratory**

0 Credit

This course is required for each of the AFR courses. Instruction is conducted within the framework of an organized cadet corps with progression of experiences designed to develop each student's leadership potential. Leadership laboratory involves a study of Air Force customs and courtesies; drill and ceremonies; career opportunities in the Air Force; and the life and work of an Air Force junior officer. Students develop their leadership potential in a practical laboratory which typically includes field trips to Air Force installations. Enrollment is limited to students who are also enrolled in the USF ROTC program.

**AFR 2130****The Evolution of USAF Aerospace Power, Part I**

1 Credit

A study of air power from balloons and dirigibles through the jet age. Emphasis is on the employment of air power in WWI and WWII and how it affected the evolution of air power concepts and doctrine. Enrollment is limited to students who are also enrolled in the USF ROTC program.

**AFR 2140****The Evolution of USAF Aerospace Power, Part II**

1 Credit

An historical review of air power employment in military and non-military operations in support of national objectives. Emphasis is placed on the period from post WWII to present. Enrollment is limited to students who are also enrolled in the USF ROTC program.

**AMH 2010****Early American History**

3 Credits

Provides an overview of United States history including discovery, colonial foundations, movement for independence, and the early years of the republic through the Civil War and Reconstruction, with an emphasis on North American geography. Prerequisites: College level reading and writing skills are required.

**AMH 2010H****Honors Early American History**

3 Credits

Same as AMH 2010 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**AMH 2020****Modern American History**

3 Credits

Provides a study of United States development from the period of Reconstruction to the present. Topics include politics, economics, geography, social issues and reforms as related to contemporary society.

Prerequisites: College level reading and writing skills are required.

**AMH 2020H****Honors Modern American History**

3 Credits

Same as AMH 2020 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**AMH 2051****U.S. Military History**

3 Credits

Examines the conflicts of the nation from its beginning to the present with an emphasis on military action, political aspects and historical significance.

Prerequisites: College level reading and writing skills are required.

**AMH 2090****History of Women in the United States**

3 Credits

This course explores the history of women's experience in American Society. The focus will be to examine the construction of womanhood throughout United States history and the

experience of gender, ethnicity, class and sexual orientation from/upon women's experiences. Students will study the contribution of various individual women and groups of women in creating the modern United States, and will analyze social, political, economic and cultural forces affecting women to both join and resist movements for social change from pre-contact to the present. Prerequisites: College level reading and writing skills are required.

**AML 2010**  
**American Literature to 1885**

3 Credits

Focuses on American writers from the Colonial, Federal and Romantic periods. Topics include major trends in Puritanism, Transcendentalism and Romanticism.

Prerequisites: College level reading and writing skills are required.

**AML 2020**  
**American Literature: 1885 to Present**

3 Credits

Focuses on American writers since 1865. Topics include major trends in realism, naturalism and primitivism in the 19th and 20th centuries.

Prerequisites: College level reading and writing skills are required.

**AML 2020H**  
**Honors American Literature: 1885 to Present**

3 Credits

Same as AML 2020 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**AML 2600**  
**African-American Literature**

3 Credits

Provides an overview of African-American literature and cultural expression in the United States from the pre discursive period to the present. Through reading, discussion, lectures, and films the historical forces that have influenced the voice of African-American literature will be discussed. The politics of African-American literature will also be explored.

Prerequisite: ENC 1101

**AML 2600H**  
**Honors African-American Literature**

3 Credits

Same as AML 2600 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**ANT 2000**  
**Introduction to Anthropology**

3 Credits

Examines human physical evolution and the development of culture from pre historic times through the present. Empha-

sizes a better understanding of our culture through a comparison of different cultures. Topics include archeology, human variations, folklore, kinship and religion.

Prerequisites: College level reading and writing skills are required.

**ANT 2000H**  
**Honors Introduction to Anthropology**

3 Credits

Same as ANT 2000 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**ANT 2410**  
**Cultural Anthropology**

3 Credits

Presents the social science and humanities aspects of anthropology in contrast to physical anthropology. Human behavior, customs, and the values and goals of various cultures are examined.

Prerequisite: ANT 2000

**ANT 2511**  
**Introduction to Biological Anthropology**

3 Credits

This course will trace the origins of humanity from very early primates through extinct hominins to arrive at modern people. Students in this course will learn the basics of evolutionary theory and genetics, investigate human evolutionary history through the fossil record, observe contemporary non-human primates, and apply this knowledge to a bio-cultural understanding of human variation, past and present.

**ANT 2511L**  
**Introduction to Biological Anthropology Laboratory**

1 Credit

This is a lab companion to an overview of Biological Anthropology. The student will be doing laboratories which are relevant to the class topics covered in the lecture and material in ANT 2511.

**ANT 2930**  
**Special Topics in Anthropology**

3 Credit

Topics evaluated in the course will demonstrate the holistic and interdisciplinary approach of anthropology and highlight evidence spanning across all times and places. The course will analyze concepts, theories, terminology, methods, and data related to the selected topic,

**APA 1111**  
**Basic Accounting**

3 Credits

Covers basic accounting procedures and concepts and business terminology; designed for students with no financial training.

**ARC 1180**  
**Introduction to Digital Architecture**

3 Credits

An introduction to digital design software and visualization concepts for communicating architectural design intent. Practical skills and design theories will be explored through the creation of portfolio pages, design presentations, and 3D visualization projects. Software will include Photoshop, Illustrator, In-Design, SketchUp, and 3ds Max.

**ARC 1301**  
**Architectural Design I**

4 Credits

Provides an introduction to architectural design, with an emphasis on the tools of architectural communications.  
Prerequisite: College level reading, writing skills are required.  
Co-requisite: ARC 1701

**ARC 1302**  
**Architectural Design II**

4 Credits

Focuses on organizational systems and space, with an emphasis on freehand drawing, mechanical drawing, one point perspectives and model making. College level reading, writing and math skills are required.  
Prerequisites: ARC 1301, ARC 1701

**ARC 1701**  
**Architectural History I**

3 Credits

A general introduction to architecture as a reflection of the cultural, social, economic and technological forces in various periods of civilization from antiquity to the Renaissance.  
Co-requisite: ARC 1301

**ARC 2164**  
**Advanced Topics in Digital Architecture**

3 Credits

The course is an advanced architectural, digital design software and visualization course that builds on the objectives of the ARC 1180 Introduction to Digital Architecture course. Advanced concepts for communicating architectural design intent will be studied. Advanced skills and design theories will be explored through the creation of advanced portfolio pages, design presentations, and 3-D visualization projects. Software will include: Photoshop, In-Design, Illustrator, Sketchup, and Revit. College level reading, writing, and math skills are required.  
Prerequisites: ARC 1180

**ARC 2201**  
**Theory of Architecture**

3 Credits

Focuses on the critical study of architecture with an emphasis on gaining an educated perspective of design methods. College level reading, writing and math skills are required.  
Prerequisites: ARC 1301, ARC 1701  
Co-requisite: ARC 2303

**ARC 2303**  
**Architectural Design III**

5 Credits

Focuses on diagramming, design response and decision making. College level reading, writing and math skills are required.  
Prerequisites: ARC 1301, ARC 1302 and ARC 1701  
Co-requisite: ARC 2201

**ARC 2304**  
**Architectural Design IV**

5 Credits

Focuses on how human action, structure, enclosure systems, geography and history influence architectural design. Completion of ARC 1301, ARC 1701, ARC 2201 and ARC 2303 strongly recommended. Completion of BCN 1250, TAR 170C and TAR 1171C strongly recommended for AS.ADCT program. Enrollment in ARC 2501 strongly recommended.

**ARC 2461**  
**Materials and Methods I**

3 Credits

Provides an introduction to building materials, systems and the construction process in residential and commercial scale projects. Study of the environmental impact of material and system selection using LEED and Sustainable Design criteria explored. College level reading and writing skills are required.

**ARC 2501**  
**Architectural Structures I**

4 Credits

An introduction into structural theory and analysis for trusses, beams and columns subjected to gravity loads. Topics include shear and moment diagrams and the determination of section properties, internal stresses, deflection and internal forces. Completion of ARC 2461 strongly recommended. Enrollment in ARC 2304 strongly recommended.

**ARH 1000**  
**Understanding Visual Art**

3 Credits

Designed for the non-art major; provides a foundation for understanding the visual arts.  
Prerequisites: College level reading and writing skills are required.

**ARH 1000H**  
**Honors Understanding Visual Art**

3 Credits

Same as ARH 1000 with honors content. Honors Program permission required.  
Prerequisites: College level reading and writing skills are required.

**ARH 1050**  
**Art History I**

3 Credits

Presents a historical review of Western art from prehistory through the Middle Ages with an examination of works in painting, sculpture, architecture and the minor arts. Students



are NOT required to take ARH 1050 either prior to or in conjunction with ARH 1051.

Prerequisites: College level reading and writing skills are required.

**ARH 1051**  
**Art History II**

3 Credits

Presents a historical review of Western art from the start of the Renaissance to the present with an examination of works in painting, sculpture, architecture and the minor arts. Students are NOT required to take ARH 1050 either prior to or in conjunction with this class.

Prerequisites: College level reading and writing skills are required.

**ARH 1500**  
**Non-Western Art History**

3 Credits

This course presents a general introduction to the visual arts of Asian, African, pre-Columbian, Native American, and Oceanic cultures from ancient times to the present.

Prerequisite: College level reading and writing skills required.

**ART 1201C**  
**Visual Studies Foundations I**

3 Credits

This is an introduction to basic visual art studio concepts. This course includes fundamentals of art making, the elements of two dimensional forms, modes of representation and visual art theory. Studio assignments are supplemented by class critique, discussion and hands-on experimentation with various media. Emphasis is placed on creative expression and examination of visual elements.

**ART 1203C**  
**Visual Studies Foundations II**

3 Credits

This course builds upon the fundamental principles and elements of art making, form and composition introduced in ART 1201C, and builds on their application to three dimensional space, both implied and practical. The nature of this transition inherently focuses on light and shadow. The student will be subjected to many lectures and projects concerning these effects. Studio assignments are supplemented by class critique discussion and hands-on experimentation with various media.

Prerequisite: ART 1201C

**ART 1300C**  
**Drawing I**

3 Credits

Covers the basic principles of drawing tangibles such as still life, landscape and the nude figure. The course deals with black and white media such as pencil and charcoal. The class topics include composition, line, value, volume, negative space, directional forces, perspective and proportion. Drawing I is recommended before taking upper level courses: painting, computer graphics, photography, sculpture, ceramics and printmaking.

**ART 2301C**  
**Drawing II**

3 Credits

Covers advanced problems in color media and the exploration of a variety of media and formats. Topics include investigation of contemporary personal direction and the development of a portfolio.

Prerequisite: ART 1300C

**ART 2400C**  
**Printmaking I**

3 Credits

Provides an introduction to printmaking, including the basic techniques of lithography, etching and silk screen. A special fee will be charged for this course.

Prerequisite: ART 1201C

**ART 2401C**  
**Printmaking II**

3 Credits

Covers advanced printmaking techniques, such as multiple printing, registration and chemical reversals, with an emphasis on creativity and the development of a personal style. A special fee will be charged for this course.

Prerequisite: ART 2400C

**ART 2500C**  
**Painting I**

3 Credits

Covers basic painting techniques with an emphasis on classic and contemporary applications of oil and acrylic media. Topics include the use of composition, color, texture, form and value through still life, landscape, portrait, figure and old masters reproduction.

Prerequisite: ART 1300C

**ART 2501C**  
**Painting II**

3 Credits

Emphasizes the development of a personal and creative use of painting media through an exploration of contemporary imagery. Students will pursue personal imagery or select eight options from contemporary art movements.

Prerequisite: ART 2500C

**ART 2600C**  
**Digital Art**

3 Credits

This course is intended to introduce students to basic digital imaging manipulation skills within the fine art context of creative expression. Focus on digital imaging manipulation techniques learned within a raster-based environment, primarily including the fundamentals of various special effects, filters, layers and masks used to explore the creation of artistically expressive images. Students will use current computer imaging software to create original art in a variety of final output formats. Hardware and image input processes are also discussed.

Prerequisite: ART 1201C or PGY 2801C

**ART 2701C****Sculpture I**

3 Credits

Covers the problems and techniques of applied three-dimensional design, with an emphasis on the use of materials and tools. Topics include clay, plaster, stone, wood, metal and wax. A special fee will be charged for this course.

Prerequisite: ART 1203C

**ART 2702C****Sculpture II**

3 Credits

Provides continued experience with expression in three-dimensional forms. This course will require students to conduct independent investigations in the design and creation of several sculpture projects. Techniques may include metal fabrication, glass casting, stone carving, woodworking, installations, wax and metal casting. A special fee will be charged for this course.

Prerequisite: ART 2701C or permission of instructor.

**ART 2750C****Ceramics I**

3 Credits

An introductory course emphasizing the total ceramic process from moist clay to fired ware. A special fee will be charged for this course.

**ART 2751C****Ceramics II**

3 Credits

Emphasizes the processes of casting, wheel-thrown forms, hand building and glaze formulation. A special fee will be charged for this course.

Prerequisite: ART 2750C

**ART 2901****Directed Independent Study: Ceramics**

3 Credits

This course is designed to establish a framework for further self-learning in various areas of ceramics for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

**ART 2902****Directed Independent Study: Drawing**

3 Credits

This course is designed to establish a framework for further self-learning in various areas of drawing for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements

that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

**ART 2903****Directed Independent Study: Painting**

3 Credits

This course is designed to establish a framework for further self-learning in various areas of painting for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

**ART 2904****Directed Independent Study: Sculpture**

3 Credits

This course is designed to establish a framework for further self-learning in various areas of sculpture for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

**ART 2905****Directed Independent Study: Art**

3 Credits

Designed to establish a framework for further self-learning in various areas of visual arts for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

**ART 2930C****Selected Topics in Art**

3 Credits

Selected Topics in Art is a studio course centered around topics of special interest to the class and professor. Topics or focus will be based on the needs and areas of interest, which may vary from semester to semester. Exceptions to the prerequisite will be considered by the instructor. Transfer credit is the prerogative of the receiving institution. May be taken eight times for credit.

Prerequisites: ART 1201C or ART 1300C or ART 2500C

**ART 2950C****Professional Art Practices**

3 Credits

This class is designed to provide students with the opportunity to learn professional art practices through hands on experience. Skill sets taught will revolve around the development of a personal artist's portfolio, intended as an aid for college placement submissions as well as for proposals for personal exhibitions. Additional skill sets will also revolve around learning the practices of gallery operations.

Prerequisite: ART 1201C

**ASL 1140C****American Sign Language I**

3 Credits

This course provides an overview of the American Sign Language and the deaf community in America with an emphasis on the linguistics and vocabulary of ASL, and the development of conversational sign language skills and deaf culture.

Prerequisites: College level reading and writing skills are required.

**ASL 1150C****American Sign Language II**

3 Credits

This course continues the development ASL skills for students who have successfully completed ASL 1140C. This course focuses more on the ASL vocabulary, grammatical principles, and cultural protocols that students need to function at a basic level in the work place and socially.

Prerequisites: ASL 1140C, College level reading and writing skills are required.

**AST 1002C****Astronomy**

3 Credits

An introductory course in astronomy which presents a survey of the current knowledge of our universe as well as the contemporary, prevailing scientific viewpoint of its nature, its origins, and the evolution and development of its constituents. Topics include our own solar system, other star systems (including planetary systems), stars in general, galaxies, quasars, the universe itself, and the prospects of intelligent life elsewhere. Where appropriate, lectures will be supplemented by hands-on student activities as well as demonstrations and audio visual presentations. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills required.

**ATE 1001****Introduction to Veterinary Technology**

1 Credit

This course presents an overview of veterinary technology including ethical, legal, and safety issues in veterinary medicine, practice management, and effective communication within the veterinary practice. Career opportunities in the veterinary field are also addressed.

Prerequisites: College level reading, writing and math skills required.

**ATE 1031****Applied Mathematics for Veterinary Technicians**

1 Credit

This course will cover basic conversions, dose calculations, dilutions/solutions, compounding, and continuous rate infusion calculations, among other topics.

Prerequisites: College level reading, writing, and math skills required. ATE 1943, ATE 2636C, ATE 1652L, ATE 2639, ATE 2639L, ATE 2661

Co-requisites: ATE 1944, ATE 2611, ATE 2671C

**ATE 1110****Animal Anatomy**

3 Credits

This course covers the basic gross and microscopic anatomy of domestic animals, especially the canine and feline with emphasis on locating and identifying anatomical regions and landmarks and applications. The student will be introduced to the descriptive and topographical terms needed to communicate to the professional staff.

Prerequisites: Admission to the Veterinary Technology program. College level reading, writing and math skills required.

Co-requisites: ATE 1110L, ATE 1211

**ATE 1110L****Animal Anatomy Laboratory**

1 Credit

This course is designed to acquaint the student with the fundamental techniques involved in anatomic dissection as well as necropsy procedures. This laboratory will correlate with ATE 1110 lecture material and will help visualize concepts.

Prerequisites: College level reading, writing and math skills required. ATE 1001, ATE 1501, ATE 1741, ATE 1112, ATE 1113, ENC 1101, EVR 1001C, MAC 1105 or MGF 1106 or STA 2023 or higher

Co-requisites: ATE 1311L, ATE 1650L, ATE 2050, ATE 2638, ATE 2638L

**ATE 1112****Animal Anatomy and Physiology I**

3 Credits

This course covers the basic gross and microscopic anatomy of domestic animals, especially the canine and feline with emphasis on locating and identifying anatomical regions and landmarks and applications. The student will be introduced to the descriptive and topographical terms needed to communicate to the professional staff. This course covers the basic physiology of domestic animals, especially the canine and feline. It includes basic chemistry and organic chemistry for physiology, cell biology, and tissue types of the skeletal, integumentary, muscular, cardiovascular, blood, lymph, immune, and respiratory system.

Prerequisite: College level reading, writing, and math skills are required.

**ATE 1113****Animal Anatomy and Physiology II**

3 Credits

This course covers the basic gross and microscopic anatomy of domestic animals, especially the canine and feline with emphasis on locating and identifying anatomical regions and landmarks and applications. The student will be introduced to the descriptive and topographical terms needed to communicate to the professional staff. This course covers the basic physiology of domestic animals, especially the canine and feline. It includes basic chemistry and organic chemistry for physiology, cell biology, and tissue types of the digestive, nervous, sense organ, endocrine, urinary, and reproductive system.

Prerequisite: ATE 1112, College level reading, writing, and math skills are required.

**ATE 1211****Animal Physiology**

3 Credits

This course is designed to acquaint the student with physiology of domestic animals. Emphasis is placed on the functions of organ systems relevant to veterinary technology. Aspects of physiology relating to the pathogenesis of certain diseases will be discussed.

Prerequisite: Admission to the Veterinary Technology program.

Co-requisites: ATE 1110, ATE 1110L

**ATE 1311L****Veterinary Office Procedure Lab**

1 Credit

Designed to acquaint the student with office procedures, client education, mathematics and veterinary computer applications.

Prerequisite: Admission to the Veterinary Technology program. ATE 1001, ATE 1501, ATE 1741, ATE 1112, ATE 1113, ENC 1101, EVR 1001C, MAC 1105 or MGF 1106 or STA 2023 or higher

Co-requisites: ATE 1110L, ATE 1650L, ATE 2050, ATE 2638, ATE 2638L

**ATE 1501****Veterinary Professional Development and Ethics**

1 Credit

This course presents laws and agencies governing the care, use, and movement of animals. Other areas of focus include resume writing, employment skills, veterinary medical ethics, and current trends in veterinary practice.

Prerequisite: College level reading, writing, and math skills are required.

**ATE 1650L****Veterinary Clinical Practice Laboratory I**

1 Credit

Acquaints the student with basic laboratory sample collection and nursing skills, including restraint, history taking, exam room techniques, and administration of medicine.

Prerequisite: Admission to the Veterinary Technology program. ATE 1001, ATE 1501, ATE 1741, ATE 1112, ATE 1113, ENC 1101, EVR 1001C, MAC 1105 or MGF 1106 or STA 2023 or higher

Co-requisites: ATE 1110L, ATE 1311L, ATE 2050, ATE 2638, ATE 2638L

**ATE 1652L****Veterinary Clinical Practice Laboratory II**

2 Credit

Acquaints the student with the basic knowledge of skills used in veterinary practice for anesthesia induction and monitoring, patient preparation for surgery, aseptic technique, and surgical assistance.

Prerequisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2050, ATE 2838, ATE 2638L

Co-requisites: ATE 1943, ATE 2636C, ATE 2639, ATE 2639L, ATE 2661

**ATE 1741****Veterinary Medical Terminology**

1 Credit

This course presents veterinary medical terminology including word parts, medical terms related to anatomical structures and physiology, body systems terminology, and abbreviations used in veterinary medical practice.

Prerequisites: College level reading, writing and math skills required.

**ATE 1943****Veterinary Work Experience I**

1 Credit

A course consisting of supervised clinical experience in a workplace approved and monitored by the instructor. Skills emphasized in curriculum up to this point will be reinforced.

Prerequisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2050, ATE 2838, ATE 2638L

Co-requisites: ATE 1652L, ATE 2636C, ATE 2639, ATE 2639L, ATE 2661

**ATE 1944****Veterinary Work Experience II**

1 Credit

A course consisting of supervised clinical experience in a workplace approved and monitored by the instructor. Skills emphasized in curriculum up to this point will be reinforced.

Prerequisites: ATE 1943, ATE 2636C, ATE 1652L, ATE 2639, ATE 2639L, ATE 2661

Co-requisites: ATE 1031, ATE 2611, ATE 2671C

**ATE 2020C****Contemporary Clinical Issues**

3 Credits

Focuses on the contemporary and anticipated developments in veterinary technology and clinical application of those developments in medicine, surgery, dentistry, radiology and behavior through lectures. Students will become familiar with related medical terms, protocols and needed materials and supplies. Students will engage in lectures and then utilize and put into application skills learned during the program.

Prerequisites: ATE 2614, ATE 2630, ATE 2631, ATE 2631L, ATE 2722, ATE 2945

Co-requisites: ATE 2634, ATE 2710, ATE 2946

**ATE 2050****Small Animal Breeds and Behavior**

1 Credit

This is a lecture-based course on canine and feline breed identification, as well as behavior and training. Discussion topics will include normal canine and feline behavior, behavior development, and causes of behavior problems in dogs and cats. The student will be exposed to training methods, will discuss or apply canine good citizen test components or corrections for common behavioral problems, and will identify numerous canine and feline breeds.

Prerequisites: ATE 1001, ATE 1501, ATE 1741, ATE 1112, ATE 1113, ENC 1101, EVR 1001C, MAC 1105 or MGF 1106 or STA 2023 or higher

Co-requisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2638, ATE 2638L

**ATE 2611****Animal Medicine I**

3 Credits

This course is designed to introduce veterinary technician students to immunology, vaccinology and infectious diseases.

Prerequisites: ATE 1943, ATE 2636C, ATE 1652L, ATE 2639, ATE 2639L, ATE 2661

Co-requisites: ATE 1031, ATE 1944, ATE 2671C

**ATE 2614****Animal Medicine II**

3 Credits

The course is designed to introduce veterinary technician students to pathologies of body systems with an emphasis on non-infectious diseases.

Prerequisite: ATE 1031, ATE 1944, ATE 2611, ATE 2671C

Co-requisites: ATE 2630, ATE 2631, ATE 2631L, ATE 2722, ATE 2945

**ATE 2630****Pharmacology for Veterinary Technicians**

2 Credits

Designed to explain the drug classifications pertaining to animal use, methods of calculating appropriate drug dosage, routes of administration and evaluation of drug efficacy.

Prerequisite: ATE 1031, ATE 1944, ATE 2611, ATE 2671C

Co-requisites: ATE 2614, ATE 2631, ATE 2631L, ATE 2722, ATE 2945

**ATE 2631****Small Animal Nursing I**

3 Credits

This course presents technical skills of drug administration, radiography, veterinary dentistry and bandaging. This course also covers nursing care of veterinary patients including intravenous catheterization and fluid therapy, blood transfusion, enteral nutrition, bandaging, and wound management.

Prerequisite: ATE 1031, ATE 1944, ATE 2611, ATE 2671C

Co-requisites: ATE 2614, ATE 2630, ATE 2631L, ATE 2722, ATE 2945

**ATE 2631L****Small Animal Nursing Laboratory**

2 Credits

This course is designed to acquaint the student with treatment techniques, anesthesia, diagnostic imaging, dentistry, and bandaging procedures used in small animal veterinary patients.

Prerequisite: ATE 1031, ATE 1944, ATE 2611, ATE 2671C

Co-requisites: ATE 2614, ATE 2630, ATE 2631, ATE 2722, ATE 2945

**ATE 2634****Small Animal Nursing II**

3 Credits

Advanced nursing concepts relative to patients with specified disease states will be presented. Techniques covered include alternative diagnostic imaging, jugular and peripheral central line placement, parenteral nutrition, critical care ventilation, fluid acquisition, arterial catheterization, and chest tube placement. College level reading, writing and math skills required.

Prerequisites: ATE 2614, ATE 2630, ATE 2631, ATE 2631L, ATE 2722, ATE 2945

Co-requisites: ATE 2020C, ATE 2710, ATE 2946

**ATE 2636C****Large Animal Clinical and Nursing Skills**

2 Credits

This course presents large animal breed identification, concepts in production animal health and housing, husbandry, restraint and common clinical procedures utilized in the practice of large animal veterinary medicine.

Prerequisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2050, ATE 2838, ATE 2638L

Co-requisites: ATE 1652L, ATE 1943, ATE 2639, ATE 2639L, ATE 2661

**ATE 2638****Animal Clinical Pathology I**

3 Credits

This course is designed to introduce the veterinary technician to hematology, immunology, and parasitology.

Prerequisite: ATE 1001, ATE 1501, ATE 1741, ATE 1112, ATE 1113, ENC 1101, EVR 1001C, MAC 1105 or MGF 1106 or STA 2023 or higher

Co-requisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2050, ATE 2638L

**ATE 2638L****Animal Clinical Pathology Laboratory I**

2 Credits

This course is designed to acquaint the student with clinical laboratory procedures covered in ATE 2638. Areas of emphasis include parasitology, hematology, coagulation studies, serology, and general laboratory etiquette.

Prerequisite: ATE 1001, ATE 1501, ATE 1741, ATE 1112, ATE 1113, ENC 1101, EVR 1001C, MAC 1105 or MGF 1106 or STA 2023 or higher

Co-requisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2050, ATE 2638,

**ATE 2639****Animal Clinical Pathology II**

3 Credits

This course is designed to introduce veterinary technician students to blood chemistry, urinalysis and cytology.

Prerequisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2050, ATE 2838, ATE 2638L

Co-requisites: ATE 1652L, ATE 1943, ATE 2636C, ATE 2639L, ATE 2661

**ATE 2639L****Animal Clinical Pathology Laboratory II**

2 Credits

This course is designed to acquaint the student with clinical laboratory procedures covered in ATE 2639. Areas of emphasis include urinalysis, blood chemistry and gas analysis, microbiology, and cytology.

Prerequisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2050, ATE 2838, ATE 2638L

Co-requisites: ATE 1652L, ATE 1943, ATE 2636C, ATE 2639, ATE 2661

**ATE 2661****Large Animal Diseases**

2 Credit

This course is designed to acquaint the student with the fundamentals of preventive medicine and common diseases present in large animals.

Prerequisites: ATE 1110L, ATE 1311L, ATE 1650L, ATE 2050, ATE 2838, ATE 2638L

Co-requisites: ATE 1652L, ATE 1943, ATE 2636C, ATE 2639, ATE 2639L

**ATE 2671C****Medicine of Laboratory Animals**

2 Credits

A study of the technical and clinical aspects of laboratory animal care, including restraint and handling, common diseases, and nutrition.

Prerequisites: ATE 1943, ATE 2636C, ATE 1652L, ATE 2639, ATE 2639L, ATE 2661

Co-requisites: ATE 1031, ATE 1944, ATE 2611

**ATE 2710****Animal Emergency Medicine**

2 Credits

This course is designed to acquaint the student with fundamentals of emergency veterinary medicine, including veterinary first aid, toxicology and specialized medical techniques and procedures.

Prerequisites: ATE 2614, ATE 2630, ATE 2631, ATE 2631L, ATE 2722, ATE 2945

Co-requisites: ATE 2020C, ATE 2634, ATE 2946

**ATE 2722****Avian and Exotic Pet Medicine**

1 Credit

Describes exotic animal and avian medical care. Veterinary technicians will understand the idiosyncrasies of these species

in order to become proficient and useful to the exotic and avian practitioner.

Prerequisite: ATE 1031, ATE 1944, ATE 2611, ATE 2671C

Co-requisites: ATE 2614, ATE 2630, ATE 2631, ATE 2631L, ATE 2945

**ATE 2945****Veterinary Work Experience III**

1 Credit

A course consisting of supervised clinical experiences in a workplace approved and monitored by the instructor. Skills emphasized in curriculum up to this point will be reinforced.

Prerequisite: ATE 1031, ATE 1944, ATE 2611, ATE 2671C

Co-requisites: ATE 2614, ATE 2630, ATE 2631, ATE 2631L, ATE 2722

**ATE 2946****Veterinary Work Experience IV**

1 Credit

A course consisting of supervised clinical experiences in a workplace approved and monitored by the instructor. Skills emphasized in curriculum up to this point will be reinforced.

Prerequisites: ATE 2614, ATE 2630, ATE 2631, ATE 2631L, ATE 2722, ATE 2945

Co-requisites: ATE 2020C, ATE 2634, ATE 2710

**BCN 1210****Construction Materials and Processes**

3 Credits

Provides a basic understanding of materials and manufacturing processes consistent with sound engineering principles; focuses on the most prevalent sources of building materials, including wood, concrete, masonry, metals, plastics, glass and composites. Materials are evaluated with respect to relevant codes and trade publications, including the AISC, ACI, APA, ASTM and UL. Elements of sustainable design explored.

**BCN 1250****Introduction Graphic Technology**

3 Credits

Introduces the principles of industrial graphics. Topics include the care and use of drawing instruments, lettering, multi-view projections and sketching techniques. Designed for the student without drawing experience.

**BCN 2049****Sustainable Design and Construction**

3 Credits

The basic theories and practices of ecology relating to building design products will be introduced. Students will gain an understanding of the impact of their building design selections on the environment. "green" design will be introduced as students understand renewable resources, environment pollution, and conservation.

Prerequisite: College-level reading, writing and math skills are required.

**BCN 2272****Blueprint Reading**

3 Credits

Includes the principles of interpreting blueprints and specifications common to the building trades. Focuses on reading details for grades, foundations, floor plans, elevations, walls, doors, windows and roofs of residential, light and heavy construction.

**BCN 2291C****Construction Materials Testing**

3 Credits

A hands-on laboratory involving industry standard techniques for testing construction materials to determine their physical properties with an emphasis on soils, Portland cement, concrete and asphalt. Completion of BCN 1210 strongly recommended. A special fee will be charged for this course.

**BCN 2760****Building Codes**

3 Credits

A study of the regulations involved in protecting public health, safety and general welfare as related to the building design and construction industries.

Prerequisite: College-level reading, writing and math skills are required.

**BCN 2939C****Construction Capstone**

3 Credits

The construction capstone course will allow the student to demonstrate the required skill sets acquired throughout the AS degree Architectural Design and Construction Technology program and will prepare the student for transition into the designing and construction industries. All aspects of design, material and building component selection, estimating and use of computer-aided design and drafting will be evaluated. This course is presented in an independent study format with assigned due dates and meeting times.

**BCN 2942C****Construction Internship**

3 Credits

Student works a minimum of 140 hours during one term in a pre-approved industrial job; also prepares a resume and CD-ROM portfolio of program course work.

Prerequisites: ARC 2461, BCN 2291C, TAR 2054

**BCT 2770C****Construction Estimating**

3 Credits

Deals with the computation of building costs for typical construction projects and the computation of labor and materials from take-off to the final estimates. Completion of BCN 1210 and ARC 2461 strongly recommended. Enrollment in ARC 2304 and ARC 2501 strongly recommended.

**BRC 1301****Introduction to Financial Institutions**

3 Credits

An introduction to the U.S. banking system, the role of banks, credit unions and thrifts as financial service providers. Banking principles, various products/services, and the laws and regulatory agencies governing the different types of financial institutions will be discussed.

**BSC 1005****Biological Foundations**

3 Credits

Designated for non-science majors. Topics include the introduction of general biological concepts, genetics, and a brief survey of living organisms.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: BSC 1005L

**BSC 1005H****Honors Biological Foundations**

3 Credits

Same as BSC 1005 with honors content. Honors Program permission required.

**BSC 1005L****Biological Foundations Lab**

1 Credit

Laboratory intended to accompany BSC 1005 lecture. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: BSC 1005

**BSC 1005L (Honors)****Honors Biological Foundations Lab**

1 Credit

Same as BSC 1005L with honors content. Honors Program permission required.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: BSC 1005H

**BSC 1025C****Nutrition and Drugs**

3 Credits

Primarily intended for non-science majors. Focuses on basic nutrients and their roles in human nutrition. Topics include the problems and possible solutions of deficiency diseases, world food shortages, obesity, commonly used drugs, drug effects on the body and drug addiction. Combined and integrated with a hands-on laboratory component. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills required.

**BSC 1026C****Reproductive Biology and Inheritance**

3 Credits

Focuses on the various aspects of reproductive biology and inheritance. Topics include the male and female reproductive systems, embryology/development, birth control, fertility, sexually transmitted infections (STI's), certain effects of aging, heredity and evolution. Combined and integrated with a hands-on laboratory component to enhance the subject matters. This course is intended for students not majoring in the biological sciences or allied health. College level reading, writing, and math skills required.

**BSC 1092****Human Biology**

3 Credits

Intended for those not majoring in the biological sciences or allied health fields. Provides introductory material in human anatomy and physiology to focus on understanding the body organization and the interrelations of body organs systems. Prerequisites: College level reading, writing and math skills required. Co-requisite: BSC 1092L

**BSC 1092L****Human Biology Lab**

1 Credit

Laboratory to accompany BSC 1092. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills required.

Co-requisite: BSC 1092

**BSC 1420C****Introduction to Biotechnology**

3 Credits

This course provides an introduction to the basic foundations of biotechnology, and the techniques used in research and industry environments. This course will integrate historical background, current concepts, and techniques in DNA and RNA technology and their role in cell and genetic disorders. Students will demonstrate knowledge of the scientific method, lab safety, and best laboratory practices. Students will demonstrate competency with various instrumentation, including pH meters, centrifuge, spectrophotometer, chromatography, and gel electrophoresis.

**BSC 2010****Biological Science I**

3 Credits

Intended for science majors. Introduces students to the science of biology. Topics include aspects of biochemistry, cytology, cellular metabolism, and genetics.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: BSC 2010L

**BSC 2010L****Biological Science I Lab**

1 Credit

A special fee will be charged for this course. College level reading writing and math skills are required.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: BSC 2010

**BSC 2011****Biological Science II**

3 Credits

Intended for science majors. Emphasizes a phylogenetic survey of the five kingdoms of living organisms, together with an introduction to ecology and behavior.

Prerequisites: BSC 2010, BSC 2010L

Co-requisite: BSC 2011L

**BSC 2011H****Honors Biological Science II**

3 Credits

Same as BSC 2011 with honors content. Honors Program permission required.

Prerequisites: BSC 2010, BSC 2010L

Co-requisite: BSC 2011L

**BSC 2011L****Biological Science II Lab**

1 Credit

College level reading skills required. A special fee will be charged for this course.

Prerequisite: BSC 2010, BSC 2010L

Co-requisite: BSC 2011

**BSC 2085****Human Anatomy and Physiology I**

3 Credits

Intended for Allied Health and science majors. Encompasses both anatomy and physiology; includes cell structure and function. Focuses on the study of human systems, particularly the integumentary, skeletal, muscular and nervous systems.

Prerequisites: College level reading, writing and math skills required.

Co-requisite: BSC 2085L

**BSC 2085L****Human Anatomy and Physiology Laboratory**

1 Credit

A special fee will be charged for this course.

Prerequisites: College level reading and writing and math skills are required.

Co-requisite: BSC 2085.

**BSC 2086****Human Anatomy and Physiology II**

3 Credits

Focuses on cardiovascular, respiratory, digestive, endocrine, immune, lymphatic, urinary and reproductive systems.

Prerequisite: BSC 2085, BSC 2085L

Co-requisite: BSC 2086L



**BSC 2086L****Human Anatomy and Physiology II Laboratory**

1 Credit

College level reading and writing skills are required. A special fee will be charged for this course.

Prerequisite: BSC 2085, BSC 2085L

Co-requisite: BSC 2086

**BSC 2419C****Plant and Animal Cell Culture**

3 Credits

This course will introduce the skills used in the biotechnology industry for plant, and animal cell culture. This course emphasizes on hands-on training in the principles and practices of cultivation, maintenance and preservation of established cell lines, including implementation of these practices in project design, and management. Students will gain extensive knowledge of how to grow bacteria, plant and animal cells in culture flasks and plates using aseptic techniques. Students will also learn to operate and maintain laboratory equipment such as centrifuges, pH meters, analytical balances, laminar flow hoods, spectrophotometers, microscopes, and CO<sub>2</sub> incubators; prepare cell growth media, reagents, buffers, and stains following standard operating procedures (SOPs).

Prerequisites: BSC 2427, BSC 2427L

**BSC 2420****Biotechnology I**

3 Credits

This course will focus on recombinant DNA and RNA technology, and genetic engineering. The course will present the basics of genomics and proteomics with DNA protein structure function relationship. This course will introduce biomedical biotechnology, pharmacogenomics, regenerative medicine, gene therapy, cloning and stem cell applications. Practical applications of biotechnology will be explored.

Prerequisites: BSC 2010, BSC 2010L, CHM 2045, CHM 2045L

Co-requisite: BSC 2420L

**BSC 2420L****Biotechnology I Laboratory**

2 Credits

This laboratory course will provide practical hands-on experience in basic biotechnology laboratory methods and techniques.

Prerequisites: BSC 2010, BSC 2010L, CHM 2045, CHM 2045L

Co-requisite: BSC 2420

**BSC 2427****Biotechnology II**

3 Credits

This course will provide a relatively in-depth exploration of modern biotechnology as required for the study, development, and application of genetic engineering and biomedical biotechnology. There will be emphasis on pharmaco-economics, stem cell technology, and immune-biology. The practical applications of forensics, bioremediation, and medical, animal, plant biotechnology will be examined.

Prerequisites: BSC 2420, BSC 2420L

Co-requisite: BSC 2427L

**BSC 2427L****Biotechnology II Laboratory**

2 Credits

This laboratory course will continue the study of modern molecular and cell biology with focus on advanced methods and techniques of biotechnology, emphasizing genomics, proteomics, genetic engineering and recombinant DNA technology.

Prerequisites: BSC 2420, BSC 2420L

Co-requisite: BSC 2427

**BSC 2435C****Bioinformatics**

3 Credits

Students will gain hands on experience in performing bioinformatics analysis using both nucleic acids and protein sequences. Use of open source software and publicly available databases such as NCBI will be demonstrated and conceptual understanding of associated algorithms and statistics will be applied to resulting data analysis. Specific topics to be covered include file formatting and management; retrieval, submission, and alignment of sequences using the most current tools, gene expression; phylogenetics; and primary literature searches.

Prerequisites: BSC 2420, BSC 2420L

**BSC 2943****Biotechnology Internship**

3 Credits

The objective of this course is to provide students with meaningful work experience. This is a practical application of procedures and professionalism in real world settings with biotechnology and closely related fields.

Prerequisites: BSC 2427, BSC 2427L

**BUL 2241****Business Law I**

3 Credits

Covers the main concepts of legal institutions, the legal environment, business ethics, public and private business law, contracts, business regulations the UCC (Uniform Commercial Code) and related laws.

Prerequisites: College level reading and writing skills required.

**BUL 2242****Business Law II**

3 Credits

Covers commercial paper, agency, partnerships, corporations, secured transactions, bankruptcy, securities regulations, real and personal property, trusts, wills and associated legal problems. Prerequisite: BUL 2241

**CAP 1023****Introduction to Game Development**

3 Credits

Survey of the various aspects of game development including: game programming and scripting, design, modeling and rendering. Students will work on projects involving design and storyboarding, computer programming and scripting, as well as multimedia presentations and artwork. Aspects of the gam-

ing industry will be covered to include human computer interaction, mathematical and physics consideration, and the business of game production and distribution.

Prerequisites: CGS 1000

### **CAP 2042**

#### **Game Design and Development - Modeling**

3 Credits

In this hands-on course the student will practice creating 3D models using game and simulation software. The student will perform polygonal as well as NURBS modeling to create programmable 3D objects capable of being rendered for simulation software and computer games.

Prerequisite: CAP 1023

### **CAP 2043**

#### **Game Design and Development - Rigging**

3 Credits

In this hands-on course the student will practice rigging 3D models using game and simulation software. The student will develop skeletons, joints and animation points to create 3D objects capable of being animated for simulation software and computer games.

Prerequisite: CAP 1023

### **CAP 2041**

#### **Game Design and Development - Animation**

3 Credits

In this hands-on course the student will practice animating 3D models using game and simulation software. The student will develop animations along paths, practice complex timing, and enhance animations with graphics editors to create 3D objects capable of being rendered for simulation software and computer games.

Prerequisite: CAP 1023

### **CAP 2044**

#### **Game Design and Development - Special Effects**

3 Credits

In this hands-on course the student will practice enhancing 3D objects and scenes using game and simulation software. The student will apply lighting effects and camera angles to objects in a 3D scene, create special effects like smoke, dust and rain, and apply complex textures to 3D objects capable of being rendered for simulation software and computer games.

Prerequisite: CAP 1023

### **CAP 2816**

#### **Database Management II**

1 Credit

Focuses on advanced data file techniques.

Prerequisite: CGS 1540

### **CAP 2905-35**

#### **Special Topics in Multimedia**

3 Credits

This course is designed to allow flexibility for presenting a variety of topics related to multimedia design and development. College level reading and writing skills are required. The course may be taken twice for up to six credits.

Prerequisite: CGS 1000

### **CAP 2939**

#### **Digital Media/Multimedia Technology Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

### **CCJ 1010**

#### **Introduction to Criminology**

3 Credits

Focuses on the complex factors related to crime in America, including basic issues, scope and economic impact.

### **CCJ 1010H**

#### **Honors Introduction to Criminology**

3 Credits

Same as CCJ 1010 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

### **CCJ 1020**

#### **Introduction to Criminal Justice**

3 Credits

Covers the historical and philosophical backgrounds of criminal justice agencies and examines the development of the courts, correctional agencies, and law enforcement processes. Topics include the Supreme Court, the 14th Amendment, individual rights, and requirements and opportunities in the law enforcement and correctional fields.

### **CCJ 1488**

#### **Ethics in Criminal Justice**

3 Credits

This course is a practical overview of key issues, questions, and concepts in applied ethics in the field of criminal justice. The course will include the historical development of ethical theories, morality and law, and ethical decision making in law enforcement, courts, and corrections.

### **CCJ 1488H**

#### **Honors Ethics in Criminal Justice**

3 Credits

Same as CCJ 1488 with honors content. Honors Program permission required.

### **CCJ 2013**

#### **Introduction to Victimology**

3 Credits

This course is about victims of crime. It provides an introductory level review of the many facets of criminal victimization and the efforts to assist crime victims. The course covers a wide range of topics including trends and interpretations of victimization research, laws, programs, and services, the emotional and social impact of crime, victim rights and restitution

and the extent of participation by victims in the criminal justice process.

**CCJ 2111****Introduction to Theories of Criminal Behavior**

3 Credits

This course presents the major theoretical explanations of crime and criminal behavior. It focuses on the historical development of criminological theory based on various definitions of crime. The primary purpose of this course is to provide a clear overview of the major academic explanations (or theories) that dominate criminology in an effort to clarify what is known about crime based upon empirical research. To this end, this course is designed to provide students with a basic understanding of historical and current criminological perspectives, as these are the foundations upon which both criminological research and public policy are based.

**CCJ 2191****Crisis Intervention in Criminal Justice**

3 Credits

This course provides a study of human nature and the peculiarities of human behavior and how it relates to crime and delinquency with emphasis on how this behavior relates to the duties and responsibilities of the criminal justice practitioner. The course will emphasize abnormal behavior and how criminal justice practitioners should react with primary emphasis on the behavioral aspects of people in crisis situations and how criminal justice practitioners should respond. The course will deal with issues of police crisis intervention and crisis management.

**CCJ 2358****Criminal Justice Communication and Reports**

3 Credits

This course provides an overview of basic principles of effective communication, written, verbal, and digital for personnel in the criminal justice profession. Students will be exposed to police report writing, drafting correspondence, and preparing written summaries. Students will learn to research statistics, texts, internet, and intranet systems as well as to write and edit documents common to the criminal justice system. Students will also participate in group discussions and prepare and deliver short oral presentations. Basic computer skills for communication and research in criminal justice will be covered as well.

**CCJ 2509****Introduction to Street Gangs**

3 Credits

This course will examine the history of gangs, how to identify gang activity, including gang specific colors, clothing, symbols and signs. Traditional gang patterns as well as non-traditional hybrid gangs will be included into this curriculum along with their use of violence, drugs and guns. Topics will include a national overview of major types of gang activity around the United States. Students will study reasons why youth join gangs and discuss community gang assessments and re-

sponses. In addition, this class will provide information on appropriate prevention, intervention and suppression responses to gangs.

**CCJ 2600****Criminal Deviant Behavior in Society**

3 Credits

Studies the various deviant behaviors with which criminal justice practitioners interact daily. Topics include the nature of deviance, sexual deviance, alcoholism, drug addiction, mental illness, violence, and suicide.

**CCJ 2610****Introduction to Criminal Typologies**

3 Credits

The primary goal of this course is for students to recognize and understand the utility of constructing typologies as a precursor to understanding criminal behavior. Students will review the differences in varying patterning of criminality.

**CCJ 2618****Forensic Psychology**

3 Credits

This course is an examination of the psychology of human behavior as it relates to crime. The student will be introduced to psychopathology, the sexually violent offender, and serial murderers. The student will also examine violent juvenile offenders and the process of psychological conditioning which allows them to commit violent criminal acts. The student will also be introduced to criminal profiling. It is recommended that the student complete PSY 2012 before taking CCJ 2618.

**CCJ 2648****Organized Crime**

3 Credits

This course involves an examination of organized crime, including its history, structures, activities and government efforts to control it.

**CCJ 2671****Race, Gender, and Ethnicity in Criminal Justice**

3 Credits

Discrimination and disparities have long been points of interest and discontent in the field of criminal justice. This course looks on the impact of race and ethnicity, class, gender, and sexuality in criminal justice. These four factors affect the administration of justice for offenders, and also impact the career of the criminal justice professional. The goal of the course is to broaden our understanding of diversity and discrimination in criminal justice.

**CCJ 2685****Domestic and Sexual Violence**

3 Credits

This course is designed to examine the various expressions of violence within the family structure including child, spouse, partner, and elder abuses. Topics will also include sexual abuse, sexual assault, stalking, and domestic homicide. Also included will be topics on the psychological and social causes of domestic and sexual violence, recognizing its signs, and

studying its effect on its victims as well as programs and policies for prevention and treatment.

### **CCJ 2686**

#### **Introduction to Victim Advocacy**

3 Credits

This course introduces the students to the responsibilities of victim advocates working within the criminal justice system. The course will cover the roles of the victim advocate when dealing with crime victims, victim families, the police, the prosecution, and the court system. Topics will include the background and history of victim advocacy, laws governing victim rights and victim compensation, and techniques victim advocates utilize when dealing with victims of abuse, sexual assault, domestic violence, and other violent crimes as well as when dealing with the families of homicide victims. This course will also cover the role of the victim advocate in areas involving suicide prevention and crisis intervention.

### **CCJ 2720**

#### **Introduction to Criminal Justice Research Methods**

3 Credits

The primary goal of this course is for students to recognize and understand the basics of research structure within the criminal justice and criminology disciplines. Upon successful completion of this course, students will have an understanding of the social scientific approach which includes the fundamental concepts of ethics, research design, data collection and analysis, and finally interpretation.

### **CCJ 2910**

#### **Guided Independent Research**

3 Credits

An individualized study project which applies the objective approach in the observation and reporting of information relating to social problems, with a focus on understanding and interpreting data, as well as basic statistics. Documented research paper required and must relate to a criminal justice subject area. College level reading and writing skills required. Prerequisites: Restricted to Criminal Justice majors only.

### **CCJ 2935-9**

#### **Seminar on Criminal Justice Issues**

3 Credits

Focuses on selected topics and issues not usually covered in other courses.

### **CCJ 2940**

#### **Criminal Justice Internship**

3 Credits

Provides an opportunity for the student with no criminal justice experience to observe the criminal justice system in operation. The student will be expected to compare classroom theory with the day-to-day operation of the criminal justice agency and the roles and responsibilities of the professional in the field. The student will be required to spend a total of 100 clock hours, spread over the semester, in the agency. Prerequisites: Restricted to Criminal Justice majors only.

### **CEN 2904, 2905, 2930-33**

#### **Special Topics in Networking**

3 Credits

This course is designed to allow flexibility for presenting a variety of topics related to computer and information technology networking. The course may be taken twice for up to six credits. College level reading and writing skills are required.

Prerequisite: CGS 1000

### **CEN 2939**

#### **Network Administrator Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

### **CET 1112C**

#### **Basic Digital Systems**

3 Credits

This course is an introduction to basic digital electronics and is for the student who has previously taken EET 1083C or will be taking both classes in the same semester. Topics covered in this course are computer number systems, Boolean algebra, combinational logic circuits, logic family characteristics, and flip flops. Laboratory exercises will be assigned to reinforce the major concepts covered in the lecture segment of the courses.

Prerequisites: College level reading, writing and math skills required.

### **CET 1123C**

#### **Introduction to Microprocessors/Microcontrollers**

3 Credits

This introductory course presents material on microprocessing. Topics include the microprocessor/microcontroller chip and its architecture, bus systems, memory map, input/output devices, interface devices, machine and assembly languages, instructions, and addressing modes. Laboratory exercises are included.

Prerequisite: CET 1112C

### **CET 1172C**

#### **PC Upgrading and Repair: Hardware**

3 Credits

Covers the knowledge and skills necessary for upgrading and repairing the hardware of a typical personal computer (PC). Includes the study of microprocessors, basic bus architectures, input/output (I/O) interface types, PC storage, printers, various types of semiconductor memories found in a typical PC, basic networking and network cabling concepts. Also studied is the layout of the drives set up by a disk operating system and how the operating system works with the hardware. This course will further prepare the student for the A+ Certification test. Laboratory exercises are included.

Prerequisite: CGS 1000 or permission of instructor.

**CET 1174C****PC Upgrading and Repair: Software**

3 Credits

This course covers advanced PC software, both operating systems and system software. Concepts are introduced that provide the student with a complete, step-by-step approach for learning the fundamentals of supporting and troubleshooting computer software. Computer service business concepts are also introduced. This course will further prepare the student for the A+ Certification test. Laboratory exercises are included.

Prerequisite: CGS 1000 or permission of instructor.

**CET 1600****Cisco Network Fundamentals**

3 Credits

Prepares a student to apply and understand the basics of networking hardware. Course covers the OSI model and industry standards; network topologies; IP addressing, including subnet masks; and basic network design. This is the first of a four-part series designed to prepare students for the Cisco Certified Networking Associate examination.

Prerequisite: CTS 1305.

**CET 1610****Cisco Switching, Routing, and Wireless Essentials**

3 Credits

Designed to prepare a student to apply and understand the basics of networking hardware. The course covers beginning router configurations; routed and routing protocols; and introduction to LAN switching. This is the second of a four-part series to prepare students for the Cisco Certified Networking Associate examination. The first part of this series is covered in CTS 1305.

Prerequisite: CET 1600

**CET 2113C****Digital Systems Analysis**

3 Credits

This course is a continuation of the basic digital electronics covered in CET 1112C. The analysis of combinational logic and sequential logic circuits is covered in the lecture segment of the course. Circuits include adder/subtractor, registers, counters, multiplexors, and others. Laboratory exercises will be assigned to reinforce these major concepts and circuits.

Prerequisite: CET 1112C

**CET 2152C****Advanced Microprocessors**

3 Credits

Covers the communications between the microprocessor and external devices. Topics include writing and debugging communications programs, analyzing and building interface circuits. Laboratory exercises are included.

Prerequisites: CET 1123C, CET 2113C

**CET 2335C****Total Microcomputer Systems**

3 Credits

This course covers the total microcomputer system, including system construction (architecture), programming and hardware, I/O interfacing, diagnostic testing, maintenance and troubleshooting.

Prerequisites: CET 2113C

**CET 2615****Cisco Enterprise Networking, Security, and Automation  
3 Credits**

Designed to prepare a student to apply and understand the advanced principles and applications of networking hardware.

The course covers advanced router configurations; LAN switching; network management; and advanced network design. This is the third of a four-part series to prepare students for the Cisco Certified Networking Associate examination.

Prerequisites: CET 1610

**CET 2620****Cisco WAN Technologies**

3 Credits

Designed to prepare a student to apply and understand the advanced principles, applications, and implementation of networking hardware. The course covers advanced network design projects and advanced network management projects.

This is the fourth of a four-part series to prepare students for the Cisco Certified Networking Associate examination.

Prerequisites: CET 2615

**CET 2939****Computer Engineering Technology Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concert with his/her area of curriculum emphasis. Permission from instructor required.

**CGS 1000****Introduction to Computers and Technology**

3 Credits

Covers the use and impact of computers in information technology. Course provides hands-on experience with software including word processing, presentation, spreadsheet, and database, for business analysis, employability and personal use. Provides students with an introductory overview of the Internet, World Wide Web, impact of computers on society and business, historic development of data processing, and basic operating system functionality, including storage and file management.

**CGS 1000H****Honors Introduction to Computers and Technology**

3 Credits

Same as CGS 1000 with honors content. Honors Program permission required.

**CGS 1103**  
**Project Management**

3 Credits

This course introduces the student to project management concepts, practices, and terminology. Topics include project life cycle, project management processes, managing projects, procurement management, quality, human resource management, and risk assessment.

Prerequisites: CGS 1000

**CGS 1107**  
**Introduction to Computers**

1 Credit

An introductory computer literacy course for the general student population with emphasis on current technology and the implications for and the effects on our society. Topics will include cyber space; communications, including the impact of the Internet and World Wide Web; ethical, privacy, environmental, and health related issues. Software applications will include a brief introduction to Windows, word processing, spreadsheets, and graphics. Students will complete a variety of short cross curricular projects, integrating critical thinking skills and cooperative learning.

**CGS 1160**  
**Desktop Information Management**

1 Credit

A general introduction to the basic capabilities of a desktop information management program, such as Outlook. Topics covered include organizing information, managing your time and schedule, and communicating with other people.

**CGS 1500**  
**Applied Word Processing**

1 Credit

Focuses on basic word processing applications, with an emphasis on term papers, reports and resumes. Prerequisite for this course are OST 1142 or ability to type 20 wpm or permission of instructor.

**CGS 1510**  
**Spreadsheet Applications I**

1 Credit

Focuses on basic spreadsheet applications such as replication, automatic recalculation, financial modeling, analysis and projection, and general mathematical calculations.

Prerequisites: CGS 1000 or OST 1142 or permission of the instructor.

**CGS 1520**  
**Electronic Presentations I**

1 Credit

Focuses on creating electronic presentations using text, graphic images, charts, sound, video and animation. Different types of presentations will be created to communicate information in an organized manner for educational and professional business settings. Prerequisites: CGS 1000

**CGS 1521**  
**Adobe Photoshop Elements**

1 Credit

Introduces Adobe Photoshop Elements program. Focuses on simple editing techniques and manipulating and modifying objects.

Prerequisite: CGS 1000

**CGS 1540**  
**Database Management I**

1 Credit

Teaches how to work effectively with a data management application, with an emphasis on assembling and organizing data in manageable records and files.

Prerequisites: CGS 1000

**CGS 1554**  
**Internet Basics**

1 Credit

An introductory course designed to teach the basics of navigating the Internet and the World Wide Web. Topics include internet etiquette, using search engines and file transfer protocols. A special fee will be charged for this course.

Prerequisite: CGS 1000

**CGS 1555**  
**Introduction to the Internet**

3 Credits

An introductory course designed to teach the basics of navigating the Internet and the World Wide Web. Students participate in online and off-line activities such as accessing the Internet, sending electronic mail, browsing newsgroups, and completing research activities. Also discussed is internet etiquette acceptable behaviors and standards of conduct.

A special fee will be charged for this course.

Prerequisite: CGS 1000

**CGS 1577**  
**Presentation Systems**

3 Credits

Students in this course learn how to design and develop multimedia presentations using linear design. Students learn the differences between a presentation program and an authoring program. Project components will include text, graphics, sound, video, and animation. Students will learn to create, import, and scan these components.

Prerequisite: CGS 1000

**CGS 1761**  
**Computer Operating Systems**

3 Credits

This course provides an overview of computer operating systems. Basic theories, concepts and terminology, and evolution of computer operating systems are covered. Development, function, and comparisons of common mobile, desktop, and server operating systems are discussed. In particular, this class is meant to introduce concepts such as user interfaces, file systems, process management, memory management, input/output management, and communication.

Prerequisite: CGS 1000

**CGS 1871  
Multimedia Authoring I**

3 Credits

Introduces the student to multimedia basics, application structure, and organization. Focus is on the conceptual elements of multimedia implementation and authoring basics.

Prerequisites: CGS 1000

**CGS 2091  
Information Technology: Ethical and Legal Issues**

3 Credits

After taking this course the student will be able to identify different types of computer crime and distinguish the various types of law applicable. Existing and emerging legislation pertaining to computer crime will be presented. The student will be exposed to various types of incidents and the proper evidence handling techniques. Ethics codes will be presented and discussed.

**CGS 2100  
Computer Information Technology and Literacy**

3 Credits

Covers the use and impact of computers in all areas of business organizations. Course provides hands-on experience with software packages for business, including word processing, presentation, spreadsheet, database, and mail and calendar programs for business analysis, employability and personal use. Provides students with an introductory overview of the internet, World Wide Web, impact of computers on society and business, historic development of data processing, and basic operating system functionality, including storage and file management.

**CGS 2100H  
Honors Computers Information Technology and Literacy**

3 Credits

Same as CGS 2100 with honors content. Honors program permission required.

**CGS 2105  
IT Project Management Software Applications**

3 Credits

This course will introduce students to software applications used in project management and project planning. Topics will include planning, work breakdown structure, task time estimations, cost, and baseline project plan evaluation and adjustments. Prerequisite: CGS 1000, College level reading, writing, and math skills are required.

**CGS 2108  
Advanced Computer Applications**

3 Credits

An advanced applications course which covers and integrates word processing, spreadsheets, database, and presentation software.

Prerequisite: CGS 1000

**CGS 2301  
Management Information Systems**

3 Credits

Focuses on the role of information systems in the management process, with emphasis on the various aspects of processing data, characteristics of communication and information, and problem solving.

Prerequisite: CGS 1000

**CGS 2511  
Spreadsheet Applications II**

1 Credit

Emphasizes advanced spreadsheet techniques.

Prerequisite: CGS 1510

**CGS 2512  
Spreadsheets III**

1 Credit

This is a continuation of CGS 2511, Spreadsheets II. More advanced concepts and macro programming are emphasized.

Prerequisite: CGS 2511

**CGS 2525  
Electronic Presentations II**

1 Credit

This is a continuation of CGS 1520, Electronic Presentations I. Advanced concepts are emphasized.

Prerequisite: CGS 1520

**CGS 2541  
Database Design**

3 Credits

Focuses on the use and development of a database program, with an emphasis on loading, modifying and querying capabilities. Topics include storage devices, data design, administration, analysis and implementation, data structures, indexed and direct file organizations, and hierarchical network and relational models. Students enrolled in a degree or college credit certificate program must complete all prerequisites.

Prerequisite: CGS 1000

**CGS 2585  
Desktop and Internet Publishing**

3 Credits

Covers principles and techniques of document and internet publishing using an industry standard software program(s). Topics include design principles, document creation and layout, and publishing techniques for print and the Web.

Prerequisite: CGS 1000

**CGS 2786  
Web 2.0 Applications**

3 Credits

This course will cover various Web 2.0 applications. Topics include forms, blogs, wikis, calendars, slideshows and Web hosting.

Prerequisite: CGS 2822

**CGS 2804****Vector Graphic Applications**

3 Credits

This course concentrates on the methods and computer applications used in two-dimensional vector-based software applications. Topics include illustration and design strategies.

Prerequisite: CGS 1000

**CGS 2820****WEB Authoring HTML**

3 Credits

Introduces the student to the fundamentals of Web page authoring. Students will learn how to use HTML to create Web pages. They will learn how to generate HTML links, add graphics, create image maps, tables, frames, and forms. Advanced techniques include new HTML tags, virtual reality, audio, and video and presentation of other non-standard data. They will also learn how to use FTP to upload and download files.

Prerequisite: CGS 1000

**CGS 2821****Graphics Design Multimedia and Internet**

3 Credits

Introduces graphic design for the Internet and multimedia projects. Focus is on instructional design process, effective page design, and scanning techniques. Students will use digital imaging software such as PhotoShop to create effective computer screen design elements. Color theory and visual communication is introduced.

Prerequisite: CGS 1000

**CGS 2822****Web Site Creation**

3 Credits

This course is designed to introduce the student to software application tools necessary to create a website. The student will use and apply a website creation program such as FrontPage, Dreamweaver, Cold Fusion, etc. They will have the opportunity to develop a website from initial concept to publication.

Prerequisite: CGS 2820

**CGS 2827****Advanced Graphics Design for Multimedia and Internet**

3 Credits

A continuation of CGS 2821. Focus is on advanced graphic design techniques. Students use digital imaging software to prepare graphics for use in effective design elements.

Prerequisites: CGS 2821

**CGS 2874****Multimedia Authoring II**

3 Credits

A continuation of CGS 1871 Multimedia Authoring I, with emphasis on advanced authoring skills. Students will develop in-depth projects using video, audio, text, hypertext, and graphics while controlling the program direction.

Prerequisites: CGS 1871

**CGS 2876****Digital Audio/Video Design**

3 Credits

Introduces the student to the essential software, tools, and techniques commonly used by Web and multimedia designers to produce digital audio and video. Various audio/video programs such as Adobe Premiere, After Effects and Audacity may be used in this course.

Prerequisite: CGS 1871

**CGS 2877****Digital Animation Design**

3 Credits

Introduces the student to the essential software, tools, and techniques commonly used by Web and multimedia authors and designers to produce digital animation effects. Various animation programs such as Adobe Animate may be used in this course.

Prerequisites: CGS 1871

**CGS 2930-35****Special Topics in Internet Services Technology**

3 Credits

This course is designed to allow flexibility for presenting a variety of topics related to Internet services technology. The course may be taken twice for up to six credits. College level reading and writing skills are required.

Prerequisite: CGS 1000

**CGS 2939****Internet Services Technology Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

**CHD 1800****Introduction to Early Childhood Administration**

3 Credits

Designed to provide potential and current early child administrators with the opportunity of satisfying one of the educational requirements for the Foundational Level Child Care and Education Administrator Credential and one of the three courses required for the Level Two Administrator Credential as defined by the State of Florida. It is intended to introduce the needed skills and information in the following areas: developmentally appropriate childcare environments, leadership for childcare settings, financial and legal issues of childcare, and developmentally appropriate education curriculum.

Prerequisites: High School Diploma or equivalent, 30 hour Florida Introduction Child Care Course, 10 hours DAP Special Needs, CDA or equivalent.



**CHM 1020C**  
**Chemistry and Society**

3 Credits

A study of how chemicals directly affect our lives, including drugs, biocides, food additives, detergents, cosmetics, and plastics. Laboratory experimentation will be included. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills are required.

**CHM 1025**  
**Introductory Chemistry**

3 Credits

Covers an elementary treatment of mathematical tools of the chemist, atomic theory, periodic arrangement of the elements, chemical bonding, nomenclature of compounds, chemical reactions, and stoichiometry. Designed for students with no chemistry background.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: CHM 1025L, MAC 1105

**CHM 1025H**  
**Honors Introductory Chemistry**

3 Credits

Same as CHM 1025 with honors content. Honors Program permission required.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: CHM 1025L

**CHM 1025L**  
**Introductory Chemistry Laboratory**

1 Credit

Accompanies CHM 1025. Topics include laboratory techniques, measurement, chemical reactions, abbreviated qualitative analysis, and quantitative chemistry techniques. College level reading, writing and math skills are required. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: CHM 1025

**CHM 1032**  
**Chemistry for Health Sciences**

3 Credits

A chemistry course designed for allied health programs. Focuses on basic chemical and physical principles applied to the life process. Topics include inorganic, organic, and physiological chemistry. Mathematics applications are minimal.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: CHM 1032L

**CHM 1032L**  
**Chemistry for Health Sciences Laboratory**

1 Credit

Accompanies CHM 1032. Topics include laboratory techniques, measurement, chemical bonding, radioactivity, gases,

and examples of common inorganic, organic, and biological reactions. A special fee will be charged for this course. Prerequisites: College level reading, writing and math skills are required.

Co-requisite: CHM 1032

**CHM 2045**  
**General Chemistry I**

3 Credits

First part of a two-semester sequence. Topics include advanced treatment of stoichiometry, atomic theory, chemical bonding, liquid, solid, and gaseous behavior, solutions and thermochemistry. College level reading, writing and math skills are required.

Prerequisites: CHM 1025 or CHM 1032 or satisfactory grade on the chemistry placement test and MAC 1105.

Co-requisite: CHM 2045L

**CHM 2045L**  
**General Chemistry I Laboratory**

1 Credit

Accompanies CHM 2045. Topics include analytical techniques, physical property determinations, gas laws and thermochemical processes. College level reading, writing and math skills are required. A special fee will be charged for this course.

Prerequisite: CHM 1025L or CHM 1032L or satisfactory grade on the chemistry placement test and MAC 1105.

Co-requisite: CHM 2045

**CHM 2046**  
**General Chemistry II**

3 Credits

Second part of a two-semester sequence. Topics include liquid and solid behavior, physical properties of solutions, kinetics, chemical equilibria, electrochemistry and chemical thermodynamics. College level reading, writing and math skills are required.

Prerequisite: CHM 2045 and CHM 2045L with a minimum grade of C.

Co-requisite: CHM 2046L

**CHM 2046L**  
**General Chemistry II Laboratory**

1 Credit

This course accompanies CHM 2046. Topics include spectrophotometric determinations, chemical kinetics, electrochemistry, inorganic qualitative analysis and chemistry equilibria. College level reading, writing and math skills are required. A special fee will be charged for this course.

Prerequisite: CHM 2045L

Co-requisite: CHM 2046

**CHM 2210**  
**Organic Chemistry I**

4 Credits

First part of a two-semester sequence. Focus is on the chemistry of hydrocarbons. Topics include nomenclature, chemical bonding, synthetic methods, characteristic reactions, spectro-

scopic analyses, reaction mechanisms and structure determinations. College level reading, writing and math skills are required.

Prerequisites: CHM 2046, CHM 2046L

Co-requisite: CHM 2210L

### **CHM 2210L**

#### **Organic Chemistry I Laboratory**

1 Credit

Accompanies CHM 2210. Topics include organic separations, synthesis, spectroscopy, chromatography and identification of organic compounds. College level reading, writing and math skills are required. A special fee will be charged for this course.

Prerequisites: CHM 2046, CHM 2046L

Co-requisite: CHM 2210

### **CHM 2211**

#### **Organic Chemistry II**

4 Credits

Second part of a two-semester sequence. Focus is on the chemistry of hydrocarbon derivatives. College level reading and math skills are required.

Prerequisites: CHM 2210, CHM 2210L

Co-requisite: CHM 2211L.

### **CHM 2211L**

#### **Organic Chemistry II Laboratory**

1 Credit

Accompanies CHM 2211. Topics include the analysis of NMR spectra, multi-step synthesis and organic qualitative analysis. College level reading and math skills are required. A special fee will be charged for this course.

Prerequisite: CHM 2210L

Co-requisite: CHM 2211

### **CHM 2910L**

#### **Guided Undergraduate Research**

1 Credit

This course is intended for students majoring in STEM areas who desire to gain experience with research techniques, methods and procedures. It is intended to create supervised study through guided design of laboratory experiments, study of relevant literature, and achievement in specific research skills. Students will develop independence in the laboratory regarding their research project and will learn how to write a scientific communication.

Prerequisites: CHM 2046, CHM 2046L

### **CHS 2440**

#### **General Chemistry for Engineers**

3 Credits

This course is intended to provide engineering students with a background in important concepts and principles of chemistry, including atomic theory, chemical bonding and its consequences to materials structure and bulk properties, thermodynamics, equilibria, kinetics and electrochemistry. Qualitative and quantitative problem-solving of current engineering and technological applications will be emphasized. This course is

for engineering students only, and is NOT for chemical engineers.

Prerequisites: MAC 1105, CHM 1025

Co-requisite: CHS 2440L

### **CHS 2440L**

#### **General Chemistry for Engineers Laboratory**

1 Credit

This course accompanies CHS 2440. Topics include inorganic qualitative and quantitative analysis, gas laws, chemical kinetics, chemical equilibria, thermodynamics, and electrochemistry. A special fee will be charged for this course.

Prerequisites: CHM 1025, CHM 1025L

Co-requisite: CHM 2440

### **CIS 2321**

#### **Systems Analysis**

3 Credits

Focuses on the systems development life cycle, with an emphasis on identifying and assessing system requirements, analyzing and designing new systems in relation to use in business.

Prerequisites: CGS 2301, CGS 2541

### **CIS 2352C**

#### **Information Assurance Local Systems**

3 Credits

Hands-on course teaches students how to hack into information systems using ethical standards. The student will learn local system vulnerabilities, the tools and techniques used to exploit vulnerabilities such as social engineering, buffer overflows, etc., and how to defend against attacks. Suggested prerequisite: CTS 2301C.

Prerequisite: CNT 1401

### **CIS 2353**

#### **Security Management and Penetration Testing**

3 Credits

In this course the student will learn the steps necessary to perform penetration testing. The student will create an audit project plan based on various information technology scenarios and then practice performing fieldwork, analyzing data to draw conclusions and preparing an audit report offering recommendations. Suggested prerequisite: CTS 2301C

Prerequisite: CNT 1401

### **CIS 2359C**

#### **Information Assurance Network Systems**

3 Credits

Hands-on course teaches students how to hack into information systems using ethical standards. The student will learn network system vulnerabilities, the tools and techniques used to exploit vulnerabilities such as SQL Injection, Denial of Service, etc., and how to defend against attacks.

Prerequisite: CNT 1401

### **CIS 2381C**

#### **Computer Forensics and Incident Response**

3 Credits

The student will design and develop strategies for inspecting potentially corrupted servers, networks and workstations. In

this hands-on course the student will practice detecting possible intrusion inspecting log files, tracking violators. Students will practice computer forensic exercises using detection tools and tracking methodologies.

Suggested prerequisite: CTS 2301C

Prerequisites: CNT 1401

### **CIS 2598**

#### **Cybersecurity Capstone**

3 Credits

This course is designed for students to demonstrate their knowledge and skills applicable to the area of cyber security and its core competencies. The course is designed as a project based experience to develop a portfolio quality product. The students project requirements will be designed along with instructor input to demonstrate curriculum expertise.

Prerequisites: College level reading, writing and math skills required.

### **CIS 2621**

#### **Cybersecurity Operations Implementation**

3 Credits

This course is the second of two advanced cybersecurity courses where students learn core network security concepts and techniques that are needed in today's Security Operations Center (SOC) to monitor, detect, analyze, and respond to threats on a network using a variety of security tools. Students will acquire hands-on experience on how to detect and respond to security incidents while preparing for the CCNA Cybersecurity Operations certification. College level, reading, writing and math skills required.

Prerequisite: CIS 2772

### **CIS 2772**

#### **Cybersecurity Operations Fundamentals**

3 Credits

This course is the first of two advanced cybersecurity courses where students learn core network security concepts and techniques that are needed in today's Security Operations Center (SOC) to monitor, detect, analyze, and respond to threats on a network using a variety of security tools. Students will acquire hands-on experience on how to detect and respond to security incidents while preparing for the CCNA Cybersecurity Operations certification. College level reading, writing and math skills required.

Prerequisites: CET 1600, CNT 1401

### **CIS 2900 - 2904**

#### **Special Topics in IT Project Management**

3 Credits

This course is designed to allow flexibility for presenting a variety of topics related to IT Project Management. The course may be taken twice for up to six credits. College level reading and writing skills are required.

Prerequisite: CGS 1000

### **CIS 2905, 2932-36**

#### **Special Topics in Computer Administration**

3 Credits

This course is designed to allow flexibility for presenting a variety of topics related to computer administration. The course may be taken twice for up to six credits. College level reading and writing skills are required.

Prerequisite: CGS 1000

### **CIS 2939**

#### **Computer Information Administrator Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

### **CIS 2945**

#### **IT Project Management Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concern with his or her area of curriculum emphasis.

Prerequisites: Completion of 75% of program requirements.

### **CJC 1000**

#### **Introduction to Corrections**

3 Credits

Provides an introduction to the historical, theoretical and objective understanding of crime, the offender and the correctional process in society. Topics include custodial procedures and theory, correctional treatment, and basic social systems in relation to crime problems.

### **CJC 2162**

#### **Probation and Parole**

3 Credits

Explores the history, functions, purposes and operations of community corrections programs within the criminal justice system which provide diversion, supervision and treatment of offenders. This course reviews the theories and practices of probation and parole within a community setting. The principles and methods of probation and parole systems at federal, state and local levels, court procedures, the role of the probation and parole officers and their associates in the rehabilitation process will be covered.

### **CJC 2940**

#### **Criminal Justice Practicum – Basic Corrections Academy**

9 Credits

Articulated credits granted to students who successfully completed an FDLE state mandated certification training program in law enforcement.

**CJE 1000****Introduction to Law Enforcement**

3 Credits

This course covers the history and philosophy of law enforcement in America including the organization and objectives of local, state and federal agencies. Areas covered will include contemporary problems facing modern law enforcement. The course will also cover the various approaches to modern law enforcement and the selection of and training of career officers to enforce the laws in a democratic society. Topics covered will include law enforcement as a balance of social, historical, political, legal, individual and organizational forces.

**CJE 1640****Introduction to Criminalistics**

3 Credits

This course explains and discusses the crime laboratory and its procedures, functions and duties. Crime scene procedures and techniques for locating, preserving and security evidence will also be discussed. Selected laboratory techniques and procedures such as comparison and identification of tool markings, blood, hair, fibers, drugs, chemicals, photographs, firearms, ballistics and documents will be explained.

**CJE 1642C****Introduction Crime Scene Technology**

3 Credits

This course explains and discusses the basic scientific techniques used in criminal investigation with emphasis on the role of the crime scene investigator. This course will focus on such areas as recording the crime scene, collecting and preserving physical evidence, and the examination of evidence. The techniques used by the crime scene investigator to collect, protect, process, and analyze crime scene evidence will be explored.

**CJE 1643C****Advanced Crime Scene Technology**

3 Credits

This course explains and discusses advanced principals and theories in crime scene technology. This course will cover specialized collection procedures for biological evidence, weapons, traffic crash evidence, arson evidence; gunshot residue, blood spatter and bodies.

Prerequisite: CJE 1642C

**CJE 1653****Introduction to Crime Analysis and Intelligence**

3 Credits

This course involves an introduction to the field of crime analysis. The course will provide the student with an overview of basic criminal intelligence and investigative analysis techniques in modern law enforcement. The course will include geographic information systems and crime mapping techniques.

**CJE 1680****Introduction to Computer Crimes**

3 Credits

Provides the student with an overview of crimes involving the use of computer technology and the Internet. It will cover how

computer related crimes are committed and how they are investigated. Topics covered will include computer crime scene management and the legal issues involved in the prosecution of computer crimes.

**CJE 2004****Career Choices Criminal Justice**

3 Credit

This course will expose the students to the diversity of requirements and career opportunities within the criminal justice system. This course will provide the students with an understanding of the different agencies within the criminal justice system including police, courts and corrections. This course will cover all levels of agencies including city, county, state and federal. The course will also cover careers related to criminal justice including juvenile justice, private investigation and security, and bail bonds agents. The course will cover the roles of these agencies and employment opportunities. The course will also provide students with information on law enforcement academies and strategies for job searching, resumes and job interviews.

**CJE 2007****Introduction to Federal Law Enforcement and Investigations**

3 Credit

This course will examine criminal justice at the federal level with the emphasis on federal criminal law and its enforcement. The course will examine the role of the different federal law enforcement agencies. The course will review security, investigations, prosecutions, probations, and corrections within the federal criminal justice system. Major areas include an overview of federal crimes, elements of the United States code, and the role of federal agents in the support of prosecutions. This course will include the mission of and interrelationships between individual agencies. Topics will also include mail fraud, official bribery and corruption, organizational crime, drug enforcement, criminal civil rights violations, human trafficking, federal vs. state prosecution, and the UCMJ.

**CJE 2233****Drug Abuse and Crime**

3 Credits

This course will introduce students to the negative effects of drugs, alcohol, and other substance abuse. This course will cover the problems created by the illegal use of narcotics and other dangerous substances and its relationship to criminal behavior. This course will emphasize the criminal implications and control of drug and substance abuse as well as touching on the social and historical implications.

**CJE 2300****Police Administration and Organization**

3 Credits

Provides an introduction to the principles of law enforcement, organization and supporting services as they apply to staff functions, personnel recruiting, training, promotions, planning, research, inspection, control, and policy formation. Topics include functions of patrol, criminal investigation, vice

control units, juvenile bureau, intelligence, sections, detention facilities, supply and transportation.

**CJE 2600**  
**Criminal Investigation**

3 Credits

Covers methods of investigation, interviews, interrogation, electronic equipment, surveillance and sources of information, with an emphasis on case preparation and problems in criminal investigations.

**CJE 2614**  
**Serial Killers**

3 Credits

This course involves an examination of serial killers and mass murderers, including the history, profiling of the offenders, and techniques for the investigation. Special issues that will be covered include media coverage and punishment.

**CJE 2664**  
**Advanced Crime and Intelligence Analysis**

3 Credits

This course is an advanced course in crime and intelligence analysis. The course will build upon the principles learned in CJE 1653 and will give the student an in-depth look into crime analysis computer applications and GIS mapping software. Prerequisite: CJE 1653

**CJE 2671C**  
**Latent Fingerprint Development**

2 Credits

This course explains and discusses the techniques involving detection, enhancement and recovery of latent fingerprints from physical evidence. This course will cover mechanical and chemical methods and surfaces will be analyzed and evaluated for application in both theory and practice.

Prerequisite: CJE 2672C

**CJE 2672C**  
**Fingerprint Classification**

2 Credits

This course explains and discusses the Henry modified system of fingerprint classification. This course will deal with all aspects of fingerprint classification, identification, and filing systems and will prepare the student to conduct inked fingerprint examinations.

**CJE 2704**  
**Introduction to Child Protective Investigation**

3 Credits

This course introduces the students to the responsibilities of Child Protective Service investigators, the various types of child maltreatment, the characteristics of the perpetrators, and the indicators of child abuse. The course will also, cover the roles of the child protective investigator, of the police, of the court system in matters of child abuse and neglect, the multi-disciplinary team approach, and the laws of procedures of the dependency court system.

**CJE 2770C**  
**Forensic Photography**

3 Credits

This course explains and covers basic crime scene photography skills, including camera operation, exposure control, proficiency in relational photos, and flash control for crime scene and evidentiary documentation. The course will also cover special light sources and the use of filters, specialized equipment, digital cameras, and hand held video camera recorders. Prerequisite: CJE 1642C

**CJE 2940**  
**Criminal Justice Practicum – Basic Police Academy**

12 Credits

Articulated credits granted to students who successfully completed an FDLE state mandated certification training program in law enforcement.

**CJE 2941**  
**Criminal Justice Practicum – 911 Public Safety Telecommunicator**

3 Credits

This course will grant articulated credit as mandated by Florida's Gold Standard Certification Articulation Agreement to students who successfully complete a State approved 911 Public Safety Telecommunicator state mandated certification training program.

**CJJ 1002**  
**Juvenile Delinquency**

3 Credits

Focuses on the history, nature, causes and scope of juvenile crimes with an examination of the justice system and treatment facilities.

**CJJ 1004**  
**Introduction to Juvenile Justice**

3 Credits

This course will examine juvenile delinquency and the juvenile justice system including its legal and social history, its definitions and procedures, and an assessment of delinquency prevention and control.

**CJL 1000**  
**Introduction to Law and Legal Issues**

3 Credits

This course will cover the evaluation, debate, and critical analysis of law and legal issues that affect individuals, their families, and communities. Students will learn about practical aspects of criminal, civil, and constitutional law as well as domestic, immigration, and consumer law in a diverse society. The course will use case studies, simulated legal exercises, small group exercises, and analytical thought problems.

**CJL 1062**  
**Constitutional Law**

3 Credits

Provides an in-depth study of criminal law, with an emphasis on the role of the Supreme Court and constitutional law as it applies to law enforcement and civil rights.

**CJL 1100**  
**Criminal Law**  
3 Credits

Focuses on the classification and analysis of criminal acts, such as homicide, rape, assault, robbery, larceny, burglary, and auto thefts, with an emphasis on specific cases and selected court decisions. Topics include court organization, court orders, writs, warrants, and other papers.

**CJL 1100H**  
**Honors Criminal Law**  
3 Credits

Same as CJL 1100 with honors content. Honors Program permission required.

**CJL 1500**  
**Introduction to the Court System**  
3 Credits

This course examines the history, traditions and philosophy of the American court system. Emphasis will be placed on the roles of the prosecutor, the judge, the defense attorney, the jurors, the defendants and the public. The course will focus on the general themes of law on the books, law in action and law in controversy. Course content will include an overview of the structure and operations of the court system with special emphasis on the Florida Court System.

**CJL 2072**  
**Civil Rights and Liability in Criminal Justice**  
3 Credits

This course will provide students with an overview of federal civil rights legislation and state federal tort law as it applies to criminal justice. Topics covered will include practitioner and supervisor liability, 1983 actions, 241 crimes, wrongful death actions, and various personnel laws including ADA, EEOC, age and sex discrimination and sexual harassment.

**CJL 2130**  
**Criminal Evidence and Procedure**  
3 Credits

Provides an introduction to criminal procedures such as arrest, search and seizure, use of force and handling evidence. Topics include the legal use and degree of force, rights of suspects and arrested persons, types of evidence, admissibility, proof and competence of evidence as related to criminal law and recent court decisions.

**CJL 2610**  
**Courtroom Presentation of Scientific Evidence**  
3 Credits

This course explains and discusses how to present physical, documentary, and scientific evidence in the courtroom. The course will cover proper dress, speaking, listening, and stress. The student will understand how to present courtroom testimony, especially in areas of scientific evidence. The course will also include how to prepare and present visual aids and exhibits collected at crime scenes. The course will include mock trial exercises.

**CLP 1000**  
**Psychology of Personal Growth**  
3 Credits

Covers the origin and development of individual needs and personality patterns, approaches to self-management, and self-control and assessment of personal value systems. Emphasis is on personal awareness and experientially based activities. Is not acceptable as a prerequisite for other psychology courses.

**CLP 2140**  
**Abnormal Psychology**  
3 Credits

This course examines the historical and current perspectives of the science of abnormal behavior. Topics include classification, diagnosis, theories, assessment methods, treatment, prevention, and legal and ethical issues. The course will also discuss the importance of empirically-based treatments. The impact of mental illness on the individual, family, and society are explored.

Prerequisites: PSY 2012 or permission of instructor. College level reading and writing skills are required.

**CNT 1401**  
**Introduction to Network Security**  
3 Credits

Basic computer and network security theory, concepts and terminology are presented. The CIA triad, basic threats, intrusion techniques, vulnerabilities and their various counter measures are included. Students will also discuss ethical behaviors and basic security practices for authentication, encryption and secure network topologies.

Prerequisites: CET 1600 or CTS 1305

**CNT 2510**  
**Wireless Networking**  
3 Credits

This course presents an overview of common wireless technologies including theories, concepts of their operation, installation, and basic troubleshooting. Basic computing and common wireless technologies are discussed as well as new trends as they develop. Wireless local area networks and integration with wired networks are also included.

Prerequisite: CTS 1305.

**COM 1000**  
**Introduction to Communications**  
3 Credits

This course introduces students to the study of human communication and includes surveys of communication theories, perspectives, processes, concepts, roles and contexts. Students will improve basic and practical communications skills and increase active awareness and best practices for effective and ethical communication.

Prerequisite: College level reading and writing skills required.

**COP 1000**  
**Programming Logic**  
3 Credits

Introduces programming logic, with an emphasis on problem definition, flow charts, tables, control breaks, and multi-record

single processing programs. Topics include read process write-loops, array creation and retrieval, and documentation standards.

Prerequisite: CGS 1000

### **COP 1030** **Introduction to Python Programming**

3 Credits

An introduction to programming using the Python language. Students will learn how basic programming ideas, such as variables, data, loops, and functions are used in Python to create useful programs. Other topics include program design, style, documentation, and working with files and text. College level reading, writing and math skills required.

Prerequisite: COP 1000

### **COP 1120** **COBOL, Beginning**

3 Credits

Introduces the computer programming for business, with an emphasis on program design and development, generating reports and creating files. Topics include structured programming, testing, implementation and documentation, file structures, input and output devices, table processing and operating system facilities. A special fee will be charged for this course.

Prerequisite: COP 1000

### **COP 1220** **Programming in "C"**

3 Credits

Introduces programming in the "C" language with an emphasis on basic input/output functions. Topics include interactive programming, style and methodology, top-down design and structured programming.

Prerequisite: COP 1000.

### **COP 1332** **Visual BASIC, Beginning**

3 Credits

Provides a basic overview of Windows programming and applications. Students enrolled in a degree or college credit certificate program must complete all prerequisites.

Prerequisite: COP 1000

### **COP 1812** **Introduction XML Authoring**

3 Credits

This course teaches students how to use XML to create customized tags for Web pages and to work effectively with XML. Students will develop websites integrating XML into their projects.

Prerequisite: COP 1000

### **COP 2050** **R Programming**

3 Credits

R Programming is an introductory course in the R programming language. The student will learn how to install and configure the R software, use R for statistical analysis, and

graphics visualization of data. This course will include reading data into R, accessing R packages, writing R functions, debugging; commenting; and code organization, applied statistical analysis using R and how to generate graphs and charts for data visualization.

Prerequisite: CGS 1000, COP 1000, STA 2023, College level reading, writing and math skills required.

### **COP 2224** **Programming in C++**

3 Credits

Basic C++ programming with a survey of advanced C++ topics, including inheritance, generics (templates), modular and object-oriented programming, dynamic memory, using the standard library, and proper programming best practices including an introduction to design, testing, documentation, and deployment. Course focuses on how C++ is used for systems and embedded programming.

Prerequisites: COP 1000, and either COP 1220 or COP 2360

### **COP 2344** **Shell Scripting**

3 Credits

This course is intended for students who have mastered the basic Linux/Unix operating environment and who would like to read and understand the various administrative scripts, and to write scripts to automate day to day tasks. This course is designed to teach students skills they need to effectively read, write and debug shell scripts. This course explores in detail the Bash shell scripting language. Major topics covered include reading, writing, modifying, and debugging shell scripts, the shell environment, regular expressions, text filtering with grep, sed, and the awk commands, conditional control statements and loops, interactive scripts, the use of other shell features such as variables, parameters, argument lists, shell functions, shell traps.

Prerequisites: COP 1000, CTS 1106

### **COP 2360** **Programming in C#**

3 Credits

An introductory course to programming in the C# language. Emphasis is placed on the basic data, methods and classes of the C# language. Additionally, object oriented programming concepts will be introduced. Programming style and object oriented methodology will be stressed throughout the course.

Prerequisite: COP 1000

### **COP 2654** **Mobile Platform Application Development**

3 Credits

This is an introductory course in application development for popular tablet and smartphone mobile platforms. Students will learn about hardware, software, and programming environments for the major types of mobile devices in current use. Student will also examine the different models for application development and distribution on these devices, plus design, code, test, and execute a mobile application.

Prerequisite: COP 1220 or COP 2224 or COP 2360 or COP 2800

**COP 2800****Java Programming**

3 Credits

Introduces programming in Java. This course will cover the basic features of Java, including procedural programming (datatypes, variables, operators, control structures, etc.), an introduction to object-oriented programming concepts (objects and classes, abstraction, encapsulation, and inheritance), GUI programming, error handling with exceptions, and other Java techniques.

Prerequisite: COP 1000 or permission of instructor.

**COP 2805C****Java Advanced**

3 Credits

A continuation of COP 2800. The focus is on software development workflow tasks (requirements, design, testing, deployment). Topics include advanced object oriented and functional programming in Java, collections, multi-threading, files, database use, and other features of modern Java.

Prerequisite: COP 2800

**COP 2830****Scripting for the Web**

3 Credits

Introduces scripting languages used to enhance Web documents. Focus is on the use of scripts and how they relate to the Web environment. Students will develop applications using a scripting language such as Visual Basic, Java Script, and/or Perl.

Prerequisites: CGS 2820, COP 1000.

**COP 2833****Database-driven Web Programming: Client**

3 Credits

The student will be introduced to techniques for coding Web pages that interact with back-end databases. The emphasis in this class is to develop code that runs on the client computer and to develop techniques for balancing the client-side code with server-side code. Topics covered will be specific programming language fundamentals and logic, and an introduction to data maintenance using data manipulation coding techniques. Other topics include writing secure Web code, error handling and data validation.

Prerequisite: COP 2836, Database-driven Web Programming: Server

**COP 2836****Database-driven Web Programming: Server**

3 Credits

The student will be introduced to techniques for coding Web pages that interact with back-end databases. The emphasis in this class is to develop code that runs on back-end servers with back-end database. Topics covered will be specific programming language fundamentals and logic, and an introduction to data maintenance using data manipulation code such as SQL, as well as an introduction to back-end DBMS concepts and terminology. Other topics include writing secure Web code, error handling and data validation.

Prerequisites: CGS 2820, COP 1000

**COP 2930-35****Special Topics in Programming**

3 Credits

This course is designed to allow flexibility for presenting a variety of topics related to programming. The course may be taken twice for up to six credits. College level reading and writing skills are required.

Prerequisite: CGS 1000.

**COP 2939****Computer Programming Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project-based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

**CRW 1001****Creative Writing I**

3 Credits

Focuses on analyzing creative writing through class discussions and readings. Works by students and others will be critiqued. Participation on the staff of the College's literary magazine is encouraged. Prerequisite waiver by permission of instructor required.

Prerequisite: ENC 1101

**CRW 1001H****Honors Creative Writing I**

3 Credits

The same course description as CRW 1001 with honors content. College level writing is required. Honors Program permission required.

**CRW 1002****Creative Writing II**

3 Credits

Further critical analyses of both the student's own writings and the writings of others combined with the readings and discussions of the process of creative writing. Continuation of the skills developed from CRW 1001. College level reading and writing skills are required.

Prerequisite: CRW 1001

**CTS 1106****Introduction to Linux**

3 Credits

This course is designed to introduce Linux operating system through lecture, demonstration, and practical hands-on training, is designed for students who are new to Linux and who want to develop a good working knowledge of the operating system using the command line. The student will explore the same tools and practice techniques used by Linux end users.

This course covers Linux software and hardware, the boot process, file and file system management, disk management, and



working with text files. After completing this course, the student should be able to competently work with any major Linux distribution.

Prerequisite: CGS 1000

**CTS 1145**  
**Introduction to the Cloud**

3 Credits

This course is designed to teach student core concepts and knowledge applicable to cloud computing. This includes Cloud concepts, architecture, configuration and deployment, management, security, troubleshooting and technical support. Coverage includes preparation for the CompTIA Cloud+ exam.

Prerequisite: CTS 1305

**CTS 1302**  
**Microsoft Intermediate Server**

3 Credits

Provides students with the knowledge and skills necessary for advanced Windows server services such as advanced configuring tasks necessary to deploy, manage, and maintain a Windows server infrastructure.

Prerequisite: CTS 1303 or CTS 1306 or permission of instructor.

**CTS 1303**  
**Enterprise Operating System I**

3 Credits

This course is designed to provide students with the knowledge and skills necessary to install, configure and administer Microsoft Windows and LINUX operating systems, local and remote management, file and storage services, Hyper-V virtualization, and high availability in an enterprise environment.

Corequisite: CTS 1305 or permission of instructor.

**CTS 1305**  
**Introduction to Networking**

3 Credits

Introduces the students to the basics of local area networks. Provides an overview of networking, including a history of development and the uses and benefits of networks. Students are introduced to major network components with a discussion of critical selection considerations. Covers the prerequisite concepts necessary for the Microsoft program and will provide background information for the Cisco certification program.

Prerequisites: CGS 1000 or permission of instructor.

**CTS 1306**  
**Enterprise Operating Systems II**

3 Credits

This course is designed to provide students with the knowledge and skills necessary to learn in-depth knowledge of Windows Server 2016, and LINUX, including TCP/IP configuration, including IPv6, DNS configuration, DHCP implementation and management, deploying remote access, configuring distributed network file services, and high-performance network solutions. This course is designed for network and system administrators who administer and maintain Windows

Server systems that provide various services in an enterprise environment.

Prerequisite: CTS 1303 or permission of instructor.

**CTS 2203**  
**Introduction Adobe Acrobat**

1 Credit

Provides students with the knowledge and skills necessary to create, post to the Internet, and distribute PDF files.

Prerequisite: CGS 1000

**CTS 2301C**  
**Linux Administration I**

3 Credits

This course is a continuation of CTS 1106 (Introduction to Linux). The focus is hands-on Linux system administration. Topics include system administration concepts, system installation and configuration. Additional topics include understanding the Linux file system, configuring basic system hardware and services, managing user accounts, basic system security and backups. Major Linux variants will also be covered. This course continues with CTS 2322, Linux Administration II. Student must have prerequisite or permission of instructor.

Prerequisite: CTS 1106

**CTS 2311**  
**Linux Security**

3 Credits

This course covers the concepts and administration of system and network security on Linux systems. Students will gain the skills needed to protect Linux servers from various types of threats. Students will understand, plan and implement security on Linux servers including developing security policies, local system security, network security, monitoring systems and networks, basic firewall setup and the use of various security related tools (e.g., PAM, sudo). College level reading and writing skills are required.

Prerequisite: CTS 2322

**CTS 2322**  
**Linux Administration II**

3 Credits

This course is a continuation of CTS 2301C, Linux Administration I. The focus is on Linux administration. Topics include software development tools, software licensing and open source issues, managing documentation and creating "man" pages', configuring network services including email, Web, and DNS. Also covered will be building and configuring custom kernels and kernel modules, patching and updating the kernel and applications, system and service monitoring and logging, and basic system security. Students will gain hands on experience installing, configuring and using Linux.

Prerequisite: CTS 2301C

**CTS 2333**  
**Linux Networking**

3 Credits

This course covers the concepts and administration of networking services on Linux systems. Topics include Windows

network integration with SMB (Samba), DNS, email services and other common network services such as DHCP, FTP, LDAP and NTP (network time protocol). Students will review basic network concepts such as network models and LANs, IPv4, IPv6 and PPP. Students will also gain hands-on experience with basic network security, and network configuration and troubleshooting using common network management tools.

Prerequisites: CTS 1305, CTS 2322. College level reading and writing skills are required.

### **CTS 2375**

#### **Enterprise and Cloud Computing**

3 Credits

This course is designed to provide students with the knowledge and skills necessary to learn PaaS cloud services and how to use Cloud as the infrastructure for existing and new services. Students will learn Amazon Elastic Cloud, Microsoft's Azure, Google App Engine, and many other Cloud offerings. Students will use open-source implementations of highly available clustering computational environments, as well as RESTful web, serverless, and FaaS services to build powerful and efficient applications. Student also learn how to deal with not trivial issues in the Cloud, such as load balancing, caching, distributed transactions, and identify and authorization management in an enterprise environment.

Prerequisite: CTS 1145, College-level reading, writing and math skills are required.

### **CTS 2440**

#### **Database Programming - SQL**

3 Credits

This course covers the concepts of both relational and object relational databases using the SQL programming language. Students are taught to create and maintain database objects and to store, retrieve and manipulate data. Students learn to retrieve data by using advanced techniques, grouping operations and navigational retrieval. They also learn to write SQL queries to generate report-like output. Hands-on practice using assigned projects reinforce the fundamental concepts.

Prerequisite: CGS 2541

### **CTS 2441**

#### **Database Administration I**

3 Credits

Provides students with the knowledge and skills required to install, configure, administer and troubleshoot a specific database management system (DBMS) in a client/server environment. Topics such as backing up and restoring a database, as well as scheduling, monitoring and performance will be covered. Sizing database objects such as tables and indexes will be covered, as well as database securities. The course may be repeated one time for purposes of preparing the student as an administrator on a second database platform. Permission of instructor is required. Prerequisite: CGS 2541

### **CTS 2442**

#### **Database Administration II**

3 Credits

Provides students with the knowledge and skills required to install, configure, administer and troubleshoot a specific database management system (DBMS) in a client/server as well as web-based environment. Topics such as complex restoring of a database will be covered. Advanced concepts such as data warehousing, data mining and transaction processing will be covered. The course may be repeated one time for purposes of preparing the student as an administrator on a second database platform. Permission of instructor is required.

Prerequisite: CTS 2441

### **CTS 2445**

#### **Database Programming Advanced**

3 Credits

This course covers advanced coding concepts of a specific DBMS. For example, if the student is studying MS Access, this course covers coding using Visual Basic for Applications (VBA). If the student is studying MS SQL Server, this course introduces advanced concepts using Transact SQL (TSQL). If the student is studying Oracle DBMS, the student will code in PL/SQL. Students will be taught to code programs to perform error handling and create triggers. Students will program stored procedures and custom functions, and learn to call those reusable programs. The course may be repeated one time for purposes of preparing the student as an administrator on a second database platform. Permission of instructor is required.

Prerequisite: CTS 2440

### **CTS 2930-35**

#### **Special Topics in Database Administration**

3 Credits

This course is designed to allow flexibility for presenting a variety of topics related to database administration. The course may be taken twice for up to six credits. College level reading and writing skills are required.

Prerequisite: CGS 1000

### **CTS 2939**

#### **Database Technology Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project based experience. The student's project requirements will be designed in concern with his/her area of curriculum emphasis. Permission from instructor required.

### **CVT 1000**

#### **Introduction to Cardiovascular Technology and Patient Care**

3 Credits

This course should introduce the student to the field of sonography and cardiovascular. The role of a cardiovascular technologist in the health care environment. Topics also cover professionalism and health care provider. Medical and ethical

issues that may affect a cardiovascular technologist will be discussed. Emphasis is placed on the foundations and origins of cardiovascular technology, orientation to sonography, learning methods, basic patient care techniques, sonographic techniques and communication skills.

Prerequisites: Admission to Cardiovascular Technology Program.

Corequisite: CVT 1261

### **CVT 1001**

#### **Introduction to Invasive Cardiovascular Technology**

3 Credits

This course is an overview of the profession including basic skills and terminology related to historical development, current profession trends, professionalism, and professional code of ethics, professional organizations, patient confidentiality, infection control, asepsis, and basic cardiopulmonary patient assessment using electrocardiography, chest roentgenography, clinical laboratory tests, and vital signs.

Prerequisites: BSC 2085, BSC 2085L

### **CVT 1191**

#### **Introduction to Cardiovascular Practicum I**

3 Credits

This course provides hands-on experience in the lab for the diagnostic procedure (scanning) in non-invasive echocardiography based on didactic class topics. Standard echocardiographic views in 2D, M mode, and Doppler modalities as well as basic scanning techniques will be emphasized.

Prerequisite: Admission to Program

Corequisite: CVT 1000

### **CVT 1220**

#### **Cardiovascular Pharmacology**

3 Credits

This course is designed to provide the cardiovascular technology student with a foundation of the pharmacology needed to function in clinical experiences. This includes classifications of medications, modes of action, indications, contraindications, and their effect on the cardiovascular system and cardiac patients. The course also prepares the student to recognize basic cardiac arrhythmias, understand basic radiographic theory, safety protection, and cardiac catheterization laboratory equipment.

Prerequisite: CVT 1001

Corequisites: CVT 1800L, CVT 1260

### **CVT 1260**

#### **Cardiopulmonary Anatomy and Physiology**

3 Credits

This course covers cardiopulmonary anatomy and physiology in detail, diffusion and transport of cardio-respiratory gases, blood gas, renal and acid base physiology, EC and basic hemodynamic analysis, cardiopulmonary exercise testing, and human gestational development of the cardiopulmonary systems. The physiologic calculations related to quantification of cardiopulmonary performance are also emphasized.

Prerequisite: CVT 1001

Corequisites: CVT 1800L, CVT 1220

### **CVT 1261**

#### **Cardiovascular Anatomy and Physiology**

3 Credits

This course is divided into four units: normal cardiovascular anatomy and physiology, embryology, congenital heart disease, and acquired cardiac and vascular diseases. The essentials of diagnosis and treatment are incorporated in these units.

Prerequisite: Admission to Program

Corequisite: CVT 1000

### **CVT 1800L**

#### **Invasive Cardiovascular Techniques I**

3 Credits

Supervised clinical practice in the on-campus cardiac catheterization laboratory. Areas of concentration in this pre-clinical course include aseptic techniques, vascular access and angiographic techniques, patient care and monitoring, procedural preparation, and radiation safety.

Prerequisite: CVT 1001

Corequisites: CVT 1220, CVT 1260, CVT 2511

### **CVT 1801L**

#### **Invasive Cardiovascular Techniques II**

4 Credits

Supervised clinical practice in the on-campus cardiac catheterization program. This course builds on the knowledge and skills from CVT 1800L, Invasive Techniques I. Areas of concentration are coronary angiography, left ventriculography, contrast selection, post-procedural patient assessment, and ACLS techniques.

Prerequisites: CVT 1800L, CVT 1220, CVT 1260, CVT 2511

### **CVT 2110L**

#### **Invasive Cardiovascular Clinical II**

3 Credits

Clinical experience in procedures performed in the cardiovascular laboratories, including use of equipment, performing tests and patient care as it relates to the cardiovascular areas with emphasis on cardiac catheterization, ECG, stress testing, Holter monitoring, and an introduction to echocardiography.

Prerequisite: CVT 1801L

Corequisites: CVT 2420C, CVT 2805C, CVT 2660C

### **CVT 2211**

#### **Clinical Care Applications**

2 Credits

This course presents an in-depth study of critical care hemodynamic measurements for medical, surgical, and emergency patients. Intra-aortic balloon pumping, Swan-Ganz monitoring, artificial airways, oxygen delivery devices, cardiovascular pharmacology, and basic ACLS algorithms are also presented.

Prerequisite: CVT 2420C

Corequisite: CVT 2421C

**CVT 2320****Vascular Ultrasound I**

3 Credits

This course provides an introduction to vascular imaging and peripheral vascular angiography. The student will review cerebrovascular anatomy and the peripheral vascular systems. This course will cover fundamental introduction to carotid duplex scanning and peripheral vascular imaging. Students will learn normal and abnormal hemodynamics, protocols and pathology relative to cerebrovascular testing. This course will also cover fundamental introduction to peripheral angiography.

Prerequisites: CVT 1000

Corequisite: CVT 2320L

**CVT 2320L****Introduction to Cardiovascular Practicum II**

3 Credits

During this laboratory training, the student gains skills in the use of fundamental ultrasonic equipment designed to detect blood flow in peripheral arteries. It will be a lab component and a clinical component. Practice of basic vascular exams: carotid arteries, upper and lower extremity venous studies. Basic cardiac echocardiography exam.

Prerequisites: CVT 1000

Corequisite: CVT 2320

**CVT 2321****Vascular Ultrasound II**

3 Credits

This course introduces the characteristics of abnormalities in blood flow. Disease states, etiologies and treatments are explored. Testing modalities used to diagnose vascular diseases in the extremities and abdomen are presented.

Prerequisites: CVT 2320

Corequisite: CVT 2840

**CVT 2420C****Invasive Cardiology I**

6 Credits

This course introduces the student to the specific procedures performed in the cardiac catheterization laboratory and the use of the resulting data for patient diagnosis. Additional topics include aseptic techniques, sterilization, patient assessment, radiography pharmacology, cardiac wave forms, coronary artery anatomy, equipment and tools utilized in cardiac catheterization, hemodynamic data and analysis, right and left heart catheterization, and complications and treatments including dysrhythmias that may occur during cardiac catheterization procedures. Students will practice cardiac catheterization procedures in the cardiac catheterization lab on campus.

Prerequisite: CVT 1801L

Corequisites: CVT 2660C, CVT 2805C, CVT 2110L

**CVT 2421C****Invasive Cardiovascular II**

6 Credits

This course is designed to tie together cardiac disease processes with diagnostic and interventional cardiac catheterization procedures. Students will be presented with classifications and the use of equipment, and techniques used

in invasive cardiology. An in-depth presentation of various cardiac diseases including coronary artery disease, angina, myocardial infarction, heart failure, valve diseases, cardiomyopathies, pericardial disorders, arrhythmias, congenital anomalies, pharmacology, and repair procedures is also presented. Additionally, students learn the various calculations performed in the catheterization lab including cardiac outputs, vascular resistance, valve areas and stunts.

Prerequisite: CVT 2420C

Corequisite: CVT 2211

**CVT 2500****Cardiovascular ECG**

3 Credits

This course relates electrophysiological principles of EKG components to heart function. Students identify the individual components of the EKG complex and discuss the best lead placement for a diagnostic EKG versus lead placement for intra-procedural monitoring. After identifying rhythm rules, students differentiate between normal and abnormal rhythm strips and paced rhythms, in correlation with known pathologies. Students demonstrate the ability to identify heart rhythms and arrhythmias and gain the ability to set up a 12-lead EKG.

Prerequisites: Admission to the program

Corequisite: CVT 1000

**CVT 2511****Radiation Biology and Safety**

3 Credits

This course will include the fundamentals of x-ray production and the specifications of the x-ray tube equipment, the interaction of ionizing radiation with biological systems, early and late effects of radiation exposure, with the principles of radiation protection. Additional topics include image intensification, digital flat plate technology and cineangiographic filming with quality control of the latent image.

Prerequisites: Admission to the program

**CVT 2620****Cardiac Ultrasound I**

3 Credits

This first course in the non-invasive cardiology series deals with the theory, rationale, application, performance and interpretation of a standard 2D echocardiogram. Standard views recommended by the American Society of Echocardiography will be performed. Measurements from M-mode and 2D will be discussed and demonstrated. This course will cover fundamentals of color flow imaging and spectral Doppler. Normal and abnormal values will be discussed.

Prerequisite: CVT 1000

Corequisite: SON 1210

**CVT 2621****Cardiac Ultrasound II**

3 Credits

This companion course to CVT 2620, presents an in-depth view of the diagnosis of common cardiac and vascular disease states. Instruction is provided in the application of theory,

techniques, and interpretation of 2-dimensional echocardiography, M-mode, color flow imaging, and pulsed and continuous wave doppler. Advanced techniques in echocardiography are also discussed, such as stress and pharmacologic echocardiography, transesophageal echocardiography and contrast echocardiography.

Prerequisite: CVT 2620

Corequisite: CVT 2621L

### **CVT 2621L**

#### **Cardiac Ultrasound II Laboratory**

3 Credits

This laboratory course allows the student to apply the techniques and interpretation modalities in echocardiography as it related to the cardiac abnormalities taught in CVT 2621.

Prerequisite: CVT 2620

Corequisite: CVT 2621

### **CVT 2660C**

#### **Non-Invasive Cardiology**

2 Credits

This course presents an introduction to non-invasive cardiology and those tests performed in this area. In addition, normal and abnormal heart rhythms, ECG acquisition and analysis, patient safety, stress testing. Holter monitoring and an introduction in echocardiography are presented.

Prerequisite: CVT 1801L

Corequisites: CVT 2420C, CVT 2805C, CVT 2110L

### **CVT 2805C**

#### **Cardiovascular Interventional Pre-Practicum**

3 Credits

Supervised clinical practice continues in the on-campus cardiac catheterization laboratory. This course builds on the knowledge and skills from CVT 1801L. Areas of concentration in this pre-clinical course include interventional cardiac catheterization, balloon angioplasty, rotational atherectomy and intracoronary stenting.

Prerequisite: CVT 1801L

Corequisites: CVT 2420C, CVT 2660C, CVT 2110L

### **CVT 2840**

#### **Cardiovascular Practicum I**

3 Credits

This laboratory course introduces the student to non-invasive cardiology by hands-on experience with modalities discussed in CVT 2620. This course has a lab component and a clinical practicum component.

Prerequisite: CVT 2500

Co-requisite: CVT 2321

### **CVT 2841**

#### **Cardiovascular Practicum II**

3 Credits

Students participate in clinical education at an affiliate hospital, performing procedures in accordance with industry standards. Students acquire clinical experiences and proficiencies sufficient to demonstrate competency in a variety of procedures while providing the highest level of patient care.

Prerequisite: CVT 2840

Corequisite: CVT 2621L

### **CVT 2842**

#### **Cardiovascular Practicum III**

4 Credits

This course is the final practicum and provides a more in-depth clinical experience to polish skills in the echocardiography/vascular lab. There will be a lab component and a clinical practice covers cardiovascular techniques and procedures, hemodynamic monitoring, scrubbing with panning and manipulation of imaging clinical practice covers performance of 2-D echocardiography with more in-depth clinical experience in stress echocardiography, pharmacological stress, transesophageal echocardiography and other advanced techniques in non-invasive cardiology.

Prerequisite: CVT 2841

Corequisites: CVT 2920

### **CVT 2845L**

#### **Invasive Cardiovascular Clinical III**

4 Credits

This course is designed for students to gain more in-depth clinical experience in invasive cardiology including pre- and post-cardiac catheterization activities, cardiovascular techniques, hemodynamic monitoring, intra-aortic balloon pumping, and cardiac output measurements. Clinical practice in the cardiac catheterization lab includes circulating, scrubbing, recording and manipulating the imaging equipment during both diagnostic and interventional catheterization procedures.

Prerequisite: CVT 2110L

Corequisites: CVT 2421C, CVT 2211

### **CVT 2846L**

#### **Invasive Cardiovascular Clinical IV**

4 Credits

This course is designed for students to gain additional clinical experience and polish their skills in the cardiac catheterization laboratory performing all duties involved in diagnostic and interventional cases.

Prerequisite: CVT 2421C, CVT 2845L, CVT 2211

Corequisite: CVT 2921

### **CVT 2920**

#### **Seminar in Cardiac Ultrasound**

3 Credits

This course is designed for students to integrate their academic knowledge with case studies observed in clinical practicum.

This course will cover registry board exam preparation for the specialty in non-invasive cardiac ultrasound. This course also will cover resume preparation and job interview skills.

Prerequisite: CVT 2841

Corequisite: CVT 2842L

### **CVT 2921**

#### **Cardiovascular Technologist as a Professional**

2 Credits

The professional relationship of the cardiovascular technologist to other health professional is presented along with a basic format for research. Resume preparation and interview skills

are also discussed. Students also present case studies and receive instruction and testing in Advanced Cardiac Life Support (ACLS).

Prerequisites: CVT 2421C, CVT 2211

Corequisite: CVT 2846L

### **CVT 2930**

#### **Seminar in Vascular Ultrasound**

3 Credits

This course covers a comprehensive review of all aspects of non-invasive vascular ultrasound and registry preparation for the specialty in non-invasive vascular ultrasound. This course is also designed for students to integrate their academic knowledge with case studies observed in clinical practicum.

This will prepare students for task oriented testing.

Prerequisite: CVT 2321

Corequisite: CVT 2841

### **DAA 1100**

#### **Modern Dance Basics for Non-Majors**

1 Credit

Modern Dance Basics is a studio course designed to introduce students with no training to the basic concepts of modern dance. The emphasis in this class will be placed upon attaining correct body alignment, learning the positions of the arms and feet, and the use of time, space, weight and energy. Students will learn basic dance vocabulary while developing flexibility, strength and musicality. This is a studio course and may be repeated 2 times for credit.

### **DAA 1101**

#### **Modern Dance I**

2 Credits

Elementary level modern dance training is for those with entry level skills in modern dance. The course will offer students the opportunity to develop an understanding of the basic principles and concepts of modern dance technique through several movement experiences and explorations. Students explore and develop awareness of body alignment, dance vocabulary, self-awareness, coordination, strength and musicality. Attendance at and written critiques of dance performances provide an enhanced view of the scope of the dance field. This course may be taken twice for credit.

### **DAA 1102**

#### **Modern Dance Basics for Pre-Majors**

1 Credit

Modern Dance Basics is a studio course designed to introduce students who plan to further pursue dance with a foundation knowledge of modern dance. The emphasis in this class will be placed upon attaining correct body alignment, the use of time, space, weight and energy and the ability to accurately learn dance combinations and phrase work. Students will learn dance vocabulary while developing flexibility, strength and musicality. This is a studio course and may be repeated 2 times for credit.

### **DAA 1104**

#### **Modern Dance II**

2 Credits

This studio course will serve as a continuation of Modern Dance I and will further explore basic principles of modern dance technique. It will broaden students' awareness of dance concepts such as momentum, weight shift, rebound and release. It will further develop dance vocabulary, body alignment, and develop an introductory framework for dance aesthetics. Attendance at and written critiques of dance performances will provide deeper insight into the dance field. This course may be taken twice for credit.

Prerequisite: Audition or Instructor Permission

### **DAA 1200**

#### **Ballet I**

2 Credits

Elementary level ballet training for those with entry level skills in ballet. Emphasis is on correct placement and alignment of the body, a knowledge of basic ballet terminology, and the development of spatial awareness as it applies to the execution of ballet exercises, positions and steps. Attendance at written critiques of dance performances provide an enhanced view of the scope of the dance field. This is a studio course and may be repeated twice for credit.

Prerequisite: Audition or Instructor Permission

### **DAA 1201**

#### **Ballet Basics for Non-Majors**

1 Credit

Ballet Basics is a studio course designed to introduce students with no training to the basic concepts of ballet technique. The emphasis in this class will be placed upon attaining correct body alignment, learning the positions of the arms and feet, and the understanding of the sequence of the ballet class. Students will learn basic dance vocabulary while developing strength and musicality. This is a studio course and may be repeated 2 times for credit.

### **DAA 1202**

#### **Ballet Basics for Pre-Majors**

1 Credit

Ballet Basics is a studio course designed to introduce students who plan to further pursue dance with a foundation knowledge of ballet. The emphasis in this class will be placed upon attaining correct body alignment, positions of the arms and legs, and ability to properly execute ballet steps. Students will learn ballet vocabulary while developing flexibility, strength and musicality. This is a studio course and may be repeated 2 times for credit.

### **DAA 1204**

#### **Ballet II**

2 Credits

Ballet II is a continuation of Ballet I. Student experiences an intensification of barre work through the use of more complex coordination of the arms and legs. Intensified center work includes more complex floor patterns to develop the use of space in movement sequences. Introduction to steps requiring an advanced beginning expertise in ballet. Leotards, tights and

ballet shoes are required. Attendance at and written critiques of dance performances will provide deeper insight into the dance field. May be repeated for credit for a maximum of 4 credit hours.

**DAA 1610L**  
**Dance Composition I**

2 Credits

This creative studio course examines basic tools of the choreographic craft. Students gain experience in structural movement from simple phrases to complex organizational units through motif development, exploration of shape, space, time, transitions and basic compositional forms. The student will explore solo, partner and group structures and use various devices to create their own artistic expressions. Reading, writing and critical analysis of dance included.

**DAA 1680L**  
**Dance Ensemble**

1 Credit

This creative studio course provides an opportunity for dance performers to work in a repertory company and to explore the various devices and skills of ensemble performance. Culminates in a stage performance. This course is repeatable for elective credit. Prerequisite: Audition required.

**DAA 1900**  
**Dance Practicum**

1 Credit

This activity/analysis course provides for the expansion of the student's range of expression and performance/production or pre-professional skills through a directed study experience. Working with a dance faculty advisor, the student will choose, refine, develop, document and present a project whose intent will be the increase of the student's mastery of selected skills from the coursework attempted to date.

Prerequisite: Audition or consent of instructor.

**DAA 1931-9**  
**Special Topics in Dance**

1 Credit

This course is designed to allow flexibility for presenting a variety of selected topics related to dance. Topics will require both an applied and theoretical approach. Examples of topics include: labanotation, technology, dance pedagogy, etc.

**DAA 2105**  
**Modern Dance III**

2 Credits

This studio course is intended to further the understanding of the principles of modern dance technique through more complex exercises and exploration of movement dynamics while developing speed in movement analysis and synthesis. Intricate rhythmical structures and increased spatial awareness will challenge students. Continuing critical analysis will be expected, along with a sharpening of both the student's overall dance knowledge and aesthetic understanding of the dance form. This course may be taken twice for credit.

Prerequisite: Audition or Instructor Permission

**DAA 2106**  
**Modern Dance IV**

2 Credits

This studio course is a continuation of Modern Dance III. Emphasis is on expanding the technical training of the student by increasing complexity of movement capabilities. More emphasis will be placed spatial awareness, rhythmical structures, exploration and on partnering. Continuing critical analysis will be expected, along with a sharpening of both the student's overall knowledge and aesthetic understanding of the dance form. The course will focus more attention on the student's individual dance preparation. Attendance at and written critiques of dance performances will provide deeper insight into the dance field. This course may be taken twice for credit.

Prerequisite: Audition or Instructor Permission

**DAA 2205**  
**Ballet III**

2 Credits

The continuation of ballet training at the beginning of the intermediate level. Emphasis is on strength and technical development through the skilled execution of intermediate level steps and center floor combinations. Uses the technical demands of ballet to further develop stamina and to increase expertise in spatial awareness. Attendance at and written critiques of dance performances increase the student observation and analytical skills.

Prerequisite: Audition or Instructor Permission

**DAA 2206**  
**Ballet IV**

2 Credits

Ballet IV is a continuation of Ballet III. Student experiences an intensification of barre work through the use of more complex coordination of the arms and legs. Intensified center work includes more complex floor patterns to develop the use of space in movement sequences. Introduction to steps requiring an advanced beginning expertise in ballet. Introduction of pointe work if student proficiency is met. Attendance at and written critiques of dance performances will provide deeper insight into the dance field. This course may be taken twice for credit.

Prerequisite: Audition or Instructor Permission

**DAA 2500L**  
**Jazz Dance**

1 Credit

Jazz dance is a studio course designed to introduce the student to the historical development of modern jazz dance, its technique, and methods of expression through exercise, locomotion, and non-locomotion. Emphasis is placed on technique, terminology, movement combination and historical information. This course may be taken twice for elective credit.

**DAA 2611**  
**Dance Improvisation**

2 Credits

Dance Improvisation is a studio course that challenges students to explore movement through spontaneous problem-solving. The course will evoke the students' creative individu-

ality and sense of ensemble. Students are guided through a series of excises that uses sensorial and kinesthetic engagement. Essential tools of improvisation will be acquired. This course is repeatable twice for credit.

**DAN 1600C**  
**Music for Dance**

2 Credits

The study of music and its relationship to the dancer. In addition to basic rhythmic structures the student will learn to use them as a tool in teaching dance and in choreography. The student will further gain insight into the process of selecting appropriate music for various choreographic projects.

**DAN 1750**  
**Dance Conditioning**

2 Credits

Conditioning for strength, tone, flexibility and posture in dance in order to enhance optimal performance. The class serves as a laboratory for movement theory, body alignment and somatic techniques. May be repeated with a change of modality (i.e., Pilates, Body Mind Centering, Yoga) up to six credits.

**DAN 2100**  
**Introduction to Dance**

3 Credits

A lecture/activity course devoted to the study of dance in its many cultural and societal contexts. The course is designed to heighten student awareness of an appreciation of the aesthetic, socio cultural, and vocational roles played by dancers from the art form's historical roots to contemporary trends. Reading, writing, critical analysis and some physical activity are included.

Prerequisites: College level reading and writing skills are required.

**DEH 1002**  
**Dental Hygiene Instrumentation**

1 Credit

Dental Hygiene Instrumentation introduces the student to the theory and practical skills necessary for basic instrumentation. Laboratory sessions are included to demonstrate proficiency in utilizing dental hygiene instruments and dental charting. Additional topics that will be covered in lecture include professionalism and ethics, communication skills, asepsis and maintenance of hand instruments and hand pieces, patient assessment, oral prophylactic procedures, and dental charting. Co-requisites: DEH 1002L, DES 1020C

**DEH 1002L**  
**Dental Hygiene Instrumentation Laboratory**

2 Credits

Dental Hygiene Instrumentation Lab introduces the student to the practical skills necessary for basic instrumentation. Laboratory sessions are included to demonstrate proficiency in utilizing dental hygiene instruments and dental charting. Additional topics that will be covered in laboratory include professionalism and ethics, communication skills, asepsis and

maintenance of hand instruments and hand pieces, patient assessment, oral prophylactic procedures, and dental charting. Co-requisites: DEH 1002, DES 1020C

**DEH 1130**  
**Embryology and Histology**

1 Credit

A comprehensive study of the embryonic, fetal, and postnatal development, and microanatomy of the cells and tissues that comprise the head, neck and oral cavity. Lecture topics include development and histology of the structures of the head, neck, and oral cavity; development and histology of teeth development and histology of the tooth supporting structures; and development and histology of orofacial structures.

Prerequisite: DES 1020C

**DEH 1720**  
**Preventive Dentistry**

1 Credit

This is a one hour credit course designed to introduce the student to the practice and philosophy of preventive dentistry. The student will learn the roles of the dental hygienist, methods of dental biofilm control, formation of tooth deposits, stains, and dental caries, oral physiotherapy, inter dental care, oral health care products and the use of fluorides and sealants. Proper communication and behavior modification skills are emphasized to facilitate the role of the dental hygienist as an educator.

**DEH 1800C**  
**Clinical Dental Hygiene I**

3 Credits

Clinical Dental Hygiene I is the first term for direct patient care. Students apply the principles and perform clinical activities for the prevention of oral disease, including data collection, prophylaxis, application of prevention agents, and oral home care instructions. This is a combined course with classroom interactions and clinical experience. Students are required to successfully complete a number of procedures.

Prerequisites: DEH 1002, DEH 1002L, DES 1800 and DES 1800L

**DEH 1802C**  
**Clinical Dental Hygiene II**

2 Credits

DEH 1802C is a continuation of DEH 1800C. It is a combined course that provides discussion of clinical activities along with clinical experience. This is the second term for direct patient care. Students apply the principles and perform clinical activities for the prevention of oral disease, including patient assessment, treatment planning, scaling, debridement, root planning, application of preventive agents, oral irrigation and antimicrobial agents, treatment of hypersensitivity, and oral home care instructions. Additional topics include oral communication skills, instrument sharpening, pulp vitality testing, special needs patients, nutritional counseling, ultra-sonics, and air polishing. Students are required to successfully complete a number of procedures.

Prerequisite: DEH 1800C



**DEH 1811****Dental Ethics, Jurisprudence**

1 Credit

This course is designed to provide knowledge of professional ethics and legal responsibilities, professional organizations, state and dental practice acts and continuing education regulations and requirements. Dental office management will be introduced to provide dental hygiene students with the business and professional skills necessary to practice in an office and/or alternate practice setting. Emphasis will be placed on the student's ethical and legal roles as a dental hygienist and on the business aspects of the profession. In addition, preparation for the National Board examination and test taking skills will be covered.

Prerequisites: DEH 2804C, DEH 2702

Co-requisite: DEH 2702L

**DEH 2300****Pharmacology and Oral Medicine**

3 Credits

Pharmacology, oral medicine, anesthesiology, and dental emergencies introduces principles of basic pharmacology as they pertain to the practice of dentistry and dental hygiene. It emphasizes actions and reactions of medications commonly used in the dental office or taken by dental patients. Topics include terminology, pharmaceutical references, prescriptions and abbreviations, pharmacokinetics, drugs used in dentistry and their pharmacokinetics, drugs that may alter dental treatment and their pharmacokinetics, drugs used in dental emergencies, drug abuse, and nitrous oxide monitoring (as mandated in the Florida State Administrative Code Chapter 64B 14).

Prerequisites: DEH 1802C, DEH 2400

Co-requisites: DEH 2804C, DEH 2809

**DEH 2400****General and Oral Pathology**

3 Credits

General and Oral Pathology presents the principles of general pathology in relation to diseases of the teeth, soft tissue, and supporting structures of the oral cavity, as well as general pathologic conditions affecting the head and neck. Topics include terminology and diagnostic procedures, variants of normal conditions, benign conditions of unknown cause, inflammation and repair, caries and pulpal pathology, immune response, oral diseases with immunological pathogenesis, autoimmune diseases, infectious diseases, embryology of the head and neck, developmental disorders of the soft tissues and teeth, developmental cysts, neoplasia, odontogenic tumors, other tumors of oral structures, genetics, genetic syndromes and diseases of the head and neck, general pathologic conditions affecting the oral structures, TMJ disorders, and dental implants.

Prerequisites: DEH 1130, MCB 2000 and MCB 2000L

Co-requisites: DEH 1800C, DEH 2602

**DEH 2602****Periodontology**

2 Credits

This course provides information on the principles of periodontology pertinent to dental hygiene practice. Topics include tissues of the periodontium, epidemiology of periodontal diseases, classification of periodontal diseases, disease prevention, disease treatment and management, drug therapy, immunology and host defense mechanisms, microorganisms associated with periodontology, surgical and nonsurgical treatment, implantology and maintenance, and periodontal endodontic emergencies.

Prerequisites: DEH 1130, MCB 2000 and MCB 2000L

Co-requisites: DEH 1800C, DEH 2400

**DEH 2604****Periodontology II**

1 Credits

This course provides information on the principles of periodontology pertinent to dental hygiene practice. Topics include periodontal care modifications for systemic conditions, decision making during treatment planning, helping patients change behavior, periodontal surgical concepts, periodontal maintenance, periodontal/endodontic emergencies, implantology and maintenance, and future directions of periodontal patients.

Prerequisite: DEH 2602

**DEH 2702****Community Dental Health**

2 Credits

This course is designed to provide knowledge of attitudes, skills, and behaviors necessary to promote dental health and prevent disease through organized community based programs. Students will be responsible for assessing, planning, implementing, and evaluating procedures in a community oral health program.

Prerequisite: DES 1830C

Co-requisites: DEH 2804C, DEH 2809

**DEH 2702L****Community Dental Health Practicum**

1 Credit

This course is designed to provide the student with community based experiences in public health settings for the promotion of dental health and the prevention of dental disease.

Students will apply principles of program assessment, implementation, and evaluation procedures for all sites visited.

Prerequisite: DEH 2702

Co-requisites: DES 2502, DEH 1811

**DEH 2804C****Clinical Dental Hygiene III**

3 Credits

Clinical Dental Hygiene III, a continuation of DEH 1802C, is a combined course that provides discussion of clinical activities along with clinical experience. This is the third term for direct patient care. Students apply the principles and demonstrate improved patient care skills while performing clinical activities

for the prevention of oral disease, including patient assessment, treatment planning, scaling, debridement, root planning, ultra-sonics, and air polishing application of preventive agents, oral irrigation and antimicrobial agents, and oral home care instructions.

Prerequisites: DEH 1802C, DES 1830C

Co-requisites: DEH 2300, DEH 2809

### **DEH 2806C**

#### **Clinical Dental Hygiene IV**

4 Credits

Clinical Dental Hygiene IV is a continuation of DEH 2804C. This course combines advanced clinical activities with previous clinical experience. This is the fourth term for direct patient care, which emphasizes quality patient care, time constraints, and communication skills. Students will continue to perform clinical activities for the prevention of oral disease, including patient assessment, treatment planning, scaling, debridement, root planning, ultra-sonics, and air polishing application of preventive agents, oral irrigation and antimicrobial agents, and oral home care instructions. Additional experience will include office management, legal aspects, ethics, dental hygiene practice settings, dentistry and dental hygiene regulation, and general office procedures. Students are required to successfully complete an advanced number of procedures.

Prerequisites: DEH 2804C and DEH 2809

Co-requisites: DEH 1811 and DES 2502

### **DEH 2809**

#### **Advanced Clinical Procedures**

2 Credit

Advanced Clinical Procedures is a lecture course that is a continuation of concepts and clinical procedures introduced in previous clinical courses. This course provides discussion of case based studies and the application of specialized care treatment procedures. Students develop critical thinking skills based on the application of theory and advanced dental hygiene procedures. Topics include dietary surveys, recall systems and applied techniques with an emphasis on patients having specialized needs and unusual case factors that may complicate routine care.

Prerequisites: DEH 1802C, DEH 2400

Co-requisites: DEH 2300, DEH 2804C

### **DEP 1004**

#### **Developmental Psychology of the Life Span**

3 Credits

Emphasizes developmental and psycho social growth from conception to death. Topics include Piaget's stages of cognitive development, Erickson's "Eight Ages," the concept of maturity, changing personalities in later adulthood, theories of aging and death and dying.

Prerequisite: College level reading and writing skills are required.

### **DEP 1004H**

#### **Honors Developmental Psychology of the Life Span**

3 Credits

Same as for DEP 1004 with honors content. Honors Program permission required.

Prerequisite: College level reading and writing skills are required.

### **DEP 2102**

#### **Child Development**

3 Credits

Focuses on the development and psychosocial aspects of the child through adolescence. Topics include heredity, maturity and social determinants of child behavior. College level reading and writing skills are required.

### **DES 1020C**

#### **Oral, Head, and Neck Anatomy**

2 Credits

Oral, Head and Neck Anatomy is a detailed study of the gross anatomy of the head and neck, and the external and internal morphology of the primary and permanent dentition. Anatomical models of the skull and teeth along with videos and workbooks allow the student to apply didactic information in the laboratory setting.

Co-requisites: DEH 1002, DEH 1002L

### **DES 1100**

#### **Dental Materials**

2 Credits

Dental Materials focuses on the nature, qualities, composition, and manipulation used in dentistry. The primary goal of this course is to enhance the student's ability to make clinical judgments regarding the use and care of dental materials based on how these materials react in the oral environment. Lecture topics include dental material standards, dental material properties, impression materials, gypsum products, mouth guards and whitening systems, dental bases, liners and cements, temporary restorations, classifications for restorative dentistry, direct restorative materials, indirect restorative materials, polishing procedures for dental restorations, removable dental prostheses, sealants and implants. Students will have hands on laboratory experience in the proper manipulation of dental materials commonly employed in dentistry. Some of the material taught in DES 1100C provides didactic, practical, and clinical experience necessary for the dental hygiene student to perform expanded functions as required by, and outlined in Florida Statue Title XXXII, Chapter 466, Section 466.024, and in the Florida Administrative Code Chapter 64, Sections B5 16.001, B5 16.002, and B5 16.006 through B5 16.010.

Prerequisites: CHM 1032, CHM 1032L, MCB 2000, MCB 2000L

Co-requisites: DES 1100L

### **DES 1100L**

#### **Dental Materials Laboratory**

1 Credit

This course is designed to provide basic knowledge and laboratory practice necessary for the proper manipulation of dental materials commonly employed in dentistry.

Prerequisites: CHM 1032, CHM 1032L

Co-requisites: DES 1100, DES 1830C

**DES 1200****Dental Radiology**

2 Credits

This course provides the student with fundamental knowledge of the nature, physics and biological effects of radiation to maximize understanding of proper control and safety precautions to be used in exposing, processing, mounting, and evaluating diagnostically acceptable radiographs.

Co-requisites: DES 1020C, DES 1200L

**DES 1200L****Dental Radiology Laboratory**

1 Credit

This course provides the student with laboratory experience in exposing, processing, mounting, and critiquing diagnostically acceptable intraoral and extra-oral radiographs.

Co-requisites: DES 1020C, DES 1200

**DES 1600****Dental Office Emergencies**

2 Credits

This course is designed to teach students basic dental medical emergencies. Special emphasis will be placed on etiology, signs, treatment, prevention of medical emergencies and will provide students with an understanding of protocols, and use of equipment for emergencies in the dental environment.

**DES 1800****Introduction to Clinical Procedures**

2 Credits

This core course introduces the dental hygiene student to the basic concepts of clinical practice. Topics include the history of dentistry, dental health team members, professional organizations, medical/dental history, vital signs, operation and maintenance of dental equipment, operator/patient, four-handed techniques, oral evacuation, dental charting, cleaning of removable appliances, coronal polishing, and fluoride application techniques.

Co-requisites: DES 1800L, DEH 1002 and DEH 1002L

**DES 1800L****Introduction Clinical Procedures Lab**

1 Credit

This course is designed for the practical application of professionalism and clinical procedures. Development of introductory skills is practiced in the clinical setting. Demonstration of required procedures is evaluated using preset standards.

Co-requisites: DES 1800, DEH 1002, DEH 1002L

**DES 1830C****Expanded Duties for Dental Hygienists**

2 Credits

Expanded Duties for Dental Hygienists is a combined lecture and clinical course designed to provide didactic, practical, and clinical experience necessary for the dental hygiene student to perform expanded functions as required by, and outlined in Florida Statue Title XXXII, Chapter 466, Section 466.024, and in Florida Administrative Code Chapter 64, Sections B5 16. 001, B5 16.002, and B5 16.006 through B5 16.010.

Prerequisite: DEH 1800C

Co-requisites: DES 1100, DES 1100L, DEH 1802C

**DES 2051****Pain Control in Dentistry**

2 Credits

This course acquaints the dental hygienist with the academic and practical aspects of local anesthetics in dental patients. It provides the student with the required training and information to safely and effectively relieve pain and reduce anxiety in the dental patient. It requires that the student apply knowledge from pharmacology, biochemistry, physiology and anatomy. The student should also realize the competency and ultimate proficiency in the administration of local anesthesia requires repeated administration and self-reeducation. This course is specifically designed to obtain certification for local anesthesia in the State of Florida.

Prerequisites: DES 1020C

Co-requisite: DES 2051L

**DES 2051L****Pain Control in Dentistry Laboratory**

1 Credit

This course acquaints the dental hygienist with the academic and practical aspects of local anesthetics in dental patients. It provides the student with the required training and information to safely and effectively relieve pain and reduce anxiety in the dental patient. It requires that the student apply knowledge from pharmacology, biochemistry, physiology and anatomy. The student should also realize the competency and ultimate proficiency in the administration of local anesthesia requires repeated administration and self-reeducation. This course is specifically designed to obtain certification for local anesthesia in the State of Florida.

Prerequisites: DES 1020C

Co-requisite: DES 2051

**DES 2502****Office Management**

1 Credit

This course enables the student to gain knowledge and proficiency in all procedures necessary for office management. The course includes telephone techniques, ordering supplies, recall system, appointment control, bookkeeping, billing, and insurance procedures.

Prerequisites: DEH 2804C, DEH 2809

Co-requisite: DEH 2702L

**DIE 1121****Management of Food and Nutrition Services**

3 Credits

This course introduces students to food service management in non-commercial operations such as hospitals, schools, and long-term care facilities. Content includes food service management, personnel and communications, sanitation and safety, and business operations.

Prerequisite: FSS 2100 and HFT 2210 with a minimum grade of C.

Co-requisite: FSS 1500 and FSS 2120

**DIE 2210****Nutrition Therapy I**

3 Credits

This course presents information on the fundamentals of nutrition science, medical nutrition therapy, nutrition screening and documentation, and nutrition intervention and client care.

Prerequisite: DIE 1121 and HUN 2203 with a minimum grade of C.

Co-requisite: DIE 2271

**DIE 2271****Clinical Nutrition II**

3 Credits

This course provides an advanced study of dietetics and the application of the science of nutrition to various disease states.

**DIE 2940****Dietary Manager Food Practicum**

3 Credits

This course provides field experience hours to meet required competencies in the areas of foodservice, personnel and communications, and food sanitation and safety as identified by the association of food and nutrition professionals (ANFP). The content of these hours is determined by the exam content outline for the certified dietary manager (CDM) credentialing exam.

Prerequisites: DIE 1121 with a minimum grade of C and College-level reading, writing and math skills required.

**DIE 2942****Dietary Manager Clinical Practicum**

3 Credits

This course provides field experience hours to meet required competencies in nutrition, foodservice, personnel and communications, food sanitation and safety, and business operations as identified by the association of food and nutrition professionals (ANFP). The content of these hours is determined by the exam content outline for the certified dietary manager (CDM) credentialing exam.

Prerequisite: DIE 2210 with a minimum grade of C, and college-level reading, writing, and math skills are required.

**DSC 1002****Introduction to Terrorism**

3 Credits

This course teaches the foundations of national security as it relates to international and domestic terrorism and the United States engagement in the war against terrorism. This course is a survey of the history and development of terrorist organizations and extreme political militancy both in the United States and the world.

**DSC 1003****Introduction to Homeland Security**

3 Credits

This course provides an introspective review of the history U.S. Homeland Defense Initiative and will explore the evolution of homeland security in the United States including an overview of the government agencies and laws involved.

**DSC 2033****Introduction to Terrorist Tactics and Weapons**

3 Credits

This course introduces students to various types of weapons of mass destruction. The student will be introduced to basic principles of weapons of mass destruction, recognition, identification, decontamination, and treatment protocols. The student will understand the importance of personal protective equipment and its proper uses and understand the toxicology, physical and chemical properties associated with weapons of mass destruction.

**DSC 2570****Introduction to Cyber-Terrorism**

3 Credits

This course is designed to provide students with a general understanding of what cyber-terrorism is and the major issues associated with cyber-security. This course will cover the technological, social, and legal controls implemented by government and private entities to secure electronic communications and data networks from manipulation, theft and attack by enemies of the state, terrorists, hackers, competitors, and other adversaries. Students will learn basic computer terminology, history, policy, laws, and enforcement protocols as it related to home security.

**DSC 2590****Intelligence Analysis and Security Management**

3 Credits

This course examines intelligence analysis and its indispensable relationship to the security management of terrorist attacks, man-made disasters and natural disasters. It also explores vulnerabilities of our national defense and private sectors, as well as the threats posed to these institutions by terrorists, man-made disasters, and natural disasters. Students will discuss substantive issues regarding intelligence support of homeland security measures implemented by the United States and explore how the intelligence community operates.

**EAP 0100****Speech/Listening I**

3 Credits

A low beginning listening and speaking course in which students develop the ability to understand and participate in brief conversations on familiar topics and begin to develop their pronunciation. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: Required minimum score on placement test

**EAP 0120****Reading I**

3 Credits

A low beginning course for EAP students with emphasis on comprehension of limited written materials. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: Required minimum score on placement test

**EAP 0140****Writing I**

3 Credits

A low beginning writing course in which students develop the ability to write grammatically correct sentences and learn basic organizational skills for paragraph writing. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: Required minimum score on placement test

**EAP 0160****Grammar I**

3 Credits

Low beginning grammar course for EAP students with emphasis on basic verb tenses and simple sentence patterns. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: Required minimum score on placement test

**EAP 0200****Speech/Listening II**

3 Credits

A high beginning listening and speaking course in which students continue to develop their ability to understand and participate in conversations and further develop their pronunciation skills. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0100

**EAP 0220****Reading II**

3 Credits

A high beginning reading course for EAP students with emphasis on developing reading skills and vocabulary. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0120.

**EAP 0240****Writing II**

3 Credits

A high beginning writing course in which students continue to develop writing skills in the context of guided discourse with an emphasis on logical organization and mechanics. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0140

**EAP 0260****Grammar II**

3 Credits

A high beginning grammar course for EAP students with emphasis on basic grammatical structures and statement/question patterns. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0160

**EAP 0300****Speech/Listening III**

3 Credits

A low intermediate listening/speaking course in which students continue to develop their ability to understand and participate in conversations and discussions, and further improve their pronunciation. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0200

**EAP 0320****Reading III**

3 Credits

A low intermediate reading course for EAP students with emphasis on vocabulary expansion and application of critical reading skills. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0220

**EAP 0340****Writing III**

3 Credits

A low intermediate writing course in which students continue to develop the writing skills necessary to produce organized paragraphs on a variety of academic topics. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0240

**EAP 0360****Grammar III**

3 Credits

A low intermediate grammar course for EAP students with an emphasis on increasing the accuracy of grammatical structures appropriate to classroom discussion and the writing of academic paragraphs. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0260

**EAP 0400****Speech/Listening IV**

3 Credits

A high intermediate listening/speaking course in which students continue to develop their ability to understand and participate in more complex classroom discussions. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0300

**EAP 0420****Reading IV**

3 Credits

A high intermediate reading course for EAP students with emphasis on extensive reading and the enhancement of critical reading skills. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0320

**EAP 0440****Writing IV**

3 Credits

A high intermediate writing course in which students further develop their writing skills by acquiring the ability to write more sophisticated structured academic paragraphs and essays. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0340

**EAP 0460****Grammar IV**

3 Credits

A high intermediate grammar course for EAP students with emphasis on verb tenses and complex syntactic structures. Students must obtain a grade of "C" or better in order to advance to the next level of EAP coursework.

Prerequisite: EAP 0360

**EAP 1520****Reading V**

3 Credits

A low advanced college level reading skills course in which students will be equipped with the skills necessary for the efficient processing of general academic texts.

Prerequisite: EAP 0420

Co-requisite: EAP 1520L

**EAP 1520L****Reading Lab V**

1 Credit

A low advanced college level reading skills lab designed to increase students' active and passive vocabulary.

Prerequisite: EAP 0420

Co-requisite: EAP 1520

**EAP 1540****Writing V**

3 Credits

A low advanced college-level writing course for EAP students in which students begin to write basic, structured academic essays with an emphasis on accuracy and cohesiveness. Students also learn to execute other related writing tasks.

Prerequisites: EAP 0440, EAP 0460

Co-requisite: EAP 1540L

**EAP 1540L****Writing Lab V**

1 Credit

A low advanced college-level grammar lab for EAP students designed to comprehensively review and expand the grammatical structures necessary to write academic English.

Prerequisites: EAP 0440, EAP 0460

Co-requisite: EAP 1540

**EAP 1620****Reading VI**

3 Credits

A high advanced college-level reading skills course in which students will further develop the skills necessary for the efficient processing of general academic texts.

Prerequisites: EAP 1520, EAP 1520L

Co-requisite: EAP 1620L

**EAP 1620L****Reading Lab VI**

1 Credit

A high advanced college-level reading skills lab designed to further increase the active and passive vocabulary of the student.

Prerequisites: EAP 1520, EAP 1520L

Co-requisite: EAP 1620

**EAP 1640****Writing VI**

3 Credits

A high advanced college-level writing course for EAP students in which students develop the ability to write a variety of college level essays with sophistication, fluency, and accuracy and execute other academic writing tasks.

Prerequisites: EAP 1540, EAP 1540L

Co-requisite: EAP 1640L

**EAP 1640L****Writing Lab VI**

1 Credit

A high advanced college-level grammar lab for EAP students designed to comprehensively review and expand the grammatical structures necessary to write academic English.

Prerequisites: EAP 1540, EAP 1540L

Co-requisite: EAP 1640

**ECO 2013****Principles of Macroeconomics**

3 Credits

Introduction to the theory of national income determination with emphasis on fiscal and monetary policies. This course includes analysis of full employment, price stability and economic growth.

Prerequisites: College level reading, writing and math skills are required.

**ECO 2023****Principles of Microeconomics**

3 Credits

Introduction to the theory of the market system with emphasis on supply and demand. This course includes analysis of price and output decisions under different market structures.

Prerequisites: College level reading, writing and math skills are required.

**EDF 1005****Introduction to the Teaching Profession**

3 Credits

This is a survey course including historical, sociological and philosophical foundations of education, governance and finance of education, education policies, legal, moral and ethical issues and the professionalism of teaching. Students will be provided information on the Florida Educator Accomplished Practices, Florida Standards, and the Professional Educator Competencies. Students are required to complete a minimum of 15 hours of field-based experience with children and youth in schools or similar settings and not via virtual modes of film or Internet.

Prerequisites: College level reading and writing skills are required.

**EDF 2085****Introduction to Diversity for Educators**

3 Credits

Designed for the prospective educator, this course provides the opportunity to explore issues of diversity, including an understanding of the influence of exceptionalities, culture, family, gender, sexual orientation, and socioeconomic status, religion, languages of origin, ethnicity and age upon the education experience. Students will explore personal attitudes toward diversity and exceptionalities. Students will be provided information on the Florida Educator Accomplished Practices, Florida Standards, and the Professional Educator Competencies. A minimum of 15 hours of field-based experience working with diverse populations of children and youth in schools or similar settings is required. The field experience should not be via virtual modes of film or Internet. College level reading and writing skills are required.

Prerequisite: EDF 1005

**EDP 2002****Educational Psychology**

3 Credits

Focuses on the teaching/learning process, including the conditions and determinants necessary for efficiency and the application of related psychological principles. College level reading and writing skills are required.

Prerequisite: PSY 2012

**EEC 1300****Planning the Early Childhood Program**

3 Credits

Introduces planning strategies for creating significant learning experiences for children 3 to 5 years of age. Emphasis is on maturity levels, daily activities, assessment and development of personal teaching techniques.

**EEC 1308****Enhancing Intellectual Development in Early Childhood**

3 Credits

Covers the theory of specific teaching skills in languages, mathematics, social studies and problem solving.

**EEC 1311****Crafts in Early Childhood**

3 Credits

Focuses on using crafts to promote physical and mental development, with an emphasis on clay, paint, chalk and crayons.

**EEC 1401****The Family and Early Childhood Education**

3 Credits

Addresses professional responsibilities in working with parents, with an emphasis on sharing information, joint problem solving, home visits and parents meetings.

**EEC 1521****Early Childhood Center Management**

3 Credits

Covers the management and delivery of educational services, with an emphasis on planning, equipment, space, security, and educational goals.

**EEC 1601****Observing and Recording Children's Behavior**

3 Credits

This course is designed to provide the student with an overview of the importance of observation, screening and assessment in planning developmentally-appropriate programs for young children. The course covers the use of a variety of observational methods and developmentally appropriate assessment practices. Ten hours of observation in a licensed early childhood program is required.

**EEC 1603****Child Guidance**

3 Credits

This course provides child guidance and classroom management strategies to foster the psychosocial development of young children. Positive guidance is emphasized. Ten hours of observation in a licensed early childhood program is required.

**EEC 1721****Physical Development in the Early Childhood Setting**

3 Credits

Focuses on teaching techniques for helping students develop large and small motor coordination, and improve balance. Topics include maturational changes and growth patterns.

**EEC 1941****Child Care Practicum I**

3 Credits

Presents the opportunity to practice skills and translate theoretical knowledge into developmentally appropriate early childhood education experiences (240 clock hours). Prerequisite waiver by permission of instructor required.

Prerequisite: EEC 1521

Co-requisite: EEC 1300

### **EEC 1943**

#### **Child Care Practicum II**

3 Credits

A continuation of EEC 1941; presents the opportunity to practice skills and translate theoretical knowledge into developmentally appropriate early childhood education experiences (240 clock hours).

Prerequisites: EEC 1941.

### **EEC 2270**

#### **Meeting Special Needs of Children in Groups**

3 Credits

Focuses on the special language and cultural needs of pre-school disadvantaged students. Emphasis is on the strategies for increasing communication between children and adults, communication as part of the socialization process, and the pros and cons of English as a second language.

### **EEC 2271**

#### **Children with Special Needs**

3 Credits

Focuses on identifying and understanding the needs of children with cultural differences, the handicapped, gifted and talented. Emphasis is on mainstreaming in the classroom setting.

### **EEC 2527**

#### **Legal and Financial Issues in Child Care**

3 Credits

This course is designed to provide advanced-level Director credential training in early childhood management. The course focuses on financial planning, budgeting, compensation, financial resource development, marketing, record keeping, legal obligations and regulatory requirements.

Prerequisite: EEC 1521

### **EEC 2732**

#### **Health, Safety and Nutrition for Young Children**

3 Credits

This course will provide students with knowledge of appropriate health, safety, and nutritional practices implemented in developmentally-appropriate educational programs for children ages birth through eight years. Health and safety regulations, legal issues, community resource and emergency procedures are addressed. Ten hours of observation in a licensed early childhood program is required.

Prerequisite: Current pediatric first aid and CPR certification.

### **EET 1036C**

#### **Basic AC and DC**

3 Credits

This course is for the student who has previously taken EET 1083C, Electronic Orientation, or is taking both classes in the same semester. It covers voltage, current, resistance, and power concepts in DC and AC circuits. It also includes problem solving in AC and DC circuits using Ohm's Law with an emphasis on constructing, measuring performance, trouble-

shooting, and repairing circuits. Laboratory exercises are included. College level reading, writing and math skills required. Prerequisites: MAC 1105.

### **EET 1037C**

#### **Circuit Analysis**

3 Credits

Covers electronic filters, resonance, and RC and RL time constants concepts. Also covers AC and DC theorems used to analyze complex circuits. Laboratory activities such as constructing AC and DC circuits, verifying calculated circuit performance, and identifying and repairing circuit faults are included.

Prerequisites: EET 1036C.

### **EET 1083C**

#### **Electronics Orientation**

3 Credits

Provides an introduction to computer operating systems, and to computer programs used in the analysis of electronic circuits. Also covers the use of electronics laboratory equipment such as digital multi meters, oscilloscopes, function generators, breadboards and trainers used in the program. Basic soldering skills included. Laboratory exercises are included.

Prerequisites: College level reading, writing and math skills required.

### **EET 1141C**

#### **Solid State Devices**

3 Credits

Covers the basic concepts of solid state devices used in electronics with an emphasis on semiconductor materials, diodes, transistors, (bipolar and FET), thyristors, basic operational amplifiers and related test equipment. Laboratory exercises are included. Prerequisite: EET 1036C.

### **EET 1142C**

#### **Solid State Circuits**

3 Credits

Covers the basic concepts of analog circuits. Topics include multistage amplifiers, linear integrated circuits, basic power supplies and filters, audio amplifiers, oscillators, motor controls, cathode ray tubes, optoelectronic devices and related test equipment.

Prerequisite: EET 1141C

### **EET 2155C**

#### **Linear Integrated Circuits**

3 Credits

Covers analog integrated circuits, operational amplifiers, power supply regulator feedback, waveform generators, special amplifiers and frequency response. Laboratory exercises are included. A special fee will be charged for this course.

Prerequisite: EET 1142C

### **EET 2326C**

#### **Communications Systems I**

3 Credits

Provides an introduction to the communications field. Topics include AM, FM, television and single sideband multiplexing.



Laboratory exercises are included. A special fee will be charged for this course.

Prerequisite: EET 2155C

### **EET 2939**

#### **Electronics Engineering Technology Capstone**

3 Credits

The capstone course is designed for the student to demonstrate his/her knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project based experience. The student's project requirements will be designed in concert with his/ her area of curriculum emphasis.

### **EGN 2122C**

#### **Geometric Dimensioning and Tolerancing**

3 Credits

This course provides the fundamentals of geometric dimensioning and tolerancing (gd and t) as based on the American Society of Mechanical Engineers standard ASME Y14.5m 1994. The coverage of topics includes geometric tolerancing symbols and terms, the rules of geometric dimensioning and tolerancing, datums, material condition symbols, tolerances of form, profile, orientation and run-out, and location tolerances.

Prerequisite: ETI 1403

### **EME 2040**

#### **Introduction to Technology for Educators**

3 Credits

Application of instructional design principles for the use of technology to enhance the quality of teaching and learning in the classroom. The course includes hands-on experience with educational media, emerging technologies, and hardware, software, and peripherals for the personal computer as well as data-driven decision-making processes. Identification of appropriate software for classroom applications, classroom procedures for integrating technologies with emphasis on legal and ethical use, and effective instructional strategies for teachers and students in regard to research, analysis, and demonstration of technology. Students will be provided an overview of the Florida Educator Accomplished Practices, Sunshine State Standards, the Professional Educator Competencies and the national Education Technology Standards. College level reading and writing skills are required.

Prerequisite: EDF 1005

### **EMS 1119**

#### **Emergency Medical Technician**

7 Credits

Provides the lecture, theory and discussion in compliance with the National Emergency Medical Services Education Standards the Emergency Medical Technician. Also includes additional content related to esophageal intubation, intravenous fluid maintenance and automated defibrillation.

Prerequisites: ENC 0022 or ENC 0055, MAT 0018, REA 0019 or equivalent HCC placement test scores.

Co-requisites: EMS 1119L, EMS 1431

### **EMS 1119L**

#### **EMT Practicum**

3 Credits

Provides the competency based practice and testing of skills presented in the companion lecture course. Those skills include all the required skills of the National Emergency Medical Services Education Standards for the Emergency Medical Technician plus the additional skills of esophageal intubation, intravenous maintenance and automated defibrillation. Includes strenuous skills such as lifting and patient carrying.

A special fee will be charged for this course.

Prerequisites: ENC 0022 or ENC 0055, MAT 0018, REA 0019 or equivalent HCC placement test scores.

Co-requisites: EMS 1119L, EMS 1431

### **EMS 1431**

#### **EMT Clinical**

2 Credits

Provides the field experience and hospital clinical portions of the National Emergency Medical Services Education Standards for the Emergency Medical Technician. Includes strenuous skills such as lifting and carrying techniques in actual patient care situations. Exposure to blood and blood borne pathogens is possible in patient care situations. A special fee will be charged for this course. An additional cost for a criminal background check is required. Drug testing is required.

Prerequisites: ENC 0022 or ENC 0055, MAT 0018, REA 0019 or equivalent HCC placement test scores.

Co-requisites: EMS 1119L, EMS 1431

### **EMS 2551C**

#### **Advanced Cardiac Life Support**

2 Credits

The American Heart Association's Advanced Cardiac Life Support Provider course is designed to provide instruction and skill testing of specific therapies for various cardiac emergencies. The target population for this course is the practicing physician, paramedic or critical care nurse. Includes strenuous skills such as lifting and carrying techniques in actual patient care situations.

Prerequisite: Current CPR certification required on the first class day

### **EMS 2617C**

#### **Assessment Based Management and Proficiency**

2 Credits

Provides a review of the didactic and practical skills of the paramedic certificate program followed by written and practical examinations.

### **EMS 2621**

#### **Paramedic Phase I**

7 Credits

Provides knowledge and skills contained in the 2009 National EMS Education Standards for Paramedic, Module 1: Preparatory, Module 2: Anatomy and Physiology, Module 3: Medical Terminology, Module 4: Pathophysiology, Module 5: Life Span Development, Module 6: Public Health, Module 7: Pharmacol-

ogy, Module 8: Airway Management, Respirations and Ventilations, Module 9: Patient Assessment, , Module 13: Special Populations, Module 14: EMS Operations.  
Co-requisite: EMS 2621L

**EMS 2621L****Paramedic Phase I Practicum**

4 Credits

Provides knowledge and skills contained in the 2009 National EMS Education Standards for Paramedic, Module 1: Preparatory, Module 2: Anatomy and Physiology, Module 3: Medical Terminology, Module 4: Pathophysiology, Module 5: Life Span Development, Module 6: Public Health, Module 7: Pharmacology, Module 8: Airway Management, Respirations and Ventilations, Module 9: Patient Assessment, , Module 13: Special Populations, Module 14: EMS Operations.

Co-requisite: EMS 2621

**EMS 2622****Paramedic Phase II**

8 Credits

Provides knowledge and skills contained in the 2009 National EMS Education Standards for Paramedic, Module 10: Medicine (specifically, cardiovascular and EKG), Module 11: Shock and Resuscitation, Module 12: Trauma.

Prerequisites: EMS 2621, EMS 2621L

Co-requisite: EMS 2622L

**EMS 2622L****Paramedic Phase II Practicum**

4 Credits

Provides knowledge and skills contained in the 2009 National EMS Education Standards for Paramedic, Module 10: Medicine (specifically, cardiovascular and EKG), Module 11: Shock and Resuscitation, Module 12: Trauma.

Prerequisites: EMS 2621, EMS 2621L

Co-requisite: EMS 2622

**EMS 2623****Paramedic Phase III**

6 Credits

Provides knowledge and skills contained in the 2009 National EMS Education Standards for Paramedic, Module 10: Medicine (specifically, cardiovascular and Advanced Cardiac Life Support (ACLS), Module 13: Special Populations.

Prerequisites: EMS 2622, EMS 2622L

Co-requisite: EMS 2623L

**EMS 2623L****Paramedic Phase III Practicum**

2 Credits

Provides knowledge and skills contained in the 2009 National EMS Education Standards for Paramedic, Module 10: Medicine (specifically, cardiovascular and Advanced Cardiac Life Support (ACLS), Module 13: Special Populations.

Prerequisites: EMS 2622 and EMS 2622L

Co-requisites: EMS 2623

**EMS 2666****Paramedic Clinical I**

3 Credits

Focuses on the demonstration of EMT and basic paramedic skills in actual patient care situations with an emphasis on initial assessment and management of airway management, intravenous and medication administration, and patient and stretcher handling in field and hospital settings. Includes physically strenuous activity. Laboratory fee assessment is made for professional liability insurance. A special fee will be charged for this course. Prerequisite: Admission to Paramedic program.

**EMS 2667****Paramedic Clinic II**

3 Credits

Focuses on the demonstration of skills of the primary provider of patient care in actual situations. Topics include advanced assessment and evaluation, EKG monitoring and rhythm interpretation, defibrillation and cardioversion, chest decompression, and advanced airway management. Involves physically strenuous activity. A special fee will be charged for this course.

Prerequisite: EMS 2666

**EMS 2668****Paramedic Clinic III**

3 Credits

An advanced clinical experience focusing on decision making and direct patient care that stresses the completion of competencies introduced in previous courses and includes a field preceptor transition program.

Prerequisite: EMS 2667

**ENC 0022****Developmental Writing**

4 Credits

Designed to provide instruction in written communication skills. Basic grammar and rhetorical skills including parts of speech, sentence structure, mechanics, and word choice will be introduced. Emphasis is placed on learning to express ideas in clear, logical standard English and on paragraph and essay development. This class does not satisfy general education requirements and generates compensatory credit only.

**ENC 0027****Developmental Reading and Writing**

4 Credits

This developmental course offers integrated reading and writing instruction. It is designed to prepare students for successful completion of college-level courses requiring intensive reading and writing. Skills taught focus on improving literal and critical comprehension, vocabulary, and essay writing skills. The connection between reading and writing is reinforced through reading response opportunities. This course does not satisfy general education requirements and generates compensatory credit only.

Prerequisite: This course is for students designated "non-exempt from placement testing/appropriate placement score. Students also must have the ability to communicate orally in English and understand spoken English.

**ENC 0055****Developmental Writing Module**

1 Credits

Conducted in a lab setting, this is a modular course designed to allow students to focus on their individual grammar, punctuation, mechanics, and language usage needs to supplement college-credit English courses (not applicable for degree completion). A student is administered a diagnostic test to identify skills for an individualized learning plan so that he or she works on only the skills not yet mastered. Possible topics in the learning plan include basic grammar, sentence skills, mechanics, and language usage and style. While addressing specific skills utilized in ENC 1101, this course may be taken prior to, in conjunction with, or independently from that course. The course may be repeated up to eight times for successful completion of the individualized learning plan. Grading is Pass/Fail (S/N). This course will be available to non-exempt students who test within three points of the cut-off score for ENC 1101 and exempt students who are identified by their instructors in ENC 1101.

**ENC 1101****English Composition I**

3 Credits

Focuses on the writing process of various rhetorical strategies with consideration of the writer's situation, including purpose, limitations of time, and audience. Students must write unified, coherent, and developed essays that include strong theses as well as introduction, body, and conclusion paragraphs. Students must demonstrate effective sentence structure and observe conventions of standard English grammar and usage. Prerequisite requirements: College level reading and writing skills required.

**NOTE:** Students will earn the Fundamentals in Written Communication digital badge upon completion of this course with a grade of C or better.

**ENC 1101H****Honors English Composition I**

3 Credits

Same as ENC 1101 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**ENC 1102****English Composition II**

3 Credits

A continuation of ENC 1101. Instruction is persuasive and literary based critical and evaluative skills in English composition. Documented research paper required.

Prerequisites: ENC 1101 with a minimum grade of C or S.

**ENC 1102H****Honors English Composition II**

3 Credits

Same as ENC 1102 with honors content. Honors Program permission required. College level reading and writing skills are required.

Prerequisites: ENC 1101H with a minimum grade of C or S.

**ENC 2210****Technical Writing**

3 Credits

Focuses on writing and designing documents in technical and professional discourse communities. Students produce a number of technical genres including correspondence, reports, a proposal, and instructions for various technical and lay audiences. Assignments are intended to create a real world situation and present a set of rhetorical considerations and restraints.

Prerequisite: ENC 1101

**ENC 2341****Magazine Writing and Design**

3 Credits

This course is designed for writing of expository, descriptive and narrative articles on subjects of contemporary interest. Topics will include non-fiction, essay writing, fiction and poetry. Class lectures will cover the publication process from start to finish, and include hands-on work with software design programs. All work produced for the class may be submitted to the student publications. Design software will be utilized as the design and layout program for the course, and participants will receive extensive training in magazine layout, design, editing and production. Completion of ENC 1101 is preferred.

Prerequisites: College level reading and writing skills are required.

**ENG 2930****Special Topics in English**

3 Credits

This course will meet the requirements of its objectives and will provide breadth and depth of exploration of a focused topic defined by a literary agenda. It is an advanced study that focuses on developing reading, writing, research, and analytical skills. This course is designed by each individual instructor who selects to teach it. It may be taken twice for up to six credits.

Prerequisite: ENC 1101

**ENL 2012****British Literature to 1800**

3 Credits

Focuses on selected British writers, with an emphasis on major periods and trends, such as Anglo Saxon, Middle Ages, neo-classicism and pre-romanticism.

Prerequisites: College level reading and writing skills are required.

**ENL 2012H****Honors British Literature to 1800**

3 Credits

Same as ENL 2012 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**ENL 2022****British Literature: 1800 to Present**

3 Credits

Focuses on 19th and 20th century writers from the romantics to the present.

Prerequisites: College level reading and writing skills are required.

**ENL 2022H****Honors British Literature: 1800 to Present**

3 Credits

Same as ENL 2022 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**ENT 1000****Introduction to Entrepreneurship**

3 Credits

This course is designed to provide a broad overview of the process of turning an idea into a successful enterprise. This course will be useful for anyone, whether or not they have had prior business or entrepreneurial experience. The course explores the characteristics of the entrepreneurial mind and the environment in which these ventures succeed. The course provide self-assessment of the skills and commitment necessary to successfully start and operate an entrepreneurial venture.

College level reading, writing, and math skills are required.

**ENT 1012****Entrepreneurship Management**

3 Credits

This course seeks to provide the knowledge, skills, and tools for students to successfully plan, design, and manage a new business venture. It is intended for those students considering self-employment for the first time or for those who are already committed as entrepreneurs. The processes of launching an entrepreneurial venture and learning the skills and techniques necessary for effective management, growth, and exit strategy will be covered in the course. Students will analyze the decision-making models and strategies and apply them in the management of business ventures. College level reading, writing and math skills required.

**ENT 1031****Entrepreneurial Marketing and Sales**

3 Credits

This course explores key marketing concepts, methods, and strategic issues relevant for start-up and early stage entrepreneurs. College level reading and writing skills are required.

**ENT 1411****Small Business Accounting and Finance**

3 Credits

This course provides an introduction to key topics in accounting and finance for those involved in new

ventures. College level reading, writing, and math skills are required.

**ENT 1612****Creativity, Innovation, and Human Centered Design**

3 Credits

This course will lead students through major phases of the creative problem solving process and methods of human centered-design thinking. Students will learn the basic skills for creative problem solving, innovation, and user-centered design. Students will identify and evaluate problems and opportunities; they will sketch, create, develop, test, and select the best prototyping options for a new product or service.

Prerequisite: College level reading, writing, and math skills are required.

**ENT 2212****Entrepreneurial Leadership - Capstone**

3 Credits

This course is specifically designed as a capstone course for students seeking an AS Entrepreneurship Degree, or related certificate in entrepreneurship. Students will study leadership theories, skills and practices necessary for effectiveness in varied entrepreneurial settings, including private businesses, corporations, not-for-profit organizations, and social causes. Students will explore the notion of values-based business formation, personal strength and weakness identification, leadership for team building, project and personal time management, and storytelling.

College level reading, writing, and math skills are required.

**EPI 0001****Classroom Management**

3 Credits

This course prepares the student to set up a classroom; employ classroom management techniques; express an understanding of school safety; integrate sunshine state standards into lesson development; create lesson plans; establish and maintain cooperative relations with parents; develop and administer various forms of assessment describe the implications of FCAT and other standardized tests; and demonstrate an understanding of the ethical and legal obligations of the teaching profession. EPI permission required to allow audit.

**EPI 0002****Instructional Strategies**

3 Credits

This course prepares the student to identify different learning styles, recognize Bloom's Taxonomy prepare lesson plans, use various styles on presentations, employ varied teaching strategies, explain cooperative, group, contextual, and project based learning, apply behavioral management strategies, and discuss accommodations for exceptional students. EPI permission required to allow audit.

**EPI 0003****Classroom Technology**

3 Credits

This course prepares the student to develop computer based record keeping, to identify additional application software productivity tools prepare multimedia presentations, describe content area instructional strategies, identify Internet resources, describe WebQuests, demonstrate knowledge of webpage development and computer aided instruction integrate technology into the learning process, and describe copyright and fair use guidelines. EPI permission required to allow audit.

**EPI 0004****Teaching and Learning Process**

3 Credits

This course prepares the student to research professional literature to seek best practices in teaching and to hone the craft of effective instruction. EPI permission required to allow audit.

**EPI 0010****Foundations of Language and Cognition through Research-Based Practices in Reading**

3 Credits

Teachers will develop substantive understanding of the six components of reading as a process oral language, phonological awareness, phonics, fluency, vocabulary and comprehension. Teachers will also scaffold student learning by applying principles of research-based reading instruction and integrating the six components of reading to better serve the needs of diverse learners. EPI permission required to allow audit.

**EPI 0014****Assessment and Differentiated Instructional Planning**

3 Credits

Teachers will understand how to select and administer appropriate assessments and analyze data to inform reading instruction to meet the needs of all students. Teachers will engage in the systematic problem solving process. Teachers will have a broad knowledge of students from different profiles in order to understand and apply research-based instructional practices by differentiating process, product and context. Teachers will engage in the systemic problem solving process. EPI permission required to allow audit.

**EPI 0020****Professional Foundations**

2 Credits

This course provides the foundation for the student to become a productive member of the teaching profession. Students will gain an understanding of the organization and administration of the public school, the laws governing teachers, the code of ethics, and the purpose of schools. Students will attain a professional perspective as well as a sense of grounding in the profession of teaching. EPI permission required to allow audit.

**EPI 0030****Diversity**

2 Credits

This course provides the student with an understanding of the variety of backgrounds and cultures that may be found in a typical classroom. EPI permission required to allow audit.

**EPI 0940****Field Experience – Module 3**

1 Credit

Participants will complete a field experience in a public, charter, or private school. These field experiences will provide the opportunity to gain insight into the instructional process. Those participants who are teaching will be required to complete the field experiences in the schools where they are assigned. EPI permission required to allow audit.

**EPI 0945****Field Experience – Module 4**

1 Credit

This course provides the student with a field experience in the classroom to give a broader view of the social aspects of diversity and cause the participant to re-evaluate personal beliefs and prejudices that may adversely affect the learning process. EPI permission required to allow audit.

**ESC 1000****Earth Science**

3 Credits

Focuses on geology, meteorology, and astronomy. Topics include the earth's atmosphere and weather systems, earthquakes, volcanoes, plate tectonics, the solar system and the universe; intended for non-science majors.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: ESC 1000L

**ESC 1000H****Honors Earth Science**

3 Credits

Same as ESC 1000 with honors content. Honors Program permission required.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: ESC 1000L

**ESC 1000L****Earth Science Laboratory**

1 Credit

The focus of this course is to familiarize the student with science laboratory techniques and procedures including collecting and recording data, performing calculations, analyzing data, and interpreting results. This is accomplished through experiments and exercises related to topics in earth science. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: ESC 1000.

**ETD 1320C****Computer-Aided Drafting for Engineering**

3 Credits

This course uses the major features of computer-aided design software (AutoCAD) to make graphic displays, including basic geometric figures, orthographic views of three dimensional objects, production of mechanical drawings, and pictorial drawings of various three-dimensional applications. Major topics include drawing, file handling, text and text editing, dimensioning and plotting.

**ETD 1340C****Intermediate CAD**

3 Credits

Provides experienced CAD students the opportunity to approach detailed and intricate drafting and design problems from computer perspective. Provides hands-on experience in creating custom menus, slides, text fonts, attributes, extractions, 3-D drawings, and rotations.

Prerequisite: College level reading, writing and math skills required. ETD 1320C

**ETD 2364C****Introduction to 3D Computer-Aided Design**

3 Credits

This course is an introduction to new designing techniques and capabilities of solid modeling using 3D computer aided design software. Topics include the integration of advanced parametric solid modeling drawing tools.

Prerequisites: College level reading, writing and math skills are required.

**ETI 1110****Introduction to Quality**

3 Credits

A survey course addressing quality management, quality systems, quality assurance, quality control and total quality management topics. The student will become familiar with ISO 9000, Pareto charts, and other quality techniques and tools.

**ETI 1420****Manufacturing Processes and Materials**

3 Credits

This course is an introduction to modern manufacturing materials, processes and systems, which are the basic building blocks of manufacturing and are best taught together. The student will learn to identify and distinguish appropriate materials processing selections given general performance needs and production rates. Material physical and mechanical properties are covered, along with equipment and processing methods used in manufacturing.

**ETI 1622****Concepts of Lean and Six Sigma**

3 Credits

This course provides a comprehensive overview of the Lean and Six Sigma methodologies including: define, measure, analyze, improve and control (DMAIC) process improvement pa-

radigm, techniques, tools and metrics that are critical for process improvement success. This course will include demonstration and use of Lean and Six Sigma tools.

**ETI 1644****Production and Inventory Control**

3 Credits

A survey course in production planning and inventory control, including the topics of scheduling, MRP and capacity planning.

**ETI 1701****Industrial Safety**

3 Credits

Covers practical and operational health and safety procedures and practices as defined by OSHA regulations that are applicable to advanced manufacturing facilities. Handling and disposal of hazardous materials will also be emphasized.

**ETI 1802****Introduction to Process Technology**

3 Credits

This course covers an introduction to chemical plant operations. Topics include process technician duties, responsibilities and expectations, plant organizations, plant process and utility systems, and the physical and mental requirements of the process technician.

Prerequisites: College level reading, writing, and math skills required.

**ETI 1810C****Introduction to Electricity and Electronics**

3 Credits

This course covers basic safety practices for electrical systems and knowledge of voltage, current and power in AC and DC circuits, circuit analysis of series and parallel loads, and basic understanding of resistors, capacitors, inductors, and transformers. This basic knowledge of industrial electricity would be expected of an entry level electrician working in facilities maintenance or assisting in the assembly, test, startup, troubleshooting, maintenance, repair or upgrade of electrical and electronic equipment.

Prerequisites: College level reading, writing, and math skills are required.

**ETI 1843****Motors and Controls**

3 Credits

This course explores the theory and application of AC and DC motors. It covers how different types of motors operate and how electronic motor control systems are designed and can be used to improve efficiency in a wide range of applications.

**ETI 1931****Special Topics in Modern Manufacturing**

3 Credits

This course is designed to allow flexibility for presenting a variety of topics related to high performance manufacturing principles and applications.

**ETI 1949****Manufacturing Internship**

2 Credits

This course is a structured and supervised internship for students in the Manufacturing Technology program of study. On the job experience will be integrated with regular biweekly class meetings to review and compare experiences with respect to workplace skills and technical expectations.

**ETI 2950****Engineering Technology Capstone**

3 Credits

The capstone course is designed for the student to demonstrate knowledge and skills applicable to the degree core competencies and outcomes. The course is designed as a project based experience. The student's project requirements will be designed in concert with the area of curriculum emphasis.

**ETI 2941****Industrial Management Practicum**

3 Credits

This course is a structured and supervised internship for students. On-the-job experience will be integrated with weekly class meetings to review and compare work experiences with respect to workplace skills and technical expectations.

**ETM 1010C****Mechanical Measurement and Instrumentation**

3 Credits

This course provides a basic foundation for mechanical measurement techniques used in manufacturing environments. The course will integrate the concepts, principles and techniques of mechanical measurement with the use of various types of instruments, including micrometers, calipers, height gauges and other types of measuring equipment.

**ETM 2315****Hydraulic and Pneumatic Systems**

3 Credits

Introduces the students to the basic hydraulic and pneumatic systems and devices commonly found in advanced manufacturing facilities. The underlying scientific principles will be covered and their practical applications. Completion of PHY 1025 is strongly recommended. Taking ETM 2315L concurrently is strongly recommended.

**ETM 2315L****Hydraulic and Pneumatic Laboratory**

1 Credit

Provides hands-on experiences to reinforce the basic principles of hydraulic and pneumatic systems and the operation of pumps and flow monitoring devices for simple but fundamental systems. Completion of PHY 1025 is strongly recommended. Taking ETM 2315 concurrently is strongly recommended.

**ETS 1520****Process Measurement Fundamentals**

3 Credits

Provides the students with a basic knowledge of instrumentation and how sensors are used in the manufacturing field.

Topics included are principles of temperature, pressure, flow and level, and the relationship of devices used to measure these for control.

Prerequisites: College level reading, writing and math skills are required.

**ETS 1535****Automated Process Control**

3 Credits

Introduces modern control theory and the use of sensors, actuators and controllers. The student will be introduced to state-of-the-art control systems used in industry and the elements that comprise a closed loop network.

**ETS 1539****Instrumentation Systems Safety**

3 Credits

This course focuses on the engineering requirements for the specification, design, analysis, and justification of safety instrumented systems for the process industries. Students use practical examples to determine safety integrity levels and evaluate whether proposed or existing systems meet the performance requirements. College level reading, writing, and math skills are required.

Prerequisites: ETS 1520 or instructor approval.

**ETS 1540****Industrial Applications Using Programmable Logic Controllers and Robotics**

3 Credits

Provides basic operational concepts common for the control of multi station industrial robotic systems. Topics include the role of programmable controllers, interface of analog and digital components in robotic systems and writing ladder diagram programs.

**ETS 1542****Introduction to Programmable Logic Controllers**

3 Credits

Provides basic operational concepts common to programmable controllers, focusing on PLC principles, programming and the fundamentals needed for simple process control.

**ETS 1603C****Fundamentals of Robotics and Simulation**

3 Credits

An introductory course designed to familiarize students with the basic principles of robotics and simulation. This course includes basic robotics concepts, operation, classification and applications. The course provides a framework for the discussion of artificial intelligence. This course also includes basic principles of modeling and simulation as applied in different environments and systems. Students will become familiar with simulation and robotic systems.

Prerequisites: College level reading, writing and math skills required. CET 1123C and EET 1141C

**ETS 2210C****Introduction to Photonics**

3 Credits

This is an introductory course exploring the fundamentals of photonics theory, concepts, and applications. Contents include the nature and properties of light, light sources, human vision, lasers, and laser safety; basics of geometric and physical optics, and basic principles and applications of fiber optics. Laboratory experimentation will complement the theoretical concepts of the course.

Prerequisites: College level reading, writing, and math skills required.

**ETS 2230C****Introduction to Lasers**

3 Credits

This course introduces students to the basic principles of laser operations, safety, and applications. Topics include elements and operation of a laser, laser safety, emission and absorption of light, lasing action, optical cavities and modes of oscillation, temporal and spatial characteristics of lasers, and laser classifications and characteristics. Laboratory experimentation will complement and reinforce the theoretical concepts of lecture material.

Prerequisites: College level reading, writing, and math skills required. EET 1036C and ETS 2210C

**ETS 2527****Electromechanical Components and Mechanisms**

3 Credits

This course covers gears and gearboxes, belts and pulleys, chains and sprockets, alignments and measures found in the industrial environment. College level reading, writing, and math skills are required.

**ETS 2604****Robotics Application**

3 Credits

This course is designed to introduce students to the basic principles of robots, including classification, operation, maintenance, troubleshooting and applications in the robotics industry. Students use hands-on practices to become familiar with sections of a robotic system. College level reading, writing, and math skills are required.

**EUH 2000****Western World: Origins to Early Modern Europe**

3 Credits

Presents a study of cultural, economic and political developments of Western civilization from prehistoric times through the Reformation and the European Renaissance, with an emphasis on geographic references.

Prerequisites: College level reading and writing skills required.

**EUH 2000H****Honors Western World: Origins to Early Modern Europe**

3 Credits

Same as EUH 2000 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills required.

**EUH 2001****Western World: Modern Europe**

3 Credits

Presents a study of the economic, social and political development of the world from 1648 to the present, with an emphasis on geographic references.

Prerequisites: College level reading and writing skills required.

**EUH 2001H****Honors Western World: Modern Europe**

3 Credits

Same as EUH 2001 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills required.

**EVR 1001C****Introduction to Environmental Science**

3 Credits

Intended for non-science majors. Focuses on the general scientific principles of biology, ecology, earth science, and physical science in describing the environment, and how human activities affect the environment. Field trips are possible. A special fee will be charged for this course. Prerequisites: College level reading, writing and math skills are required.

**EVR 1001H****Honors Introduction to Environmental Science**

3 Credits

Same as EVR 1001C with honors content. Honors Program permission required.

Prerequisites: College level reading, writing, and math skills are required.

**EVR 1041****Natural Resource Management with Applications in Geographic Information Systems (GIS)**

4 Credits

An introduction to the appropriate use and potential applications of geographic information systems (GIS) in natural resource management with emphasis on forest management and operations planning. Students will be presented with lectures and exercises that cover a wide range of GIS and GIS related topics and issues.

**EVR 1328****Natural Resource Conservation and Ecology**

3 Credits

An introduction to the ecology and conservation of natural resources of native lands, concentrating on Florida ecosystems. Emphasis will be given toward interactive networks and ecosystems on which species depend, techniques for insuring biological diversity and human conservation interactions. Topics include: ecosystems, diversity, threats to habitat, the value of natural resources, conservation practices and conservation and human society.

Prerequisite: College level reading and math skills required, and BSC 1005, BSC 1005L, EVS 1001



**EVR 2040****Advanced Geographic Information Systems (GIS) with Environmental Applications**

4 Credits

This course provides advanced instruction using GIS software. Special emphasis will be given to environmental applications. Designed for students who have taken GEO 2150 or who have had previous experience with GIS software.  
Prerequisite: GIS 2040

**EVR 2858****Environmental Law**

4 Credits

This course will introduce the basic legal concepts and statutory principles of environmental law with a focus on pollution control. It will also provide an opportunity for applying these concepts and principles through a service project.

**EVS 1001****Introduction to Environmental Sustainability**

3 Credits

Provides the student with an overview of current environmental concerns and their management. Emphasis is on the application of biological, physical and chemical methods to the understanding of and solutions to environmental problems. The student will gain insight into the natural interactions among living things and physical aspects of the environment.  
Prerequisites: College level reading and math skills required.

**EVS 1026****Chemistry and Biology of Natural Waters**

4 Credits

Provides an introduction to the chemistry of water treatment systems of natural water. Emphasizes the unit operations and analysis of water treatment. Attention is also given on assessing local bodies of water with regard to water quality and appropriate assessment techniques.  
Prerequisite: CHM 1025

**EVS 1042****Water Resources with Applications in Geographic Information Systems (GIS)**

4 Credits

This course is an introduction to water resources with applications in geographic information systems software. Prior GIS experience is not required, but familiarity with Windows is. In this course students will learn the basics of water resource science and management as well as the basics of GIS software. Topics to be studied include the basics of: GIS software; hydrologic science; and global, regional, and local water resource management issues. Special emphasis will be placed on the water resources of Florida.

**EVS 1893****Comparative and Sampling Analysis Methods**

3 Credits

Provides an overview of sampling and analysis techniques which are commonly used in the environmental and materials testing fields. The course deals with the skills and knowledge

necessary to understand sampling and analysis concepts and to conduct basic sampling procedures.

**EVS 2005C****Treatment of Water and Wastewater**

4 Credits

Examines the chemical, physical and biological treatment of water and wastewater. Emphasizes unit operations analysis of water treatment systems, and field evaluation of their operation.

Prerequisites: CHM 1025, CHM 1025L

**EVS 2793****Sources and Effects of Air Pollution**

4 Credits

Examines the common sources of air pollution and the effect of this pollution on human and ecosystem health, with an emphasis on how pollutants are produced and transported. The engineering aspects of combustion and transportation related emissions and the basic principles of air pollution meteorology will also be examined.

Prerequisite: EVS 1001

**EVS 2891****Hydrology and Quality Water Resources**

4 Credits

A comprehensive survey of water resources considering both quantity and quality. Emphasis is on the standard techniques of sampling and monitoring especially for ground water. The hydraulic characteristics of water are also discussed. Analytical procedures used in field investigations and modeling studies are covered. A separate laboratory time is provided for on campus and field activities.

**EVS 2893C****Soil Sampling and Analysis**

5 Credits

This course investigates the physical and chemical properties of soils and the dynamics that lead to soil formation. Standard procedures and methods will be examined and applied toward the collection and analysis of samples. The characteristics of soil types will be compared to land use, plant communities, and assessed in the field. In addition, hydric soils and general techniques of wetland delineation will be introduced and applied in the field. Lab and field work are a significant component of this class.

Prerequisite: College level reading and writing.

**EVS 2894C****Water Sampling and Analysis I**

5 Credits

This course introduces major water quality parameters and inorganic chemicals found in water bodies. Standard procedures and methods will be examined and applied toward the collection and analysis of samples. Techniques for using sampling equipment and meters will be taught and applied in the lab and field, including proper calibration. Field and lab activities are a significant part of this class and will emphasize preparation and organization.

Prerequisite: College level reading and writing.

**EVS 2895C****Water Sampling and Analysis II**

5 Credits

This class explores the implications of pollution on the ecology of aquatic systems. Concepts including trophic states, organic loading and biological contamination will be explored. General concepts of biological assessments and indexes will be introduced to define the implications of land use and pollution on organisms. Standards procedures and methods will be examined and applied toward the collection and analysis of samples. Emphasis will be on field exercises, data analysis, and quality control.

Prerequisite: EVS 2894C, College level reading and writing.

**EVS 2942L****Environmental Technology Practicum**

3 Credits

Focuses on hands-on experience in environmental sampling and analysis methods by assigning students to agencies or businesses for 150 hours per semester. Emphasis will be to gain practical experience in protocols, methods and use of equipment in an applied setting; includes the possibility of outdoor work and mildly strenuous skills such as carrying and lifting.

Prerequisite: EVS 2893C

**FAS 1012C****Aquacultural Organisms**

3 Credits

The field of aquaculture uses a variety of organisms to culture from fresh water fish, to marine fish, plants, shrimp, lobster, and many others. In this course, the students will learn about the variety of organisms that can be cultured and the methods learned to do so.

Prerequisites: College level reading and writing skills are required.

**FAS 1401L****Aquacultural Laboratory Techniques**

3 Credits

The field of aquaculture uses a number of laboratory techniques to assist the technician in the treatment of fish, identification of fish, breeding techniques, raising of fish, feeding, and a whole host of controls on the artificial environment of the aquarium. This laboratory teaches the techniques used in the field. A special fee will be charged for this course.

Prerequisites: College level reading and writing skills are required.

**FAS 1404C****Aquacultural Field Techniques**

3 Credits

Focuses on the practical aspects of establishing a fish farm, setting up the ponds, maintaining environmental conditions, and harvesting the fish. College level reading and writing skills are required. A special fee will be charged for this course.

Prerequisites: College level reading and writing skills are required.

**FAS 2240C****Aquacultural Nutritional Techniques**

3 Credits

Focuses on the nutritional aspects of fish. Fish digestive anatomy, nutrition requirements, metabolic rates, diets, and available food sources will be covered.

Prerequisites: College level reading and writing skills are required.

**FAS 2253****Aquacultural Disease Processes**

3 Credits

Studies the disease processes that affect fish that includes bacterial diseases, infections, viruses, fungi, parasites, immune diseases, nutritional diseases and environmental diseases.

Prerequisites: College level reading and writing skills are required.

Co-requisite: FAS 2253L

**FAS 2253L****Aquacultural Disease Process Laboratory**

1 Credit

Designed to teach laboratory techniques to identify disease causing organisms and to use some of the treatment methodologies. A special fee will be charged for this course.

Prerequisites: College level reading and writing skills are required.

Co-requisite: FAS 2253

**FAS 2263C****Aquacultural Reproductive Techniques**

3 Credits

Focuses on the principles of reproductive biology for the aquaculture industry. The primary emphasis will be on freshwater fish reproduction, however, other aquaculture organisms will be discussed.

Prerequisites: College level reading and writing skills are required.

**FAS 2353C****Aquacultural Management Practices**

3 Credits

Aquaculture operations are businesses. This course teaches the basic operations of the business side, showing profit and loss statements, marketing, how to manage people, and the general principles of how to manage an aquaculture establishment. In addition, decision making tools for the manager will be presented that include the use of computers and records management. Prerequisites: College level reading and writing skills required.

**FAS 2941L****Aquaculture Field Experience I**

3 Credits

Focuses on the hands-on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the first of the four field experience courses.

Prerequisites: College level reading and writing skills required.

**FAS 2942L**  
**Aquaculture Field Experience II**

3 Credits

Focuses on the hands-on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the second of the four field experience courses.

Prerequisite: FAS 2941L

**FAS 2943L**  
**Aquaculture Field Experience III**

3 Credits

Focuses on the hands-on experience that can be gained from being in the field at aquaculture facilities in Hillsborough County. Students rotate through a variety of aquaculture operations to gain a broad spectrum of experiences that can only be gained from actual field work. This is the third of the four field experience courses.

Prerequisite: FAS 2942L

**FFP 1000**  
**Introduction to Fire Science**

3 Credits

Provides an overview of the fire protection field, with an emphasis on fire protection agencies, equipment, building design and construction and fire-fighting tactics. Topics include fire suppression and equipment, characteristics and behavior of fire, fire hazard properties of ordinary materials, extinguishing agents and public relations.

**FFP 1304**  
**Aerial Operators Course**

3 Credits

Covers driving laws and techniques, construction and operation of ladder trucks, aerial platforms and apparatus maintenance.

**FFP 1506**  
**Fire Prevention and Investigation**

3 Credits

Deals with the principles of prevention and investigation, a study of the fire hazards of various occupancies, a review of fire prevention codes, OSHA requirements, surveying and mapping procedures. Topics include recognition of hazards, engineering and enforcement of solutions, public relations and presentation of arson evidence.

**FFP 1710**  
**Company Officer**

3 Credits

Designed to assist officers in solving problems and situations encountered in today's changing fire service. The curriculum includes a review of fire department organization and administration, management theory, leadership, communication, motivation and group dynamics.

**FFP 1810**  
**Fire Fighting Tactics and Strategy I**

3 Credits

Involves a review of fire chemistry, equipment, manpower, strategies, methods of attack and pre planning fire problems.

**FFP 2120**  
**Fire Service Building Construction**

3 Credits

Building construction topics include identifying hazards from assault by fire and gravity, how building construction can influence fire spread, fire confinement or structural collapse, and many other life safety issues

**FFP 2303**  
**Fire Service Hydraulics**

3 Credits

This course will cover the principles of fire service hydraulic formulas and calculations to determine pump pressures.

**FFP 2305**  
**Apparatus Operations**

3 Credits

This course covers emergency vehicle driving fire ground pump operations including the use of master stream devices, pump construction and pump operational applications.

Prerequisite: FFP 2303

**FFP 2401**  
**Hazardous Materials I**

3 Credits

On site operational practices for hazardous materials in compliance with CFR 1910.120 standards.

**FFP 2402**  
**Hazardous Materials II**

3 Credits

On site operational practices for hazardous materials in compliance with CFR 1910.120 standards.

**FFP 2490C**  
**Chemistry of Hazardous Materials**

3 Credits

This course focuses on the chemistry knowledge required to evaluate the potential hazards and behaviors of materials considered hazardous. It examines the reasons for the chemical behavior of hazardous materials and is designed to improve decision making, safety operations, and handling. The course will meet the requirements set forth by OSHA 1910.120 and 40 CFR 1910.120.

**FFP 2510**  
**Codes and Standards**

3 Credits

This course is designed to familiarize inspectors with the basic units of NFPA 101. This course includes statewide fire prevention code NFPA 1.

**FFP 2521****Construction Documents and Plan Review**

3 Credits

This curriculum is designed to have the student assimilate information contained in working drawings and specifications as they relate to the fire inspector. Topics include the interpretation of conventional graphic communication, symbols, abbreviations, principles of technical projection as well as a review of construction arithmetic and geometry.

**FFP 2540****Private Fire Protection Systems**

3 Credits

The study of private fire protection and detection systems, such as sprinkler and standpipe systems, chemical extinguishing systems, detection systems and devices. Each system is discussed as to its construction, preventive maintenance and individual uses.

**FFP 2604****Cause and Origin**

3 Credits

This course is designed to enhance the fire investigators ability to detect and determine the origin and cause of a fire. Specific topics include fire behavior review, investigation ethics, construction, ignition sources, reading fire patterns and scene reconstruction. Special topics on electrical fire investigation, woodland fires, vehicle fires, mobile home fires, RV and boat fires and scene documentation.

**FFP 2740****Fire Service Course Delivery**

3 Credits

Draws from many recognized authorities in exploring the methods and mechanics of imparting information, with an emphasis on techniques and multi-media materials for communication of ideas and strengthening the retention of skills obtained in the learning process.

**FFP 2741****Fire Service Course Development**

3 Credits

Emphasis on instructional design, course development and training manuals. Students develop their own course by establishing goals, objectives and evaluation criteria. Students may repeat this course up to 20 times for renewal of their Fire Certification.

**FFP 2811****Fire Fighting Tactics and Strategy II**

3 Credits

Covers advanced fire-fighting techniques, with an emphasis on incident command systems.

**FIL 1000****Introduction to Motion Media: Film, Cinema and the Environment**

3 Credits

This course will provide an introduction to the basic terminology, techniques, and contributions of filmmaking and will explore major issues in the history of the moving image, from its invention at the end of the 19th century to the present day. Prerequisites: College level reading and writing skills are required.

**FIL 1420C****Motion Media I – Recording and Interpreting Reality**

3 Credits

Provides a basic understanding of motion media production technology, equipment operation, terminology, and techniques. This will include an introduction to the camera, and to "mis en scene" for documentaries. Students apply the essentials of creative filmmaking in both studio and location settings. Prerequisites: CGS 1000, FIL 1000

**FIL 2010****Films of Fantasy and the Imagination**

3 Credits

This course focuses on the art of the created motion picture image, which springs from the imagination with the help of tools such as animation, optical printing and digital construction and manipulation. This approach contrasts with the more traditional production of moving images, which focuses on and photographs aspects of real and existing objects, whether these are actors and sets or the world of nature. This course concerns films which spring from the imagination, literally from the mental pastures of human dreams, from the subconscious rather than the conscious mind.

Prerequisites: College level reading and writing skills required.

**FIL 2905****Directed Independent Study: Film**

3 Credits

This course is designed to establish a framework for further self-learning in various areas of motion media for the advanced student. The student will shape the course to fit their needs by planning activities and preparing a contract coordinated with a member of the motion media faculty. The contract will outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member.

Prerequisite: FIL 1000

**FIL 2931****Careers in Film and Video**

1 Credit

Students are exposed to the full range of careers in film, video and broadcasting in addition to learning about resumes, internships, interviews and portfolios.

**FIN 1100****Personal Finance**

3 Credits

Focuses on charting financial objectives, with an emphasis on budgeting, savings, credit, loans, insurance, estate planning, taxes, investments and real estate.

**FIN 2001****Principles of Finance**

3 Credits

This course is an introduction to the fundamentals of corporate finance. It will cover corporate financial structures, monetary systems, financial instruments, financial statement analysis, interest, and the time-value of money.

Prerequisites: ACG 2021. College level reading, writing and math skills required.

**FIN 2051****International Financial Management**

3 Credits

This course explores the management of international banking, financial services, financial risk, foreign exchange, corporate financing from a global perspective, direct foreign investment decisions, and the management of on-going operations.

Prerequisite: FIN 2001. College level reading and writing skills required.

**FNR 1001****Natural Resource Management**

3 Credits

An introduction to the ecology and conservation of natural resources of native lands, concentrating on Florida ecosystems. Emphasis will be given toward management techniques for the conservation of interactive networks and ecosystems on which species depend. Topics include: land use, ecosystems management, conservation and restoration practices, wildlife and forest management, and prescribed fire management.

Prerequisite: EVR 1328. College level reading and math skills required.

**FOS 1201****Sanitation and Safety Management.**

2 Credits

This course explores the scientific rationales of sanitation and safety practices which are enforced for group protection in institutions and food service facilities. Students will recognize the importance of preparing, serving, storing, and holding foods so that they are free of contamination. This course also includes a study of the micro-world, food allergies, food borne illness, safe food handling, cleaning, sanitizing, pest management, and state, local, and national regulation governing sanitary food handling practices.

Prerequisites: College level reading, writing, and math skills are required.

**FRE 1120****Elementary French I**

4 Credits

Covers the fundamentals of listening, reading and writing the language while developing an understanding of the French

culture. Native speakers of French are encouraged to seek credit by exam test.

Prerequisites: College level reading and writing skills are required.

**FRE 1121****Elementary French II**

4 Credits

Enhances the skills learned in FRE 1120. Native speakers of French are encouraged to seek credit by exam test. College level reading and writing skills required.

Prerequisite: FRE 1120 with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

**FSS 1063C****Food Specialties I (Baking)**

3 Credits

This course covers the fundamentals of baking as it applies to the industry. The student gains hands-on experience in practical applications, weights, measures and formula procedures. Emphasis is placed on the proper use of care of equipment, food safety and sanitation.

Prerequisites: FOS 1201, FSS 1223C. Student must pass ServSafe Certification Exam. College level reading, writing and math skills required.

**FSS 1223C****Food Preparation for Managers**

4 Credits

Students are introduced to various food preparation and kitchen management techniques. It specifically examines the chemical and physical changes that take place as food is processed and prepared for consumption. The knowledge in this course is acquired through theoretical lectures and hands-on service in the HCC kitchen laboratory ensuring the students' understanding of back-of-the-house procedures and the application of food safety and sanitation principles.

Prerequisites: College level reading, writing and math skills required.

Co-requisite: FOS 1201

**FSS 1248C****Food Specialties II (Garde Manger I)**

3 Credits

The purpose of this course is to introduce basic information, procedures, and techniques identifiable to contemporary chefs, in understanding and applying garde manger terminology, and the principles of cold food preparation. The proper care and use of tools and the correct preparation, handling, and use of mousses, cold dressings, and charcuterie are explained. Traditional plate presentations and techniques will also be discussed, as well as changes and interpretations of classical preparations to contemporary cooking standards.

Prerequisites: FOS 1201, FSS 1063C, Student must pass the ServSafe Certification Exam. College level reading, writing and math skills required.

**FSS 1500****Food and Beverage Control**

3 Credits

This course is designed to provide students with a solid introduction to the planning and controlling elements of a food and beverage operation. It focuses on proven control principles and practical applications essential to operating an effective control system.

Prerequisites: College level reading, writing and math skills required.

**FSS 1941****Food Practicum I**

2 Credits

A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher-coordinator will be used to evaluate the student.

Prerequisites: FOS 1201, FSS 1223C. Student must pass ServSafe Certification Examination. College level reading, writing and math skills required.

**FSS 1942****Food Practicum II**

2 Credits

A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

Prerequisites: FOS 1201, FSS 1223C. Student must pass ServSafe Certification Examination. College level reading, writing and math skills required.

**FSS 1943****Food Practicum III**

2 Credits

A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

Prerequisites: FOS 1201, FSS 1223C. Student must pass ServSafe Certification Examination. College level reading, writing and math skills required.

**FSS 1944****Food Practicum IV**

2 Credits

A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student.

Prerequisites: FOS 1201, FSS 1223C. Student must pass ServSafe Certification Examination. College level reading, writing and math skills required.

**FSS 2100****Menu Development and Marketing**

3 Credits

Emphasizes the preparation of a nutritionally balanced cycle menu, portion control, use of leftovers and waste control. The course also provides students with a solid background in hospitality sales and marketing.

Prerequisites: College level reading, writing and math skills required.

**FSS 2120****Food Purchase and Storage**

3 Credits

Focuses on volume food purchasing, with an emphasis on the legal obligations of vendors and vendees, receiving controls, and storing and dispersal.

Prerequisites: College level reading, writing and math skills are required.

**GEB 1011****Introduction to Business**

3 Credits

Presents an overview of the practices and procedures of the business world. Topics include the main functions of business, management, marketing, accounting, and finance. College level reading and writing skills required.

**GEB 1949****Business Internship**

3 Credits

A coordinated work-study course involving class work and field experience. Objectives determined by the student and teacher coordinator will be used to evaluate the student. This course may be repeated six times for credit.

**GEB 2214****Business Communications and Technology**

3 Credits

This course is designed to equip students with a comprehensive understanding of communication, its scope and importance in business. Students will learn to apply fundamental communication theory. The various types of business communication genre are developed and used including written and oral forms. Emphasis is placed on planning, preparing, drafting, analyzing, performing the different communications required in the normal course of business activities. The course provides opportunities to recognize complex issues, organize ideas and thoughts in a consistently logical format, and then to communicate these ideas in succinct and concise manner. College level reading, writing, and math skills are required.

Prerequisite: ENC 1101

**GEB 2350****Introduction to International Business Essentials**

3 Credits

Focuses on the fundamentals of international business through an analysis of the cultural, economic, legal, and political factors that influence international operations in the global economy.

Prerequisite: College level reading and writing skills required.

**GEB 2370****Introduction to International Business Policy Issues**

3 Credits

Examines the challenges associated with planning and implementing international policy within business enterprises whose operations span across national boundaries. Students will be able to obtain a fundamental understanding of the strategic, operational and behavioral aspects of managing across cultures.

Prerequisites: GEB 1011, GEB 2350, and FIN 2051. College level reading and writing skills are required.

**GER 1120**  
**Elementary German I**

4 Credits

Covers the fundamental of reading, writing, listening and speaking the language while developing an understanding of the German culture. Native speakers of German will be asked to seek credit by exam test.

Prerequisites: College level reading and writing skills are required.

**GER 1121**  
**Elementary German II**

4 Credits

Enhances the skills taught in GER 1120. Native speakers of German will be asked to seek credit by exam test.

Prerequisites: GER 1120 with a minimum grade of "C" or instructor's permission. College reading and writing skills are required.

**GEY 1000**  
**Issues of Aging**

3 Credits

Explores the issues related to the aging process and the later-stages of life including: retirement, psychosocial concerns and community services for the elderly.

Prerequisites: College level reading and writing skills are required.

**GIS 1041**  
**Survey of Geographic Information Systems and Global Positioning Systems (GPS).**

1 Credit

Designed to acquaint students with the uses and applications of Geographic Information Systems (GIS) and Global Positioning Systems (GPS). Methods and techniques used in GIS and GPS will also be reviewed.

**GIS 2040**  
**Fundamentals of Geographic Information Systems**

3 Credits

Designed to acquaint students with the history, operation and applications of geographic information systems (GIS). This course will cover all aspects of geographic information systems including data collection, preprocessing, data management and data analysis as well as the application of these systems.

**GLY 2010**  
**Physical Geology**

3 Credits

Covers basic geology concepts and principles. Topics include origin and structure of the earth, processes involved in shaping the earth's crust, the nature and classification of earth materials, and the dynamic interactions of the lithosphere with the hydrosphere and atmosphere that produce characteristic landforms.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: GLY 2010L

**GLY 2010L**  
**Physical Geology Laboratory**

1 Credit

This course accompanies GLY 2010. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills are required.

Co-requisites: GLY 2010

**GRA 2111C**  
**Graphic Design**

3 Credits

This course is an introductory class which will introduce students to the design applications relevant to graphic design. Students with little or no experience on a MAC or PC will become familiar with the operating systems and will be able to use the computer to bring their images into the computer and be able to function with proficiency in file management, input and output, design applications, and creating backups of their work.

Prerequisite: ART 1201C, PGY 2401C

Co-requisite: PGY 2801C

**GRA 2156C**  
**Digital Illustration**

3 Credits

This course will build upon the student's understanding of digital design within the larger context of visual literacy and communication by expanding upon basic digital design processes and practices, particularly the differences between working in raster and vector-based media. The course will explore visual and technical understanding of digital illustration in a vector based environment using software applications that are considered to be the industry standard.

Prerequisites: GRA 2111C or ART 2600C

**GRA 2206C**  
**Introduction to Typography**

3 Credits

This course provides an introduction to the study of letterforms and typography as fundamental elements of design. It focuses on how typography can be used as a visual communications device as well as a graphic, compositional and expressive element. The course will provide a groundwork for effective typographic design upon which other design elements can be built.

Prerequisites: ART 2600C or GRA 2111C

**HFT 1000**  
**Introduction to Hospitality Industry Management**

3 Credits

The purpose of this course is to provide students with a basic understanding of facilities management within the hospitality industry. Emphasis is placed on the organization, structure, and functional areas in food service and lodging operations.

Prerequisites: College level reading, writing, and math skills are required.

**HFT 1410**  
**Front Desk Procedure**

3 Credits

This course presents a systematic approach to front office procedures by detailing the flow of business through a hotel from the reservation process to check-out and settlement. It also examines the various elements of effective front office procedures within the context of the overall operation. Students also utilize various accounting machines to process guest accounts through the hotel night audit.

Prerequisites: College level reading, writing and math skills are required.

**HFT 1790**  
**The Event Industry**

3 Credits

This course examines the full event planning process; beginning with the anatomy of an event to establish the different layers of an event experience and the step-by-step process needed to plan, design and execute events that will meet the needs of both customers and their audiences.

Prerequisites: College level reading and writing skills are required.

**HFT 2210**  
**Supervisory Development**

3 Credits

This course introduces students to the process of managing personnel in the hospitality industry. Lectures will highlight the supervisory skills, techniques, and procedures needed to become successful business leaders in today's dynamic and diverse workplace.

Prerequisites: College level reading, writing and math skills are required.

**HFT 2600**  
**Hospitality Industry Law**

3 Credits

Presents a study of the laws, codes and regulations applicable to the hospitality industry.

Prerequisites: College level reading and writing skills are required.

**HFT 2750**  
**Meeting, Convention and Exposition Industry**

3 Credits

The purpose of this course is to provide students with a basic understanding of convention sales and service. It identifies the various segments of the convention market and explores the methods and techniques utilized in exceeding guest expectations.

Prerequisites: College level reading, writing, and math skills are required.

**HFT 2840**  
**Maitre D' and Dining Room Service**

3 Credits

Students are introduced to various service techniques and customer interaction skills. The knowledge in this course is acquired through theoretical lectures and practical hands-on

service in the HCC Gourmet Dining Room. In this way, students become knowledgeable about front-of-the-house procedures and apply the principles of food safety and team leadership skills.

Prerequisites: College level reading, writing and math skills are required.

**HFT 2941**  
**Hospitality Management Internship**

3 Credits

The student intern will experience the opportunity to apply the theory learned in the program within a hospitality setting. Grading is based on academic projects related to the position and site evaluations. The student must also provide authorized documentation confirming 250 hours of internship experience.

Prerequisite: Student must complete 50 program credit hours prior to being placed in a hospitality internship. College level reading, writing, and math skills are required.

**HIM 1000**  
**Introduction to Health Information Management**

3 Credits

This course provides an introduction to health information management and how it fits into the healthcare delivery system. Students will explore ethical and legal principles with regard to health informatics and information management, medical records, and privacy issues. Students will learn essential employability skills and work habits with the health information management field.

Prerequisite: College level reading, writing and math skills are required.

**HIM 1112C**  
**Electronic Health Records**

2 Credit

Covers the basics of electronic health records, both content and usage. Provides an understanding of patient record requirements, access and confidentiality. Includes analysis of the medical record, emphasizing legal ramifications, ethics, proper use and confidentiality issues.

**HIM 1433**  
**Principles of Disease**

4 Credits

This course addresses the etiology, pathophysiology, treatment, and complications of human diseases. A systems approach to the disease process is used, which will incorporate basic medical terminology, anatomy and physiology. Common laboratory and diagnostic tests are included.

Prerequisite: HSC 1531

**HIM 1442**  
**Pharmacology**

2 Credits

Course is designed for students who will not be administering medications but require a general knowledge of classifications, common usage, and therapeutic indications of commonly prescribed medications.

Prerequisites: HSC 1531



**HIM 1453****Anatomy and Physiology for Medical Coding**

4 Credits

This course is designed for students with limited background in sciences pursuing careers in the allied health fields. The students will gain an understanding of how the human body operates on a daily basis from birth to death and the fascinating working systems in our bodies, intended for medical coding students. Focuses on the structure and function of the various body systems. Includes the medical terminology and abbreviations related to each body system.

**HIM 2253****CPT Coding**

3 Credits

This course will explore the appropriate approach to accurate usage of physicians current terminology (CPT) for coding in an outpatient setting. Students apply the skills acquired in ICD-10 Coding (HIM 2724). Students explore reimbursement methodologies, and issues such as ambulatory payment classifications (APC) and resource-based relative value scales (RBRVS). Patient privacy and confidentiality are discussed, as well as the proper handling of protected health information (PHI).

Prerequisites: HIM 1000, HSC 1531, and OST 2854C all with a grade of C or better.

Corequisite: HIM 1453

**HIM 2272C****Medical Billing and Insurance II**

3 Credits

Emphasis on billing regulations for the State of Florida. Course content includes LMRPs, Workers' Compensation Laws, Florida Medicare and claims for automobile accident injuries.

Prerequisites: HIM 2275C

**HIM 2275C****Medical Billing and Insurance I**

3 Credits

Introduction to health insurance claims processing, carrier requirements, and state and federal regulations. Billing for physician's offices, hospital and ambulatory surgery services.

Topics that are covered include, electronic billing, confidentiality, managed care systems, Workers' Compensation, Medicare and Medicaid. Will include hands-on laboratory component.

Prerequisites: HIM 1112C, HSC 1531, OST 2854C

**HIM 2283****Advanced Coding**

3 Credits

Includes the study of complex medical and surgical diagnoses and procedures in the inpatient and outpatient settings using CPT and ICD-10-CM codes to ensure accurate coding and reporting. Addresses current concepts and changes related to coding practice. Reimbursement by prospective payment systems will be reviewed. The 3M encoder will be used to provide hands-on practice.

Prerequisites: HIM 2253, HIM 2724

**HIM 2724****ICD-10 Coding**

4 Credits

This course focuses on the International Classification of Diseases 10<sup>th</sup> Revision, Clinical Modification (ICD-10 CM) and the International Classification of Diseases 10<sup>th</sup> Revision, Procedure Coding (ICD-10 PC) Systems. Students explore the organization, structure, conventions, and guidelines of ICD-10 in order to accurately code and sequence diagnoses. The importance of the standards of ethical coding, coding compliance, and maintenance of patient privacy is stressed.

Prerequisites: HSC 1531

Corequisite: HIM 2253

**HIM 2941****Clinical Coding Practicum**

3 Credits

Course is planned work-based experience that provides students with an opportunity to enhance their skills through a supervised practical experience related to their career objectives. Coding guidelines will be used and the student will address billing and reimbursement issues. Medical records will be used by the student to perform coding procedures.

Prerequisites: HIM 1000, HIM 1112C, HIM 1433, HIM 1442, HIM 1453, HIM 2275C, HIM 2724, HSC 1531, OST 2854C and permission of instructor or department head.

Corequisite: HIM 2283.

**HIS 2206H****Honors Selected Topics in History**

3 Credits

An in depth study of the economic, intellectual, cultural, social and political developments in Western Civilization and their impact on today's world. Honors Program permission required. May be taken two times for credit.

**HLP 1081****Health Analysis and Improvement**

3 Credits

Examines the role, wellness and fitness, disease, nutrition, stress and physical activity, and their implications for total well-being. Includes a self-evaluation of the student's current health status through their body composition and target heart rate. The development of a personal fitness program through complimentary and integrative modalities and a wide variety of choices is designed to improve total body fitness.

**HSA 2010****Issues and Trends in Public Health**

3 Credits

This course will serve as an introduction to current events in the field of public health (e.g., Zika virus, marijuana legislation in Hillsborough County and how STI risks relate to geo-location dating applications). Content will vary from semester to semester in order to reflect up-to-date events within the field. Prerequisites: College level reading and writing skills are required.

**HSA 2117**  
**Health Care Delivery**

3 Credits

This course provides an introduction to health care services, offering students an overview of the US health care delivery system, health policy, funding sources, and comparison with other nations.

**HSA 2322**  
**Health Insurance**

3 Credits

This course will serve as an introduction to basic health insurance, and health care financing principles and terminology. It is designed to serve as an overview of how the insured, uninsured, and underinsured interact with the United States health care system.

Prerequisites: College level reading and writing skills are required.

**HSC 1220**  
**Introduction to the Health Sciences**

1 Credit

Introduces students to health care and patient care delivery systems. Includes discussion of infectious diseases and their transmission, including HIV/AIDS and hepatitis, blood borne pathogens, legal/ethical issues regarding violence/abuse cognition and reporting. Also includes CPR certification for health care providers.

Prerequisites: MAT 0018, REA 0007 and ENC 0015 or equivalent HCC placement test scores.

**HSC 2006**  
**Orientation to Perioperative Services**

3 Credits

This course is an overview of the profession including basic skills and terminology related to historical development, current profession trends, professionalism, and professional code of ethics, professional organizations, patient confidentiality, infection control, asepsis, and basic surgical patient assessment using aseptic technique, clinical laboratory tests, and vital signs.

Prerequisite: Admission to Surgical Technology Program  
Corequisite: HSC 2006L

**HSC 2006L**  
**Orientation to Perioperative Services Laboratory**

1 Credit

This course is an overview of the profession including basic skills and terminology related to historical development, current profession trends, professionalism, and professional code of ethics, professional organizations, patient confidentiality, infection control, asepsis, and basic surgical patient assessment using aseptic technique, clinical laboratory tests, and vital signs.

Prerequisite: Admission to Surgical Technology Program  
Corequisite: HSC 2006

**HSC 1531**  
**Medical Terminology**

3 Credits

Focuses on medical terminology, with an emphasis on anatomic names of bones and organs of the body, anatomic descriptive terms, radiographic laboratory terms and their common abbreviations and commonly used medical terms and their proper usage.

**HSC 1641**  
**Legal and Ethical Aspects in Health Care**

1 Credit

An introduction to health care delivery systems, their roles and responsibilities, and the patient's legal rights within the system. The student will also evaluate ethical issues as they relate to the health care field.

**HSC 2017**  
**Careers in Public Health**

3 Credits

This course description will provide students with an overview of careers in the field of public health and actively engage them in the process of exploring occupations in public health. Students will complete self-assessments on their interests, skills, personality and work values. This information will be applied to occupation and career goals.

Prerequisites: College level reading and writing skills required.

**HSC 2100**  
**Health Education**

3 Credits

Provides a survey of the principles of health with an emphasis on physical fitness, mental health, nutrition, the use of tobacco, alcohol, drugs and family living.

**HSC 2130**  
**Sex, Health, and Decision Making**

3 Credits

This course explores the fundamental relationship between sexuality, decision making and health outcomes from a public health perspective. Students explore sexuality issues and learn tools that promote sexual health and healthy relationships.

**HSC 2400**  
**First Aid**

3 Credits

To provide the citizen responder with the knowledge and skills necessary in an emergency to help sustain life, reduce pain, and minimize the consequences of injury or sudden illness until professional medical help arrives. Meets American Red Cross requirements for First Aid Responding to Emergencies Certification. A special fee will be charged for this course.

**HSC 2520**  
**Microbiology for Perioperative Services**

3 Credits

This course is an overview of the profession including basic skills and terminology related to medical asepsis and the role

bacteria has on the operating room environment and the surgical patient. It examines the relation with the growth of pathogenic micro-organisms and methods used to destroy harmful organisms in the operation room environment. It covers profession trends, patient confidentiality, infection control, asepsis, and surgical assessment using scenario-based procedures used in the operation room.

Prerequisite: Admission to Surgical Technology Program

### **HSC 2561**

#### **Care for an Aging Population**

3 Credits

This course will serve as an introduction to public health issues related to providing care for an aging population. This course is designed to define and describe long-term care and types of residents, long-term care services, continuum of care, different LTC facilities (SNF, AL, IL, home health, hospice, respite care, adult day care, CCRC) and advance medical directives.

Prerequisites: College level reading and writing skills are required.

### **HSC 2660**

#### **Health Communications**

3 Credits

This course will serve as an introduction to key principles used in health communications. This course will provide an overview of health communication; how it is used at the individual group, and community levels to promote consumption of goods and products and its impact on health outcomes.

Prerequisites: College level reading and writing skills are required.

### **HSC 2669**

#### **Prevention and Community Health**

3 Credits

This course will serve as an introduction to prevention methods in public health. This course is designed to provide an overview of the three primary levels of prevention: primary, secondary, and tertiary prevention.

Prerequisites: College level reading and writing skills are required.

### **HSC 2721**

#### **Accessing and Analyzing Health Information**

3 Credits

This course will serve as an introduction to the use of evidence to draw conclusions about disease etiology, benefits and the use of evidenced based recommendations. It is designed to provide an overview of health information concepts such as health literacy and health information types.

Prerequisites: College level reading and writing skills are required

### **HSC 2732**

#### **Fundamentals of Clinical Research I**

3 Credit

This course will provide an overview of the research process including: consent, screening, phases of clinical trials, product development and adverse events and safety.

### **HSC 2733**

#### **Fundamentals of Clinical Research II**

3 Credit

This course will provide an overview of guidelines and regulations governing clinical trials.

Prerequisite: HSC 2732

### **HSC 2734**

#### **Regulatory Affairs in Clinical Research**

3 Credit

This course will provide an overview of Institutional Review Board functions and operations including purpose, review types and composition. In addition, ethical issues within clinical research will be introduced.

### **HSC 2738**

#### **Quality Assurance in Clinical Research**

3 Credit

This course will provide an overview of compliance and monitoring issues in clinical research.

### **HSC 2739**

#### **Business of Clinical Research**

3 Credit

This course will provide an overview of funding and site sponsorship related to clinical research including: public/private grants and contracts and lifecycles of clinical trials.

### **HSC 2810**

#### **Health Navigator Practicum**

4 Credits

This course will serve as the culminating experience for students enrolled in the Health Navigator program. It is designed to prepare students for employment as patient navigators or community health workers by providing an experiential field experience that provides students with descriptions of primary duties, annual salary, and interaction with professional organizations.

Prerequisites: College level reading and writing skills are required.

### **HSC 2819**

#### **Clinical Research Practicum**

3 Credit

This course will serve as the culminating experience for students enrolled in the Clinical Research programs. It will include experience working directly at a clinical research facility.

### **HUM 1020**

#### **Introduction to the Humanities**

3 Credits

This course is an overview of human creative expression through various humanistic disciplines. The course is intended to broaden or establish an appreciation of the arts and ideas. Topics may include music, painting, sculpture, architecture, religion, philosophy, dance, theatre, literature, and film. Emphasis may be placed on a thematic, discipline-oriented, and or chronological approach.

Prerequisites: College level reading and writing skills required.

**HUM 1020H****Honors Introduction to the Humanities**

3 Credits

Same as HUM 1020 with honors content. This course is an overview of human creative expression through various humanistic disciplines. The course is intended to broaden or establish an appreciation of the arts and ideas. Topics may include music, painting, sculpture, architecture, religion, philosophy, dance, theatre, literature, and film. Emphasis may be placed on a thematic, discipline-oriented, and or chronological approach. Honors Program permission required. Prerequisites: College level reading and writing skills required.

**HUM 1520****Music in Culture**

3 Credits

Links music to the visual arts and the composer's cultures, focusing on western music from the Medieval Period to the present.

**HUM 2210****World Humanities: Prehistory to the Early Modern Era**

3 Credits

Provides an overview of the arts and ideas of major world civilizations of Europe, Asia, the Middle East, Africa and the Americas from the Prehistoric Era to the Renaissance. History is discovered through a study of art, music, literature, religion and philosophy as students learn what others valued and believed.

Prerequisites: College level reading and writing skills are required.

**HUM 2210H****Honors World Humanities: Pre-history to the Early Modern Era**

3 Credits

Same as HUM 2210 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**HUM 2230****World Humanities: Early Modern to the Contemporary**

3 Credits

Provides an overview of the arts and ideas of major world civilizations of Europe, Asia, the Middle East, Africa and the Americas from the Renaissance to the present day. History is discovered through a study of art, music, literature, religion and philosophy as students learn what others valued and believed.

Prerequisites: College level reading and writing skills are required.

**HUM 2230H****Honors World Humanities: Early Modern to the Contemporary**

3 Credits

Same as HUM 2230 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**HUM 2410****Asian Humanities**

3 Credits

A historical survey of the humanities in India, China, Japan: the visual arts, music, dance, theater, religion, and philosophy from the Prehistoric Era to modern times. Emphasis will be on the cultural values revealed in works of art and literature.

Prerequisites: College level reading and writing skills are required.

**HUM 2410H****Honors Asian Humanities**

3 Credits

Same as HUM 2410 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**HUM 2420****African Humanities**

3 Credits

A historical survey of African humanities: the visual arts, music, dance, literature, theater, religion, and philosophy from the prehistoric era to the present day. Emphasis will be on the cultural values revealed in works of art and artifact.

Prerequisites: College level reading and writing skills are required.

**HUM 2420H****Honors African Humanities**

3 Credits

Same as HUM 2420 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**HUM 2461****Latin American Humanities**

3 Credits

A historical survey of the humanities of Latin America: the visual arts, music, dance, theater, religion and philosophy from the pre-Columbian era to modern times. Emphasis will be on the cultural values revealed in works of art, artifact, and literature.

Prerequisites: College level reading and writing skills are required.

**HUM 2700**  
**Travel Study**  
3 Credits

This course offers students a study/travel program centered around trips to specified countries and cities. This course will provide lectures and discussions in the humanities area before the trip and field experiences in the humanities area during the trip. This course may be repeated twice for credit.

**HUM 2930**  
**Special Topics in Humanities**  
3 Credits

This course introduces an area of humanities studies that is not given in-depth coverage in other courses. This course provides an interdisciplinary exposure to various aspects of the humanities through readings, discussion, lecture, guided research and/or field trips. Topics vary from semester to semester. Course may be repeated up to 6 credit hours.

**HUM 2930H**  
**Honors Special Topics in Humanities**  
3 Credits

Same as HUM 2930 with honors content. Honors Program permission required.  
Prerequisites: College level reading and writing skills are required.

**HUN 2201**  
**Fundamentals of Human Nutrition**  
3 Credits

Presents a fundamental understanding of basic human nutrition. Topics include carbohydrates, protein, fat, vitamins, minerals, water, nutrition throughout the lifecycle, fiber, fast foods, the food guide pyramid, and popular facts and fallacies. Includes the interpretation of current nutrition information.  
Prerequisites: College level reading, writing, and math skills are required.

**HUN 2203**  
**Culinary Nutrition**  
3 Credits

This course relates nutrition to the food service industry by way of menu planning, studying nutrient deficiencies and nutrition-related diseases, and retention of nutrients through basic principles of health-conscious cooking.

**HUS 1001**  
**Introduction to Human Services**  
3 Credits

Focuses on the history of the field of Human Services. In addition, models of service delivery, ethics, and professionalism in the practice of human service skills are investigated. College level reading and writing skills are required.

**HUS 1024**  
**Abnormal Behavior: Etiology and Treatment**  
3 Credits

Focuses on the basic concepts of mental health and therapeutic intervention with an emphasis on normal and abnormal be-

haviors. Topics include concepts of normalcy, models of abnormal designations (medical v. non-medical) and identification and classification of abnormal behavior.

**HUS 1111**  
**Interpersonal Skills in Human Services**  
3 Credits

Focuses on the learning and proactive basic communication and interpersonal skills that are necessary in providing competent mental health and social services.

**HUS 1200**  
**Introduction Group Process**  
3 Credits

Provides an introduction to the principles of group interaction, with an emphasis on observation and participation in the group environment.

**HUS 1320**  
**Crisis Intervention**  
3 Credits

Focuses on the theoretical and practical aspects of human crises, with an emphasis on handling simulated crisis situations. Prerequisites: College level reading and writing skills are required.

**HUS 1406**  
**Etiology and Treatment of Substance Use Disorders**  
3 Credits

This course is a comprehensive analysis of the causes, diagnosis, treatment, and prevention of substance abuse and dependence. Symptoms and the progression of substance use disorders are discussed. Types of abusers and different conceptualizations of the nature of substance disorders are reviewed. Strategies and skills are required for working with substance abusing clients are explored.

**HUS 1540**  
**Principles for Understanding and Working with Families**  
3 Credits

This course presents family theories most often used by human service workers as the framework for working with families. Three of these theories—the ecological model of human development, family systems theory and empowerment theory will be used to help students understand the complexity of family development and adaptation and the impact of stress on the family system. The student will learn how these theories can be used in the development of family professional collaboration and application of family centered practice. Students will learn and practice skills for empowering families to assess their strengths, concerns and priorities and to plan for how to meet their needs.

Prerequisite: HUS 1001

**HUS 1550**  
**Multicultural Perspective in Human Services**  
3 Credits

Addresses cultural diversity and its implications for counseling and human services practice. It considers the psychological

impact of factors such as sex, race, ethnicity and culture, religious preference, socioeconomic status, sexual orientation, and physical disability. Common stereotypes and prejudices toward various groups and cultures are investigated. Strategies for overcoming prejudice are studied. Interventions and strategies for working effectively in a helping capacity with diverse clients are discussed.

**HUS 1820**  
**Human Services Practicum I**

2 Credits

Provides an opportunity to apply theory in community health agencies for 16 hours per week. The emphasis is on direct client contact and on using correct interviewing techniques. A special fee will be charged for this course. College level reading and writing skills are required.

**HUS 2008**  
**Psychotherapy: Theory and Practice**

3 Credits

This course surveys the field of counseling theory and practice. The major theories that guide the practice of mental health counseling are investigated, including the personality theories which are the underpinnings of many theoretical approaches. Further, this course reviews issues related to the counselor as a person and a professional and considers ethical issues in counseling practice. College level reading and writing skills are required.

**HUS 2311**  
**Strategies of Behavior Modification**

3 Credits

Focuses on the tenet of learning and motivation, with an introduction to behavior theory. College level reading and writing skills are required.

**HUS 2821**  
**Counseling and Human Services Practicum II**

3 Credits

HUS 2821 builds on the training achieved in HUS 1820. Emphasis is on developing increased skill in working therapeutically with clients and in treatment planning. The elements of ethical practice are emphasized. The course requires 200 hours over the duration of the semester and attendance at a bi-weekly, two hour practicum seminar. The seminar hours are not included in the required 200 practicum hours. A special fee will be charged for this course.

Prerequisite: HUS 1820.

**HUS 2822**  
**Counseling and Human Services Practicum III**

3 Credits

HUS 2822 builds on the training achieved in HUS 1821. Emphasis is on providing effective and professional clinical services to clients and on achieving a sense of professional identity. This course requires 200 hours over the duration of the semester and attendance at a bi weekly, 2 hour practicum seminar. The seminar hours are not included in the required 200 practicum hours. A special fee will be charged for this course.

Prerequisite: HUS 2821

**IDH 2931H**  
**Honors Leadership**

3 Credits

An honors course in leadership and career theory that emphasizes understanding of oneself as an unique individual and that will serve as the basis for developing effective leadership abilities. The major topics include personal assessment, values and expectations, motivation, decision making, and leadership and career theory. Honors Program permission required.

Prerequisites: College level writing and reading skills are required.

**IDH 2955H**  
**Honors Global Leadership**

3 Credits

Students will examine international leadership through an interdisciplinary approach which combines stateside classroom activities, scholarly research, foreign travel, and service learning. Course content will explore the historical, social, economic, religious, and artistic perspectives of another culture. The course promotes communication skills and team work; students should expect rigorous travel and service work. A special fee will be charged for this course for travel expenses. Please contact your instructor for more information.

Prerequisite: IDH 2931H

**IDS 2159**  
**Environmental Issues in Tropical Ecosystems**

3 Credits

Environmental Issues in Tropical Ecosystems is a three-credit hour course that provides an interdisciplinary study of issues in tropical environments. The natural ecology of a terrestrial rain forest ecosystem, a coastal mangrove swamp ecosystem, and an offshore barrier reef ecosystem will be studied. The alterations of these ecosystems by human activities will be examined. Further, the social, political and economic reasons surrounding both the exploitation and the conservation of these systems will be investigated. Sustainable resource extraction from these ecosystems will be explored and compared to the consequences of biodiversity loss, societal issues, and ecological foot printing. A significant portion of this class will occur in the water. Therefore all students must be proficient swimmers and be able to swim unassisted for at least 100 yards and tread water for 10 minutes.

**IDS 2200**  
**Energy Issues**

3 Credits

This course provides an interdisciplinary study of renewable energy sources. A comparison of how the United States and other nations (primarily Denmark) have dealt with the political and economic vulnerability of the dependence on fossil fuel sources since the 1980's will be made. Societal aspects of energy use, waste, production, economics and environmental impacts will be compared between other nations and current United States trends. Course participants will be expected to observe aspects of Danish culture while staying with a Danish

host family for approximately two weeks. This course will include both pre-trip and post-trip components. Note: Course participants must successfully complete an application process. Prerequisites: College level reading, writing and math skills are required.

### **IDS 2891**

#### **Connections**

1 Credit

A selected topics capstone interdisciplinary experience course for the AA degree curriculum. Summarizes major points in the bodies of knowledge acquired while participating in the general education experience in an applied manner. Involves research, application of theoretical models, and utilization of learned skills. The student will be awarded a satisfactory (S) or unsatisfactory (U) grade.

Prerequisite: Completion of at least 45 credit hours including 24 credit hours of general education coursework with a minimum grade of C.

### **IDS 2891H**

#### **Honors Connections**

1 Credit

Same as IDS 2891 with honors content. Honors Program permission required.

Prerequisite: Completion of at least 45 credit hours including 24 credit hours of general education coursework with a minimum grade of C.

### **IDS 2912L**

#### **Undergraduate Research Experience in Natural Science**

2 Credit

This course introduces natural science majors to interdisciplinary direct research in biological, physical, geological, ocean and/or environmental sciences and provides an opportunity for students to gain experience with the scientific process through the development of an independent or group (up to 3 students) research project under the direction of a faculty member(s). Student propose, design, conduct, analyze and present scientific research in the course. This course may be repeated once for additional credit for longer term research projects. Projects must be agreed upon with faculty member and must be interdisciplinary in nature. College level reading, writing and math skills are required.

Prerequisites: Approval of instructor and BSC 2010, BSC 2011 or OCB 2000; or PHY 2053 and PHY 2054; or two of the following: ZOO 1010C, OCE 2001C, EVR 1001C, GLY 2101.

### **IHS 2110C**

#### **Introduction to Global Health: Focus on Selected Countries**

3 Credit

This study abroad course introduces students to global health issues with emphasis on a selected country. The course will examine various issues which influence health outcomes and compare health care delivery systems. Students will analyze personal professional development as they examine various health care disciplines. This course is offered in a hybrid format combining on-line instruction with an in-country content and clinical component. Students are required to complete on-

line theoretical content before leaving for their in-country experience and again upon their return. Students will travel to supervised sites in a selected country for direct exposure to theoretical concepts as well as "hands-on" clinical experiences for application and service learning.

Prerequisites: College level reading and writing skills are required.

### **IND 1020C**

#### **Introduction to Interior Design**

3 Credits

The content of this studio course includes an in-depth study of the elements and principles of design. Students will develop proficiency in the understanding and use of these design principles including: proportion, contrast, hierarchy, emphasis, pattern, balance, and unity. Coursework will include exercises expounding those design principles and utilizing the specific elements of color, line, texture, ornament, shape, and spatial concepts, including scale and proportion, in the design of interior spaces. The course will also explore employment opportunities.

Prerequisites: College level reading, writing and math skills are required.

### **IND 1420**

#### **Materials and Methods**

3 Credits

The focus of this course is the materials of interior design. Topics include: textiles, floor and wall?? Coverings, furniture, ceilings, window treatments and accessories. The particular sources of these materials will be covered. The course will also include topics surrounding estimation and installation of materials, specification guidelines, and residential and commercial applications.

Prerequisites: College level reading, writing and math skills are required.

### **IND 1606C**

#### **Functions and Psychology of Space**

3 Credits

This studio course analyzes social, interactive environments, private and work spaces for residential environments. The psychological use of space, efficiency of traffic patterns, and effectiveness of design layouts explored. Students will read, evaluate, modify, and execute floor plans based upon the requirements for the spatial zones. The course will explore the multitude of visual-impact concepts for the total design of an interior space. Students will learn basic drafting skills.

Prerequisites: College level reading, writing and math skills are required.

### **ITA 1120**

#### **Elementary Italian I**

4 Credits

Covers the fundamentals of reading, writing, listening and speaking the Italian language while developing an understanding of the Italian culture. Native speakers of Italian are encouraged to seek credit by exam test.

Prerequisites: College level reading and writing skills are required.

**ISM 2110**  
**Business Intelligence I**

3 Credit

Business Intelligence I provides the students with an introductory overview of Business Intelligence, data analytics, and data science theory. It is a course that discusses business intelligence (overview of), descriptive analytics, predictive analytics, prescriptive analytics, big data concepts, and privacy and managerial considerations in analytics. Through these topics students will be introduced to the nature of data, statistics modeling, data visualization, data mining, methods and algorithms.

Prerequisites: College level reading, writing and math skills are required.

**ISM 2111**  
**Business Intelligence II**

3 Credit

Business Intelligence II provides the student with the fundamental concepts to understand modern business analytics in organizations, the use of business tools such as spreadsheet and software, how to interpret business analytics data, and how to communicate the finding from the analysis through the use of visualization, tables, and reports.

Prerequisites: College level reading, writing and math skills are required. CGS 1000, ISM 2110, COP 2050, STA 2023

**JOU 1400L**  
**Journalism Laboratory**

1 Credit

Provides practical experience through work on college publications under faculty supervision. This course may be repeated six times for credit.

Prerequisites: College level reading and writing required.

**JOU 1949**  
**Journalism Internship**

3 Credits

A coordinated work study course involving class work and field experience. Objectives determined by the student and the teacher coordinator will be used to evaluate the student. This course may be repeated six times for credit.

Prerequisite: ENC 1101

**JOU 2100C**  
**Journalistic Writing and Reporting**

3 Credits

Introductory course providing instruction and practice in journalistic writing and news reporting. Course includes writing leads, defining news and writing news with specific emphasis on features, editorials, and specific content. Additional course emphasis is placed on the principles of identification, selection, and evaluation of news stories for print and online publication. Course also includes instruction in professional ethics.

Prerequisite: College level reading and writing skills required.

**LAH 2020**  
**Survey of Latin American History**

3 Credits

To examine the major events in the history of Latin American countries from the colonial period to the present with special emphasis on social, cultural, political, and economic development.

**LAH 2020H**  
**Honors Survey of Latin American History**

3 Credits

This course is intended to provide an introductory examination of the colonization and evolution of Latin America from 1492 to the present. The course pays particular attention to the social, political, economic, and cultural impact of the interactions between Europe, Africa and the Americas, which shaped Latin America and the Caribbean throughout the colonial period. It will then explore the ways in which the consequences of colonialism influenced Latin American independence and national identity in the nineteenth and twentieth century. The course critically examines Latin America's relationship to the US and world history in recent decades. Honors Program permission required. College level reading and writing skills are required.

**LIN 1670**  
**English Grammar and Usage**

3 Credits

Provides an intensive study of traditional grammar usage and mechanics for those students who desire to improve both their understanding and use of English. Provides an in-depth review of grammar to returning students. Complements English composition courses.

**LIN 1670H**  
**Honors English Grammar and Usage**

3 Credits

Same as LIN 1670 with honors content. Honors Program permission required.

**LIN 1672**  
**Foundations in English Grammar**

3 Credits

This 3-credit college-level course will provide a study of traditional grammar, usage, and mechanics for students desiring to improve their understanding and use of English. It will examine English from a structural level, focusing on the construction of a sentence.

**LIT 2000**  
**Introduction to Literature**

3 Credits

This survey course will focus on providing the student with an understanding of literature and how it relates to the human experience. Students will read literature from different authors, historical periods, and or cultural contexts. The course presents the opportunity for the student to focus on a variety of literary topics with each section focused on a specific



genre/theme. College level reading and writing skills are required.

**LIT 2000H****Honors Introduction to Literature**

3 Credits

Same as LIT 2000 with honors content. Honors Program permission required.

**LIT 2110****World Literature to 1650**

3 Credits

Focuses on the major periods and forms in literature from Greek and Roman Classicism through the Renaissance, excluding British and American literature. Topics will include the cultural background of each period and the distinctive characteristics of each style and genre.

Prerequisites: College level reading and writing skills required.

**LIT 2120****World Literature: 1650 to Present**

3 Credits

Focuses on literature from the Renaissance to now.

Prerequisites: College level reading and writing skills are required.

**LIT 2120H****Honors World Literature: 1650 Present**

3 Credits

Same as LIT 2120 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**MAC 1105****College Algebra**

3 Credits

Provides students with the opportunity to gain algebraic knowledge needed for many fields such as engineering, business, science, computer technology, and mathematics. Graphical and numerical methods support the study of functions and their corresponding equations and inequalities. Students will study linear, quadratic, polynomial, rational, exponential, logarithmic, inverse, composite, radical, and absolute value functions; systems of equations and inequalities; modeling applied problems; and curve fitting techniques. Previous credit for MAC 1106 precludes credit for MAC 1105.

Prerequisite: MAT 1033 with a minimum grade of C or appropriate score on placement test.

**MAC 1105H****Honors College Algebra**

3 Credits

Same as MAC 1105 with honors content. Honors Program permission required.

Prerequisite: MAT 1033 with a minimum grade of C or appropriate score on placement test.

**MAC 1106****Combined College Algebra/Pre-Calculus**

5 Credits

This course covers the topics of both MAC 1105 and MAC 1140 and is intended for students preparing for MAC 2311. Major topics include the study of linear, quadratic, polynomial, rational, exponential, logarithmic, inverse, composite, radical, and absolute value functions; conic sections; systems of equations and inequalities; matrices and determinants; sequence and series; the binomial theorem; and applications such as curve fitting, modeling, optimization, and exponential growth and decay. Previous credit for MAC 1105, MAC 1140, or MAC 1147 precludes credit for MAC 1106.

Prerequisite: MAT 1033 with a minimum grade of B or appropriate score on placement test.

**MAC 1114****Trigonometry**

3 Credits

Major topics include trigonometric functions, their properties and graphs; inverse trigonometric functions, their properties and graphs; trigonometric identities; trigonometric equations; solutions of triangles; polar coordinates; trigonometric forms of complex numbers; vectors; applications. For students taking MAC 1140 and MAC 1114 in preparation for MAC 2311, it is recommended that MAC 1140 be taken before MAC 1114. Previous credit for MAC 1147 precludes credit for MAC 1114.

Prerequisite: MAC 1105 or MAC 1106 with a minimum grade of C or appropriate score on placement test.

**MAC 1114H****Honors Trigonometry**

3 Credits

Same as MAC 1114 with Honors content. Major topics include trigonometric functions, their properties and graphs; inverse trigonometric functions, their properties and graphs; trigonometric identities; trigonometric equations; solutions of triangles; polar coordinates; trigonometric forms of complex numbers; vectors; applications. Honors Program permission required.

Prerequisite: MAC 1105 or MAC 1106 with a minimum grade of C.

**MAC 1140****Pre-Calculus Algebra**

3 Credits

Major topics include polynomial, rational and other algebraic functions, their properties and graphs; polynomial and rational inequalities; exponential and logarithmic functions, their properties and graphs; conic sections; systems of equations; matrices and determinants; sequences and series; binomial theorem; applications. For students taking MAC 1140 and MAC 1114 in preparation for MAC 2311, it is recommended that MAC 1140 be taken before MAC 1114. Previous credit for MAC 1106 or MAC 1147 precludes credit for MAC 1140.

Prerequisites: MAC 1105 with a minimum grade of C or appropriate score on placement test.

**MAC 1140H****Pre-Calculus Algebra**

3 Credits

Same as MAC 1140 with Honors content. Major topics include polynomial, rational and other algebraic functions, their properties and graphs; polynomial and rational inequalities; exponential and logarithmic functions, their properties and graphs; conic sections; systems of equations; matrices and determinants; sequences and series; binomial theorem; applications. Honors Program permission required.

Prerequisite: MAC 1105 with a minimum grade of C.

**MAC 1147****Pre-Calculus Algebra and Trigonometry**

5 Credits

This is an accelerated course covering the topics of both MAC 1140 and MAC 1114. Students should already have some prior knowledge of trigonometry. Major topics include polynomial, rational, and other algebraic functions, their properties and graphs; polynomial and rational inequalities; exponential and logarithmic functions, their properties and graphs; trigonometric equations; solutions of triangles; polar coordinates; trigonometric forms of complex numbers; vectors; conic sections; systems of equations; matrices and determinants; sequences and series; binomial theorem; applications. Previous credit for MAC 1106, MAC 1114 or MAC 1140, precludes credit for MAC 1147.

Prerequisite: MAC 1105 with a minimum grade of B or appropriate score on placement test.

**MAC 2233C****Calculus for Business and Social Sciences**

3 Credits

An introduction to calculus with applications to business, economic, social and behavioral sciences. Topics includes the study of limits, continuity, rates of change, differentiation and integration of algebraic, exponential and logarithmic functions, and curve sketching with embedded review of algebraic preliminaries: expressions, equations, functions, and graphs including piecewise functions. Previous credit for MAC 2311 precludes credit for MAC 2233C.

Prerequisite: MAC 1105, or MAC 1106, or MAC 1140, or appropriate score on placement test.

**MAC 2311****Calculus and Analytic Geometry I**

5 Credits

This is the first of a three-course sequence in calculus. Major topics include limits, continuity, and differentiation and integration of algebraic, trigonometric, exponential and logarithmic functions. Applications include rates of change, related rates, mean value theorem, extreme values, curve sketching, differentials, area, volume and work. Students must pass both pre-calculus algebra and trigonometry with a minimum grade of C in order to take MAC 2311. This can be accomplished through any one of the following routes: (1) MAC 1106 and MAC 1114, (2) MAC 1140 and MAC 1114, (3) MAC 1147. Prerequisites: MAC 1106 and MAC 1114 with a minimum grade of C, or MAC 1140 and MAC 1114 with a minimum grade of C, or MAC 1147 with a minimum grade of C.

**MAC 2312****Calculus and Analytic Geometry II**

5 Credits

This is the second in a three-course sequence in calculus. Major topics include differentiation and integration of hyperbolic functions, algebraic, trigonometric, and numerical integration techniques, applications of integrals, improper integrals, parametric equations, polar coordinates, conics, and sequences and series.

Prerequisite: MAC 2311 with a minimum grade of C.

**MAC 2313****Calculus and Analytic Geometry III**

5 Credits

A continuation of MAC 2312. Focuses on arc length and surface area, vectors in two and three dimensional space, planes, lines and surfaces in three-dimensional space, functions of more than one variable, partial derivatives, double and triple integrals and their applications, cylindrical and spherical coordinates, vector fields, line integrals, Green's theorem and Stoke's theorem.

Prerequisites: MAC 2312 with a minimum grade of C.

**MAD 2104****Discrete Mathematics**

3 Credits

This course presents and demonstrates some aspects of discrete mathematics that are fundamental to digital computing. Topics include mathematical logic, set theory, graph theory, functions, relations, computer arithmetic, and elementary combinatorics.

Prerequisites: MAC 1105 with a minimum grade of C. College-level reading, writing and math skills are required.

**MAN 2021****Principles of Management**

3 Credits

This course presents an overview of the management functions including planning, organizing, controlling, leading, and problem-solving in organizations; reviews foundations of management thought and managerial processes that lead to organizational effectiveness in today's global business environment.

Prerequisites: College level reading and writing skills are required.

**MAN 2300****Introduction to Human Resource Management**

3 Credits

This course serves as an overview of the field of Human Resources Management. Theories and practices relating to the management of human resources will be explored. The role of the human resources department will be emphasized with particular attention being focuses on supervision, training, and customer service. Topics will include hiring and termination decisions, understanding of applicable federal and state employment legislation, labor relations, employee discipline, performance appraisals, wages and benefits.

Prerequisite: College level reading and writing skills are required.

**MAN 2500**  
**Operations Management**

3 Credits

This course introduces you to operations management techniques including application to functional areas of the business enterprise and operations control. Topics include design and management of production operations, including productivity, strategy, capacity planning, location, layout, resources management, Just-in-time systems, materials requirement planning, and project management.

Prerequisite: College level reading, writing and math skills are required.

**MAN 2604**  
**Intercultural Relations in Business**

3 Credits

Examines the influence of individual differences and ethnic and national culture on behaviors within organizations and across national borders. Addresses the questions of how and when to be sensitive to these issues, and develops skills required to effectively manage in diverse environment.

Prerequisites: College level reading and writing skills are required.

**MAN 2652**  
**Global Management**

3 Credits

This course involves a comparative study of global management practices. This course also addresses the questions of how and when to be sensitive to cultural issues and to develop the skills needed to effectively manage in diverse global environments.

Prerequisite: College level reading, writing and math skills are required.

**MAN 2930**  
**Special Topics in Supply Chain Management**

3 Credits

This course provides an in-depth analysis of current issues, problems, and systems in logistics and supply chain management, with an emphasis on new theoretical and methodological developments. Specific topics vary depending upon current industry developments. This course, in different content areas, may be repeated for credit.

Prerequisite: SCM 1010, Introduction to Supply Chain Management. College level reading, writing and math skills are required.

**MAN 2942**  
**Supply Chain Management Internship**

3 Credits

This course is a selected and planned, work-based experience that provides students with an opportunity to enhance workplace skills through supervised practical experiences related to their career objectives. Work site, supervision, and objectives are to be approved by the Program Manager. A minimum of

75-clock ours of work-site training and supervision are required to complete the internship. The Program Manager (and/or instructor) evaluates student performance based upon completion of the course objectives and feedback provided by the work-site supervisor.

Prerequisite: College level reading, writing and math skills are required.

**MAP 2302**  
**Differential Equations**

3 Credits

Covers first order differential equations including those with separable variables, homogeneous and exact equations and equations made by an integrating factor. Topics include linear differential equations of higher order and their solutions including both homogeneous and non-homogeneous equations, differential operators, Laplace transforms, and series solutions and applications. Designed for engineering and mathematics majors.

Prerequisite: MAC 2312 with a minimum grade of C.

**MAR 2011**  
**Principles of Marketing**

3 Credits

An introduction to contemporary marketing strategies and practices and the decisions marketing managers make to help organizations find, get, and keep customers in today's global business environment.

Prerequisites: College level reading and writing skills are required.

**MAR 2150**  
**International Marketing**

3 Credits

Introduces students to the international marketing environment by examining the marketing implications of cultural and environmental differences, international marketing research, and the adaptation of product, price, promotion, and distribution.

Prerequisite: MAR 2011

**MAT 0018**  
**Pre-Algebra**

3 Credits

Focuses on manipulative skills of whole numbers, integers, fractions, and decimals. Topics include prime factorization, square roots, and absolute values, order of operations, use of percent, formulas, measurement, geometry, and introduction to algebra. This course does not satisfy general education requirements in mathematics and is awarded compensatory credit only. Credit for MAT 0012 precludes credit for MAT 0018.

Prerequisites: REA 0018 or appropriate score on placement test.

**MAT 0022**  
**Integrated Arithmetic and Algebra**

5 Credits

This course combines the arithmetic and algebra skills of MAT 0018 and MAT 0028. This course includes all mathematics

skills necessary for entry into college level mathematics. Arithmetic topics include operations with real numbers, fractions, decimals, exponents, geometry measurement systems, percent and ratios. Algebra topics include polynomial operation, factoring, solving and graphing linear equations and inequalities, operations with quadratic equations, and applications of all concepts. This course does not satisfy general education requirements and generates compensatory credit only. Permission from instructor required.

**MAT 0028**  
**Beginning Algebra**

3 Credits

Provides an introduction to algebra. Topics include basic linear equations and inequalities, properties of real numbers, operations, involving exponents and polynomials, factoring, quadratic equations, applications, graphing of linear equations, and an introduction to radical simplification. This course does not satisfy general education requirements in mathematics and is awarded compensatory credit only. Credit for MAT 0024 precludes credit for MAT 0028.

Prerequisite: MAT 0018 and REA 0018 or appropriate score on placement test.

**MAT 0029**  
**Developmental Mathematics for Statistics and Liberal Arts**

3 Credits

This course provides instruction in developmental mathematical concepts that serve as a foundation for liberal arts and statistics. These mathematics concepts are presented in a context that is relevant and meaningful. This course emphasizes both written and verbal communication of mathematical concepts, and helps prepare the student for college-level statistics and liberal arts math courses. This course is not designed for students who are required to take MAC 1105. Students who complete this course will be prepared to enter STA 2023 or MGF 1106/1107 only.

**MAT 1031**  
**Intermediate Algebra Module**

2 Credits

This emporium-style course covers the algebraic skills of MAT 1033, Intermediate Algebra in a modular format. Students will be given a diagnostic test to identify skills in the course outcomes that have not been mastered. An individual learning plan will be established and students will be assigned objectives relating to the identified competencies. Specific topics for study determined by student's diagnostic test results. Topics include relations, functions, polynomial operations, factoring, rational expressions, equations (linear, quadratic, radical, rational), systems of equations, inequalities, exponents, radicals, graphs of linear equations, and inequalities in two variables, complex number and applications. Elective credit only. May be repeated up to 5 times for credit.

Prerequisites: MAT 0022, or MAT 0028, with an 'S' grade, or appropriate score on placement test.

**MAT 1033**  
**Intermediate Algebra**

4 Credits

Topics include sets, relations, functions, polynomial operations, factoring, rational expressions, equations (linear, quadratic, radical, rational), systems of equations, inequalities, exponents, radicals, graphs of linear equations, and inequalities in two variables, complex numbers, and applications. Elective credit only.

Prerequisites: MAT 0022, or MAT 0028 with an 'S' grade, or appropriate score on placement test.

**MCB 1060**  
**Food Microbiology**

3 Credits

This course offers detailed examination of the principles of food microbiology and their application to current food technology. Additional topics covered will be food and enzymes produced by micro-organisms, food in relation to disease, food sanitation control and inspection and the Food Additives Amendment of the Federal Food, Drug and Cosmetic Act. Co-requisite: MCB 1060L

**MCB 1060L**  
**Food Microbiology Laboratory**

1 Credit

This course is designed to accompany MCB 1060. Aseptic techniques and the culturing of microorganisms are presented. Various techniques for culturing foods, performing food counts, preparing food using micro-organisms, and sampling the environment for microorganisms are presented. A special fee will be charged for this course.

Co-requisite: MCB 1060

**MCB 2000**  
**Microbiology and Human Disease**

3 Credits

Intended for Biology and Allied Health majors. Focuses on disease states, bacteria, viruses, fungi, rickettsiae and other pathogenic organisms. Topics will include problems of sterilization, resistance, diagnostic testing and immunization.

Prerequisites: College level reading and writing skills are required.

Co-requisite: MCB 2000L

**MCB 2000L**  
**Microbiology and Human Disease Laboratory**

1 Credit

A special fee will be charged for this course.

Prerequisites: College level reading and writing skills are required.

Co-requisite: MCB 2000

**MCB 2910L**  
**Guided Undergraduate Research**

1 Credit

This course is intended for biological science majors who desire to gain experience with research techniques, methods and procedures. It is intended to create supervised study through

field and laboratory projects, guided readings, and achievement in specific research skills. Students will develop independence in the laboratory regarding their research project and will learn how to write a scientific abstract. May be repeated up to 3 times for credit.

Prerequisites: College level reading, writing and math skills are required.

### **MET 2010C** **Meteorology**

3 Credits

A one semester course for non-science majors that focuses on the physical properties and dynamics of the atmosphere. Topics include the origin and evolution of the atmosphere, storms and severe weather, weather forecasting and analysis, and the impact of weather and climate on humankind. A special fee will be charged for this course.

Prerequisites: College level reading, writing and math skills are required.

### **MGF 1106** **Topics in Mathematics**

3 Credits

Topics will include finite and infinite sets, logic, deductive and inductive reasoning, geometry, counting methods, probability and statistics. Studying these topics will develop a broader base of mathematical knowledge. This course may be used to satisfy part of the mathematics general education requirement for the associate in arts degree.

Prerequisite: MAT 0022, or MAT 0028, or MAT 0029 with a grade of 'S', or appropriate score on placement test.

### **MGF 1106H** **Honors Topics in Mathematics**

3 Credits

Same as MGF 1106 with honors content.

Prerequisite: MAT 0022, or MAT 0028, or MAT 0029 with a grade of 'S', or appropriate score on placement test. Honors Program permission required.

### **MGF 1107** **Explorations in Mathematics**

3 Credits

This course may be used to satisfy part of the mathematics general education requirement for the associate in arts degree. Topics will be chosen from the following: financial mathematics; sequences and series; elementary number theory; history of mathematics; linear and exponential growth; voting theory; chaos and fractals; reflections and translations in geometry; graph theory; game theory; and mathematical use of calculators and computers. These topics will be helpful in developing a broader base of mathematical knowledge.

Prerequisite: MAT 0022, or MAT 0028, or MAT 0029 with a grade of 'S', or appropriate score on placement test.

### **MGF 1107H** **Honors Explorations in Mathematics**

3 Credits

Same as for MGF 1107 with honors content. Honors Program permission required.

Prerequisite: MAT 0022, or MAT 0028, or MAT 0029 with a grade of 'S', or appropriate score on placement test.

### **MLS 2001L** **Laboratory Techniques I**

3 Credits

This is a foundational course which covers clinical laboratory techniques. Students will learn how to draw blood using universal precautions and following OSHA regulations. Laboratory practicums will include macroscopic and microscopic analysis of the urine specimen, immunology and immunohematology techniques with blood specimens. Basic hematological techniques will be introduced to conduct whole blood analysis and differentials. Initial microbiological techniques will be introduced in the laboratory.

Prerequisite: Admission to the Medical Laboratory Science program.

Corequisite: MLS 2304, MLS 2460

### **MLS 2002L** **Laboratory Techniques II**

4 Credits

This is a continuation of MLS 2001L. Students will continue to practice drawing blood using universal precautions and following OSHA regulations. Laboratory practicums will include clinical chemistry, hematology, molecular, microbiology and parasitology techniques.

Prerequisite: MLS 2001L

Corequisite: MLS 2307, MLS 2465, MLS 2624

### **MLS 2003** **Laboratory Techniques III**

2 Credits

This a continuation of MLS 2002L. Students will continue to practice drawing blood using universal precautions and following OSHA regulations. Laboratory practicums will include clinical chemistry and serology.

Prerequisite: MLS 2002L

Corequisite: MLS 2625

### **MLS 2192** **Molecular Diagnosis**

2 Credits

This course provides an overview of the nucleic acid structure, gene expression and genetic diseases. Fundamentals of DNA and RNA isolation, amplification, hybridization analysis will also be discussed.

Prerequisite: MLS 2624

Corequisite: MLS 2003L

### **MLS 2304** **Hematology I and Body Fluids**

3 Credits

This course will provide the student with a foundational overview of the hematopoietic system, cell differentiation, and blood cell structure. Features and characteristics of anemias, thalassemia's and hemoglobinopathies will be covered in this course. Students will explore the components of a quality specimen for the hematology laboratory. The course will cover hematological laboratory techniques including staining techniques and identification of normal blood cells. Students will

also cover the study of the body fluids and their characteristics in normal and diseased states. Characteristics of deviation from normal cells will be emphasized.

Prerequisite: Admission to the Medical Laboratory Science program.

Corequisite: MLS 2001L

### **MLS 2307**

#### **Hematology II and Hemostasis**

3 Credits

This is a continuation of MLS 2304. Students will continue to work with blood cell differentiation and hematology instrumentation. An emphasis will be placed on abnormal cell identification, and white blood cell abnormalities in leukemia, myeloproliferative, lymphoproliferative, and myelodysplastic disorders. This course will cover theory of hematological laboratory techniques including staining techniques and the identity of normal and abnormal blood cells. In addition, coagulation and hemostasis concepts, and instrumentation will be taught along with coagulopathies and platelet disorders.

Prerequisite: MLS 2304

Corequisite: MLS 2002L

### **MLS 2460**

#### **Medical Microbiology I**

3 Credits

This course will cover the foundational overview of the diagnostic microbiological system, isolation and identification of clinically significant microorganisms. There will be an emphasis on the growth characteristics and methodology for identification. Clinical laboratory diagnosis of infectious disease by serological test methods will be studied. Lectures will cover quality specimen collection, and the quality control procedures in the microbiology and serology laboratories.

Prerequisite: Admission to the Medical Laboratory Science program.

Corequisite: MLS 2001L

### **MLS 2465**

#### **Medical Microbiology II**

3 Credits

This course is a continuation of MLS 2460. Emphasis will be placed on the correlation between pathogens, types of infection, and specimen source. Study of parasites and fungi of importance will be explored. The identification of the diagnostic stages, and knowledge of specimen collection, handling, and processing will be discussed. Lectures will continue the discussion of quality control procedures in the microbiology laboratory.

Prerequisite: MLS 2460

Corequisite: MLS 2002L

### **MLS 2551**

#### **Immunohematology and Immunology**

4 Credits

This course will cover the theoretical aspects of the immunohematology section of the laboratory. Students will cover the study of blood group antigens, antibodies and basic immunology. The theory of blood genetics, blood group systems and pre-transfusion practices, and quality control concepts in the

immunohematology laboratory will be discussed. In addition to the immunology concepts covered hemolytic disease of the fetus, neonatal and obstetric transfusion medicine testing, adverse effects of transfusion, donor screening, and blood component preparation usage will also be discussed.

Prerequisite: Admission to the Medical Laboratory Science program.

Corequisite: MLS 2001L

### **MLS 2624**

#### **Clinical Chemistry I and Urinalysis**

3 Credits

This course will provide the introduction to the chemistry tests that monitor the processes in the human body. Quality of specimen collected and its effect on the chemistry laboratory results will be examined. The course will cover the theory of the chemistry laboratory procedures conducted. Quality assurance concepts and quality control procedures will be introduced. Point-of-care procedures will be discussed in relation to the current practice for patient care. The course also covers the study and formation of urine, chemical, and microscopic examination. This course also includes an overview of the non-urine analyzed in the clinical laboratory.

Prerequisite: Admission to the Medical Laboratory Science program.

Corequisite: MLS 2002L

### **MLS 2625**

#### **Advanced Clinical Chemistry**

3 Credits

This course is a continuation of Clinical Chemistry I and Urinalysis. Discussion of the chemistry tests performed on serum and plasma specimens will continue. Material covered in MLS 2624 on quality control principles will be reviewed. Enzyme kinetics, endocrinology, therapeutic drug monitoring and toxicology, liver and cardiac function will be discussed, as well as, principles of instrumentation and techniques in clinical chemistry related to standardization of procedures, and use of standards and controls.

Prerequisite: MLS 2624

Corequisite: MLS 2003L

### **MLS 2701**

#### **Principles of Laboratory Operations**

2 Credits

This course will provide students with knowledge of the role regulatory agencies and laws in the practices of the medical laboratory sciences. Students will be given information on essentials of management and quality assurance in the practices in the clinical laboratory. Emphasis will be placed on safe practices in the laboratory and elements required, and training laboratory personnel.

Prerequisite: MLS 2624

### **MLS 2834**

#### **Medical Laboratory Clinical I**

2 Credits

Students will spend required time at a clinical affiliate and practice under the supervision of a MLS. Theory and laboratory skills attained in the student laboratory will be required in

the area of urinalysis, serology, immunology and body fluids. The skills demonstrated must include critical thinking skills, ability to correlate the findings in the specimen, and patient clinical condition and disease state.

Prerequisite: MLS 2624

### **MLS 2835**

#### **Medical Laboratory Clinical II**

5 Credits

Students will spend required time at a clinical affiliate and practice under the supervision of a MLS. Theory and laboratory skills attained in student laboratory are required in the area of the laboratory. The skills demonstrated must include critical thinking skills, the ability to correlate the findings in the specimen, and patient clinical condition and disease state.

Prerequisite: MLS 2834

Corequisite: MLS 2930

### **MLS 2930**

#### **Medical Laboratory Seminar**

2 Credits

This course stresses the importance of evidence based practice in the medical laboratory sciences field. Students will be presenting case studies to the faculty and peers in the program. Instruction will emphasize professional, legal and ethics issues affecting the medical laboratory science field. Students will review the material covered in the program to prepare for the comprehensive examination. This will be used in preparation for the Board of Certification examination by the American Society for Clinical Pathology.

Prerequisite: MLS 2003L, MLS 2625

Corequisite: MLS 2835

### **MMC 2000**

#### **Introduction to Mass Communications**

3 Credits

Provides an overview of the background, role, and responsibilities of the mass media; focuses on analyzing and evaluating techniques. Topics include print and electronic media and film.

### **MMC 2100C**

#### **Writing for Mass Communication**

3 Credits

Covers the basic techniques used in preparing copy for mass media including the fundamental journalistic skills used in writing for newspapers, magazines, radio, television, public relations and advertising.

Prerequisites: College level reading and writing skills are required.

Co-requisite: JOU 1400L

### **MNA 1320**

#### **HR Recruitment Interviewing and Selection**

3 Credits

Provides a detailed overview of staffing activities crucial to organization performance. Within the context of current law and regulations, the focus will be on the assessment of staffing needs, recruitment strategies, interviewing techniques, selection tools and methods, planning and implementation of staffing policies.

### **MNA 1325**

#### **HR Statistical Analysis, Compensation and Benefits**

3 Credits

An examination of the compensation systems in large and small organizations, the methods and implications of making wage and salary decisions, and the use of statistical analysis in decision making. Topics include: job analysis, job evaluation, wage surveys, incentives, pay equity, benefits and compensation strategy, and legal perspectives.

### **MSL 1001C**

#### **Leadership and Personal Development**

2 Credits

Introduces personal challenges and competencies critical to effective leadership; teaches personal development life skills relative to leadership, officership, and the Army profession; focuses on gaining understanding of the ROTC program and its purpose in the Army. Enrollment is limited to students who are also enrolled in the USF ROTC program.

### **MSL 1002C**

#### **Introduction to Tactical Leadership**

2 Credits

Presents leadership basics (e.g.: setting direction, problem-solving, listening, briefs, giving feedback and use of effective writing skills); explores dimensions of leadership values, attributes, skills and actions in context of practical hands-on exercises. Enrollment is limited to students who are also enrolled in the USF ROTC program.

### **MSL 2101C**

#### **Innovative Team Leadership**

2 Credits

Explores creative and innovative tactical leadership strategies and styles. Develops knowledge of leadership values and attributes by understanding Army rank, structure, and duties. Broadens knowledge of land navigation and squad tactics. Enrollment is limited to students who are also enrolled in the USF ROTC program.

### **MSL 2102C**

#### **Foundations of Tactical Leadership**

2 Credits

Examines challenges of leading tactical teams in complex current operating environment; highlights dimensions of terrain analysis, patrolling and operation orders; develops greater self-awareness, communication and team building skills. Enrollment is limited to students who are also enrolled in the USF ROTC program.

### **MSL 2900C**

#### **Army Physical Readiness**

1 Credit

This course will train students in the unique role of Army physical readiness in sustaining military operations. It will also prepare students to plan, prepare, and conduct military fitness training. Student can receive one credit per semester for up to four semesters. Enrollment is limited to students who are also enrolled in the USF ROTC program.

**MUL 1010****Introduction to Music**

3 Credits

Covers the basic principles of music and techniques for listening to music, with an emphasis on Western music from the 17th century to the present.

Prerequisites: College level reading and writing skills are required.

**MUM 1623****Electronic Music: Introduction to MIDI**

3 Credits

An introduction to electronic music composition through lecture and studio instruction, with an emphasis on the MIDI system, in conjunction with computers and the digital synthesizer.

Prerequisite: MUT 1111

**MUN 1120****Concert Band I**

1 Credit

Provides for participation in a concert band which performs traditional and contemporary music. This course may be repeated four times for credit.

**MUN 1310****Chorus**

1 Credit

Provides for participation in a chorus which performs a variety of music at college and public functions. This course may be repeated four times for credit.

**MUN 1340****Vocal Ensemble**

1 Credit

Provides for participation in small performing groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

**MUN 1410****String Ensemble**

1 Credit

Provides for participation in small instrumental groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

**MUN 1420****Woodwind Ensemble**

1 Credit

Provides for participation in small instrumental groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

**MUN 1430****Brass Ensemble**

1 Credit

Provides for participation in small instrumental groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

**MUN 1440****Percussion Ensemble, Small Ensemble**

1 Credit

Provides for participation in small instrumental groups and includes the study of traditional and contemporary music. This course may be repeated four times for credit.

**MUN 1480****Classical Guitar Ensemble**

1 Credit

Open to all students, faculty and members of the community who play guitar. Enrollment is determined by the director through audition. Participants will study and perform music from all periods in preparation for public performance. May be taken six times for credit.

**MUN 1710****Stage Band I, Major Ensemble**

1 Credit

Provides for participation with a select group of musicians who perform contemporary jazz and stage band music. This course may be repeated four times for credit.

**MUS 1010****Recital Attendance**

Students in this course are required to attend recitals and concerts approved by the Hillsborough Community College, Ybor City Campus School of Visual and Performing Arts Music Department. This course is required of all students enrolled in Applied Music, principal instrument (or voice) courses. It is a non-credit S/U (Satisfactory/Unsatisfactory) course.

**MUT 1001****Fundamentals of Music**

3 Credits

Focuses on music fundamentals for non-music majors, with an emphasis on reading music, keys, scales, simple chords and their practical application.

**MUT 1111****Music Theory I**

3 Credit

Covers the rudiments of music, with an emphasis on major and minor scales, rhythmic and melodic notation, triads, intervals, cadences, chords and inversions and four part music writing. Topics include the development of aural and visual skills in music reading, rhythmic, melodic and harmonic dictation and the practical application of basic harmonic principles.

Co-requisite: MUT 1241L

**MUT 1112****Music Theory II**

3 Credit

A continuation of MUT 1111

Co-requisite: MUT 1242L



**MUT 1241L****Sight Singing and Ear Training I**

1 Credit

Trains students to visually and aurally recognize the melodic, rhythmic and harmonic patterns studied in Theory I, translate patterns from aural stimulus to notation and visual/cognitive stimulus to performance in real time.

Co-requisite: MUT 1111

**MUT 1242L****Sight Singing and Ear Training II**

1 Credit

Trains students to visually and aurally recognize the melodic, rhythmic and harmonic patterns studied in Theory II, translate patterns from aural stimulus to notation and visual/cognitive stimulus to performance in real time.

Co-requisite: MUT 1112

**MUT 2116****Music Theory III**

3 Credits

Focuses on the development of music from Beethoven through the 20th century, with an emphasis on the techniques of four-part harmonization, including triads and chords, with an introduction to counterpoint.

Co-requisite: MUT 2246L

**MUT 2117****Music Theory IV**

3 Credits

A continuation of MUT 2116

Co-requisite: MUT 2247L

**MUT 2246L****Sight Singing/Ear Training III**

1 Credit

Trains students to visually and aurally recognize the melodic, rhythmic and harmonic patterns studied in Theory III, translate patterns from aural stimulus to notation and visual/cognitive stimulus to performance in real time.

Co-requisite: MUT 2116

**MUT 2247L****Sight Singing/Ear Training IV**

1 Credit

Trains students to visually and aurally recognize the melodic, rhythmic and harmonic patterns studied in Theory IV, translate patterns from aural stimulus to notation and visual/cognitive stimulus to performance in real time.

Co-requisite: MUT 2117

**MVB 1011****Pre-Principal Freshman Trumpet (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on

the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVB 1011****Pre-Principal Freshman Trumpet (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVB 1012****Pre-Principal Freshman Horn (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVB 1012****Pre-Principal Freshman Horn (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVB 1013****Pre-Principal Freshman Trombone (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVB 1013****Pre-Principal Freshman Trombone (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVB 1014****Pre-Principal Freshman Baritone (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVB 1014****Pre-Principal Freshman Baritone (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVB 1015****Pre-Principal Freshman Tuba (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVB 1015****Pre-Principal Freshman Tuba (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVB 1211****Secondary Freshman Trumpet**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MVB 1212****Secondary Freshman Horn**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MVB 1213****Secondary Freshman Trombone**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MVB 1214****Secondary Freshman Baritone**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MVB 1215****Secondary Freshman Tuba**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has com-

pleted the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

### **MVB 1311**

#### **Principal Freshman Trumpet**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVB 1312**

#### **Principal Freshman Horn**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVB 1313**

#### **Principal Freshman Trombone**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVB 1314**

#### **Principal Freshman Baritone Horn**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVB 1315**

#### **Principal Freshman Tuba**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVB 2221**

#### **Secondary Sophomore Trumpet**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVB 2222**

#### **Secondary Sophomore Horn**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument,

or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

### **MVB 2223**

#### **Secondary Sophomore Trombone**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

### **MVB 2224**

#### **Secondary Sophomore Baritone**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVB 2225**

#### **Secondary Sophomore Tuba**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

### **MVB 2321**

#### **Principal Sophomore Trumpet**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVB 1311

Co-requisite: MUS 1010

### **MVB 2322**

#### **Principal Sophomore Horn**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisites: MVB 1312

Co-requisite: MUS 1010

### **MVB 2323**

#### **Principal Sophomore Trombone**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVB 1313

Co-requisite: MUS 1010

**MVB 2324****Principal Sophomore Baritone Horn**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVB 1314

Co-requisite: MUS 1010

**MVB 2325****Principal Sophomore Tuba**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVB 1315

Co-requisite: MUS 1010

**MVK 1011****Pre-Principal Freshman Piano (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVK 1011****Pre-Principal Freshman Piano (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVK 1111 (A & B)****Freshman Class Piano**

1 Credit

Covers beginning piano skills for non-keyboard music majors by combining lecture and outside practice. Students may take two semesters, designated 'A' and 'B.'

**MVK 1211****Secondary Freshman Piano**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MVK 1311****Principal Freshman Piano**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MVK 1811****Class Piano/Non Music Majors**

1 Credit

Beginning piano for the non-music major. This course may be repeated four times for credit.

**MVK 2221****Secondary Sophomore Piano**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MVK 2321****Principal Sophomore Piano**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVK 1311

Co-requisite: MUS 1010

**MVP 1011****Pre-Principal Freshman Percussion (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVP 1011****Pre-Principal Freshman Percussion (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVP 1211****Secondary Freshman Percussion**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010.

**MVP 1311****Principal Freshman Percussion**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated 1 time(s) for credit.

Co-requisite: MUS 1010

**MVP 2221****Secondary Sophomore Percussion**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MVP 2321****Principal Sophomore Percussion**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVP 1311

Co-requisite: MUS 1010

**MVS 1011****Pre-Principal Freshman Violin (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on

the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVS 1011****Pre-Principal Freshman Violin (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVS 1012****Pre-Principal Freshman Viola (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MVS 1012****Pre-Principal Freshman Viola (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVS 1013****Pre-Principal Freshman Cello (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MVS 1013****Pre-Principal Freshman Cello (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVS 1014****Pre-Principal Freshman String Bass (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MVS 1014****Pre-Principal Freshman String Bass (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVS 1015****Pre-Principal Freshman Harp**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUT 1001 ("A" semester only), MUS 1010

**MVS 1016****Pre-Principal Freshman Guitar (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MVS 1016****Pre-Principal Freshman Guitar (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MVS 1116****Class Guitar**

1 Credit

Guitar class: group instruction in beginning classical guitar techniques. May be repeated four times for credit.

**MVS 1211****Secondary Freshman Violin**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MVS 1212****Secondary Freshman Viola**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MVS 1213****Secondary Freshman Cello**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has com-

pleted the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 1214**

#### **Secondary Freshman String Bass**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 1215**

#### **Secondary Freshman Harp**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 101\_ level but still does not meet the requirements for entry to the MV\_ 131\_ level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 1216**

#### **Secondary Freshman Guitar**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 1311**

#### **Principal Freshman Violin**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 1312**

#### **Principal Freshman Viola**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 1313**

#### **Principal Freshman Cello**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 1314**

#### **Principal Freshman String Bass**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisites: MUS 1010

### **MVS 1315**

#### **Principal Freshman Harp**

2 Credits

This course is designed for the music major to improve technical skills, musicianship and to study appropriate repertoire with emphasis on stylistically accurate performance practices. Students must either audition successfully for placement in this course or have successfully completed the MV\_101\_ courses. May be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 1316**

#### **Principal Freshman Guitar**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 2221**

#### **Secondary Sophomore Violin**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 2222**

#### **Secondary Sophomore Viola**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

### **MVS 2223**

#### **Secondary Sophomore Cello**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MVS 2224****Secondary Sophomore String Bass**

1 Credit

This course is a continuation of MV\_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_10XX level but still does not meet the requirements for entry to the MV\_13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MVS 2225****Secondary Sophomore Harp**

1 Credit

This course is a continuation of MV\_121\_ and is designed for the music major who wishes to study a secondary instrument or for a student who has completed the MV\_101\_ level but still does not meet the requirements for entry to the MV\_131\_ level course. May be repeated once for credit.

Co-requisite: MUS 1010

**MVS 2226****Secondary Sophomore Guitar**

1 Credit

This course is a continuation of MV\_222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_10XX level but still does not meet the requirements for entry to the MV\_13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MVS 2321****Principal Sophomore Violin**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVS 1311

Co-requisite: MUS 1010

**MVS 2322****Principal Sophomore Viola**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVS 1312

Co-requisite: MUS 1010

**MVS 2323****Principal Sophomore Cello**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contract hour weekly. This course may be repeated once for credit.

Prerequisite: MVS 1313

Co-requisite: MUS 1010

**MVS 2324****Principal Sophomore String Bass**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVS 1314

Co-requisite: MUS 1010

**MVS 2325****Principal Sophomore Harp**

2 Credits

This course is designed for the music major to improve technical skills, musicianship and to study appropriate repertoire with emphasis on stylistically accurate performance practices. Students must either audition successfully for placement in this course or have successfully completed the MV\_101\_ courses. May be repeated once for credit.

Co-requisite: MUS 1010

**MVS 2326****Principal Sophomore Guitar**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVS 1316

Co-requisite: MUS 1010

**MVV 1011****Pre-Principal Freshman Voice (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MUT 1001

**MVV 1011****Pre-Principal Freshman Voice (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010



**MVV 1211****Secondary Freshman Voice**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MVV 1311****Principal Freshman Voice**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once.

Co-requisite: MUN 1310, MUS 1010

**MVV 2221****Secondary Sophomore Voice**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MVV 2321****Principal Sophomore Voice**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVV 1311

Co-requisite: MUN 1310, MUS 1010

**MWW 1011****Pre-Principal Freshman Flute (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MWW 1011****Pre-Principal Freshman Flute (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on

the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MWW 1012****Pre-Principal Freshman Oboe (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MWW 1012****Pre-Principal Freshman Oboe (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010, MVW 1013

**MWW 1013****Pre-Principal Freshman Clarinet (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MWW 1013****Pre-Principal Freshman Clarinet (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MWW 1014**  
**Pre-Principal Freshman Bassoon (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MWW 1014**  
**Pre-Principal Freshman Bassoon (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MWW 1015**  
**Pre-Principal Freshman Saxophone (A)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisites: MUS 1010, MUT 1001

**MWW 1015**  
**Pre-Principal Freshman Saxophone (B)**

2 Credits

This course is for the student who intends to be a music major, but who lacks the technique, music reading skills and/or performance experience proficiencies expected of a student wishing to register for the first semester college freshman level of applied music instruction. The course also serves those who are not music majors, but who wish to study an instrument on the college level. In such cases, enrollment is subject to space availability and instructor approval. Students may take two semesters, designated 'A' and 'B.'

Co-requisite: MUS 1010

**MWW 1211**  
**Secondary Freshman Flute**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MWW 1212**  
**Secondary Freshman Oboe**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MWW 1213**  
**Secondary Freshman Clarinet**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MWW 1214**  
**Secondary Freshman Bassoon**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MWW 1215**  
**Secondary Freshman Saxophone**

1 Credit

This course is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MWW 1311**  
**Principal Freshman Flute**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MWW 1312****Principal Freshman Oboe**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MWW 1313****Principal Freshman Clarinet**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MWW 1314****Principal Freshman Bassoon**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MWW 1315****Principal Freshman Saxophone**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Co-requisite: MUS 1010

**MWW 2221****Secondary Sophomore Flute**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MWW 2222****Secondary Sophomore Oboe**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MWW 2223****Secondary Sophomore Clarinet**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MWW 2224****Secondary Sophomore Bassoon**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MWW 2225****Secondary Sophomore Saxophone**

1 Credit

This course is a continuation of MV\_ 222X and is designed for the music major who wishes to study a secondary instrument, or for a student who has completed the MV\_ 10XX level but still does not meet the requirements for entry to the MV\_ 13XX level course. This course may be repeated 1 time for credit.

Co-requisite: MUS 1010

**MWW 2321****Principal Sophomore Flute**

2 Credits

Students must audition for placement in this course and will receive private instruction on one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVW 1311

Co-requisite: MUS 1010

**MWW 2322****Principal Sophomore Oboe**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVW 1312

Co-requisite: MUS 1010

**MWW 2323****Principal Sophomore Clarinet**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVW 1313

Co-requisite: MUS 1010

**MWW 2324****Principal Sophomore Bassoon**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once for credit.

Prerequisite: MVW 1314

Co-requisite: MUS 1010

**MVW 2325****Principal Sophomore Saxophone**

2 Credits

Students must audition for placement in this course and will receive private instruction of one contact hour weekly. This course may be repeated once.

Prerequisite: MVW 1315

Co-requisite: MUS 1010

**NMT 1002****Introduction to Nuclear Medicine Technology**

2 Credits

Provides an overview of the field of nuclear medicine. Focuses on medical terminology, the history of nuclear medicine, basic concepts of radiochemistry, the production of radionuclides, medical law, and hospital administration. Field trips to nuclear medicine training facilities are included.

Prerequisite: NMT 1705L (Nuclear Medicine Tech I Lab)

Co-requisite: NMT 1705L

**NMT 1103****Patient Care**

2 Credits

Covers concepts of patient care with an overview of proper patient management. Addresses issues of ethics as they relate to patient care, healthcare, and the profession of nuclear medicine.

Prerequisite: NMT 1002

Co-requisite: NMT 1706L (Nuclear Medicine Tech Lab II)

**NMT 1312****Radiation Safety and Health Physics**

3 Credits

Covers proper techniques in the safe handling of radioactive materials, with an emphasis on proper receipt, usage, storage and disposal of radioactive materials. Topics include rules, standards, regulations and biological effects of radiation.

Prerequisite: NMT 1613

**NMT 1534****Instrumentation, Quality Control and Quality Assurance**

3 Credits

Covers the operation and design principles of radiation detection and imaging instruments used in nuclear medicine, computed tomography scanners, magnetic resonance, imaging scanners, medical informatics and computers used in imaging. Also includes quality control of instruments and quality assurance programs.

Prerequisite: NMT 1613

Co-requisite: NMT 1706L

**NMT 1534L****Nuclear Instrumentation Laboratory**

1 Credit

Accompanies NMT 1534. Laboratory exercises include plotting gamma spectra, instrument calibration, detector resolution, simultaneous and radio nuclide quantification.

Co-requisite: NMT 1534

**NMT 1613****Nuclear Physics and Instrumental Applications**

3 Credits

Covers the basic concepts of quantum theory and radiation physics with an emphasis on radioactive decay and the interaction of radiation with matter. Basic radiation safety, the physics of nuclear medicine instruments health physics, and dosimetry.

Prerequisite: Admission to Nuclear Medicine Technology program.

Co-requisite: NMT 1705L, NMT 1714

**NMT 1705L****Nuclear Medicine Laboratory I**

1 Credit

Introduces student to radio-pharmacy and nuclear medicine department settings. Laboratory exercises include proper identification of equipment and use, radiation detection, radiation safety and shielding, instrument calibration, and proper instrumentation technique. Students will be required to pass practical competencies.

Prerequisite: Admission to Nuclear Medicine Technology program.

Co-requisites: NMT 1002, NMT 1613, NMT 1713

**NMT 1706L****Nuclear Medicine Laboratory II**

1 Credit

Prepares students for practicum courses and clinical applications in nuclear medicine by practicing patient transport and transfer, patient positioning, patient care skills, venipuncture, image processing and analysis, principles of radiation safety, and daily applications in the field of nuclear medicine technology. Laboratory exercises also include radiation detection, instrument calibration, detector resolution, instrument quality control, trouble-shooting, and proper technique. Students will be required to pass practical competencies. Completion of practical competencies is required.

Prerequisite: NMT 1705L

Co-requisites: NMT 1103, NMT 1534, NMT 1723, NMT 2430

**NMT 1713****Nuclear Medicine Methodology I**

3 Credits

Comprehensive study of nuclear medicine procedures with special emphasis on radiochemistry, radio-pharmacy, preparation and properties of radiopharmaceuticals and routine imaging techniques. Imaging topics include skeletal, pulmonary, and endocrine systems. Includes case studies and image review.

Prerequisite: Admission to Nuclear Medicine Technology program.

Co-requisite: NMT 1705L, NMT 1714

**NMT 1714****Pathology and Immunology for the NMT**

3 Credits

Introduces the student to human immunology and pathological conditions with an emphasis on those commonly seen in the field of nuclear medicine. Basic anatomy is reviewed in

correlation to the pathophysiology of disease. Descriptions of how diseases are classified, diagnosed and treated, as well as the natural course/prognosis of these diseases are presented. Prerequisite: Admission to the Nuclear Medicine Technology program.

Co-requisite: NMT 1713

### **NMT 1723**

#### **Nuclear Medicine Methodology II**

3 Credits

Comprehensive study of nuclear medicine procedures with special focus on cardiovascular, gastrointestinal, and genitourinary systems. Emphasis is given to radiopharmaceuticals, routine imaging techniques, ancillary pharmacology, and quantitative analysis. Includes image review and case studies.

Prerequisite: NMT 1002

Co-requisite: NMT 1706L

### **NMT 1804**

#### **Nuclear Medicine Practicum I**

3 Credits

Allows students to apply knowledge gained in lectures and laboratories to clinical situations. Consists of up to 32 hours per week of clinical training in affiliate nuclear medicine departments. Under the guidance of registered technologists and physicians, students experience in the clinical setting. Competencies required.

Prerequisites: NMT 1706L, NMT 1723

### **NMT 1814**

#### **Nuclear Medicine Practicum II**

4 Credits

Continuation of NMT 1804L. Consists of up to 32 hours per week of clinical training in affiliate nuclear medicine departments. Under the guidance of registered technologists and physicians, students gain experience in the clinical setting. Competencies on imaging and non-imaging procedures are required.

Prerequisite: NMT 1804

### **NMT 2051L**

#### **Nuclear Medicine Data Analysis**

1 Credit

Correlated review and comprehensive testing of mathematics and data analysis associated with nuclear medicine.

Prerequisite: NMT 2733

Co-requisite: NMT 2061C

### **NMT 2061C**

#### **Nuclear Medicine Seminar**

2 Credits

Correlated review and comprehensive testing in preparation for professional certification examinations. Students are required to complete oral presentations, and participate in professional activities.

Prerequisites: NMT 2733, NMT 2910

### **NMT 2430**

#### **Radiation Safety and Biology**

3 Credits

Focuses on the interaction of ionizing radiation with physiological systems, genetics, radiation injury, and radiation dosimetry with an emphasis on the principles of radiation safety. Includes proper techniques in the safe handling of radioactive materials, proper receipt, usage, storage and disposal of radioactive materials. Topics include rules, standards, and regulations.

Prerequisites: NMT 1002, NMT 1613

Co-requisite: NMT 1534

### **NMT 2733**

#### **Nuclear Medicine Methodology III**

4 Credits

Continues the comprehensive study of nuclear medicine procedures with special emphasis on infection, the central nervous system, oncology, hematopoietic, radioimmunoassay, and therapies. Includes radiopharmaceuticals, pharmacology, image analysis, case studies and image review.

Prerequisite: NMT 1723

### **NMT 2775C**

#### **PET/CT and Cross Sectional Anatomy**

3 Credits

Comprehensive study of positron emission, computed tomography and fusion imaging procedures. Emphasis is given to radiotracer methodology, preparation and properties of positron emission radiopharmaceuticals, routine imaging techniques, ancillary pharmacology including contrast agents, and quantitative analysis. Includes anatomy and pathology in cross-sectional planes for SPECT, PET, CT, and MRI using case studies and image review. Laboratory assignments and competencies also included.

Prerequisites: NMT 1103, NMT 2714, NMT 2430

Co-requisite: NMT 1814

### **NMT 2824**

#### **Nuclear Medicine Practicum III**

4 Credits

Continuation of NMT 1814L. Consists of up to 32 hours per week of clinical training in affiliate nuclear medicine departments. Under the guidance of registered technologists and physicians, students gain experience in the clinical setting. Competencies on imaging and non-imaging procedures are required.

Prerequisite: NMT 1814

### **NMT 2905**

#### **Directed Independent Study: Advanced Clinical Practices**

4 Credits

Supervised sessions in computed tomography, PET and or SPECT/CT with specific assignments and case studies to include math problems, instrumentation, and quality control. Clinical rotations through a variety of specialty areas including nuclear medicine fusion studies with PET/CT and or SPECT/CT and computed tomography departments to complete required exams and competencies of various patient age

groups (pediatric/geriatric) and pathologies. Experience in the clinical environment for 36 hours per week for 16 weeks.  
Prerequisites: NMT 1312, NMT 2061C, NMT 2733.

### **NMT 2910**

#### **Advanced Topics and Research Methods**

2 Credits

Covers research methods and ethics as it relates to medical research and scientific writing techniques. Includes review of current research as it relates to the field of nuclear medicine and molecular imaging. Students are required to complete a research paper and present research in written and oral form.

Prerequisites: NMT 1103, NMT 1714, NMT 2430

Co-requisite: NMT 1814

### **NUR 1003**

#### **Transition Nursing Specialty**

4 Credits

This course provides credits to meet the State of Florida affiliation agreement for transition students who have completed an LPN program and have received licensure to be a Licensed Practical Nurse. The content reflects their knowledge in the areas of pediatric nursing, maternal child health nursing, and mental health nursing.

Prerequisites: NUR 1022C, NUR 1024, NUR 1522C, NUR 1440C

Co-requisites: NUR 2210, NUR 2210L, NUR 2205, NUR 2211, NUR 2211L, NUR 2811C.

### **NUR 1020**

#### **Fundamental Concepts of Nursing Practice**

3 Credits

This course provides for the acquisition and application of fundamental concepts important to the practice of nursing including those related to patient-centered care, the healthcare environment, and professional nursing practice. Includes care of the stable, acute, and chronically ill adults and elderly patients with a focus on the promotion of wellness, maintenance of health, and prevention of illness. Application of knowledge and skills occurs in nursing laboratories and clinical setting.

Prerequisite: Acceptance into the Nursing program.

Co-requisites: NUR 1020L, NUR 1023C, NUR 1024

### **NUR 1020L**

#### **Fundamental Concepts of Nursing Practice Clinical**

2 Credits

This course provides for the acquisition and application of fundamental concepts important to the practice of nursing including those related to patient-centered care, the healthcare environment, and professional nursing practice. Includes care of the stable, acute, and chronically ill adults and elderly patients with a focus on the promotion of wellness, maintenance of health, and prevention of illness. Application of knowledge and skills occurs in nursing laboratories and clinical setting.

Prerequisite: Acceptance into the Nursing program.

Co-requisites: NUR 1020, NUR 1023C, NUR 1024

### **NUR 1022C**

#### **Essential Concepts of Patient Care Management**

2 Credits

This course presents the theoretical basis for assessing the health status of individuals across the lifespan and the basis for planning safe, quality patient-centered care that reflects understanding of pharmacology and nutrition. The course introduces how the professional nurse uses this theory to plan developmental, cultural and lifestyle appropriate approaches to nursing care. Includes the role of the nurse in identifying and communicating normal findings and common deviations of normal. Focuses on safety and quality improvement related to pharmacological interventions. Physical assessment techniques are taught in the nursing laboratory.

Prerequisite: Acceptance into the Nursing program.

Corequisites: NUR 1024, NUR 1440C, NUR 1522C

### **NUR 1023C**

#### **Essential Concepts of Patient Management**

4 Credits

This course presents the theoretical basis for assessing the health status of individuals across the lifespan and the basis for planning safe, quality, patient-centered care that reflects understanding of pharmacology and nutrition. The course introduces how the professional nurse uses this theory to plan developmentally, culturally, and lifestyle appropriate approaches to nursing care. Includes the role of the nurse in identifying and communicating normal findings and common deviations of normal. Focuses on safety and quality improvement related to pharmacological and nutritional interventions, and health assessment techniques are taught in the nursing laboratory and simulation suite.

Prerequisite: Acceptance into the Nursing program.

Corequisites: NUR 1020, NUR 1020L, NUR 1024

### **NUR 1024**

#### **Critical Thinking in Nursing Practice**

2 Credits

This course introduces the learner to critical thinking used in nursing. In this course the student learns to use critical skills and strategies that underscore the clinical reasoning represented in the nursing process as well as dealing with aspects of the healthcare system for safe practice in the current healthcare environment. This course forms the basis for critical thinking processes applied throughout all nursing courses.

Prerequisite: Acceptance into the Nursing program.

Corequisites: NUR 1020, NUR 1020L, NUR 1023C

### **NUR 1060**

#### **Health Assessment**

3 Credits

Provides the student with the basic skills needed for health assessment. In simulated laboratory setting clients will be assessed physically, psychologically, and socially across the life span. Topics include the health history, objective physical examination and subjective client information coordinated within the framework of the nursing process. The student will be able to differentiate common deviations from the norm.

**NUR 1141****Pharmacology in Nursing**

3 Credits

This course will introduce basic concepts of pharmacology related to the actions of drugs, therapeutic and adverse effects, and food and interactions of these drugs used in the treatment of acute and chronic diseases. Drug classification will be presented based on body system and disease process format. Emphasis is placed on nursing implications and patient education in collaboration with other treatment modalities needed in patient care. Legal aspects of drug administration including safety and precautionary measures will be included. Calculation of medication doses and various routes of administration will be discussed. Students will be able to apply this knowledge in subsequent nursing courses as they care for clients across the lifespan.

Prerequisite: NUR 1020, NUR 1020L, NUR 1023C, NUR 1024

**NUR 1310C****Concepts of Pediatric Nursing**

3 Credits

This course builds on all previous nursing courses to further refine and apply the concepts of nursing practice to the care of children. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisites: NUR 1020, NUR 1020L, NUR 1023C, NUR 1024  
Corequisites: NUR 1421C, NUR 1520C

**NUR 1421C****Concepts of Nursing Care for Woman and Infants**

3 Credits

This course builds on previous nursing courses to provide for the acquisition and application of concepts of nursing applied to the care of woman and infants. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisites: NUR 1020, NUR 1020L, NUR 1023C, NUR 1024  
Corequisites: NUR 1310C, NUR 1520C

**NUR 1440C****Concepts of Family Nursing**

4 Credits

This course builds on all previous nursing courses to further refine and apply the concepts of nursing practice to the care of women, infants, and children through adolescence. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisite: Acceptance into the Nursing Program  
Corequisites: NUR 1022C, NUR 1024, NUR 1522C

**NUR 1520C****Concepts of Mental Health Nursing**

4 Credits

This course builds on the fundamental concepts providing for the acquisition of additional concepts and application of concepts of nursing applied to the care of patients with mental health conditions. Application of knowledge and skills occurs in a variety of clinical settings.

Prerequisites: NUR 1020, NUR 1020L, NUR 1023C, NUR 1024  
Corequisites: NUR 1310C, NUR 1421C

**NUR 1522C****Concepts of Mental Health Nursing - Transition**

3 Credits

This course builds on fundamental concepts providing for the acquisition of additional concepts and application of concepts of nursing applied to the care patients with mental health conditions. Application of knowledge and skills occurs in a variety of clinical settings.

Corequisites: NUR 1022C, NUR 1024, NUR 1440C

**NUR 2205C****Complex Simulation**

2 Credits

This course utilizes simulation to further expand on the concepts of nursing practice with application to the care of adult and pediatric patients with stable and unstable conditions. Patient care experiences are provided in the simulation suite.

Prerequisites: NUR 1310C, NUR 1421C, NUR 1520C,  
Corequisites: NUR 2210, NUR 2210L

**NUR 2210****Concepts of Adult Health I**

5 Credits

This course further expands on the concepts of nursing practice with application to the care of adult patients with stable and unstable conditions. The course focuses on a variety of adult patient populations in the classroom and simulation to provide the necessary patient care experiences. Application of knowledge and skills occurs in the nursing laboratories and in a variety of clinical settings.

Prerequisites: NUR 1310C, NUR 1421C, NUR 1520C  
Corequisites: NUR 2205C, NUR 2210L

**NUR 2210L****Concepts of Adult Health I Clinical**

3 Credits

This course further expands on the concepts of nursing practice with application to the care of adult patients with stable and unstable conditions. The course focuses on a variety of adult patient populations in the classroom and simulation to provide the necessary patient care experiences. Application of knowledge and skills occurs in the nursing laboratories and in a variety of clinical settings.

Prerequisites: NUR 1310C, NUR 1421C, NUR 1520C  
Corequisites: NUR 2205C, NUR 2210

**NUR 2211****Concepts of Adult Health II**

5 Credits

This course builds on all previous nursing courses to further refine and apply concepts of nursing practice to the care of adult patients with complicated conditions. The course focuses on a variety of adult patients through clinical experiences and simulation to provide the necessary patient care experiences. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisites: NUR 2205C, NUR 2210, NUR 2210L  
Corequisites: NUR 2211L, NUR 2811C

**NUR 2211L****Concepts of Adult Health II Clinical**

3 Credits

This course builds on all previous nursing courses to further refine and apply concepts of nursing practice to the care of adult patients with complicated conditions. The course focuses on a variety of adult patients through clinical experiences and simulation to provide the necessary patient care experiences. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisites: NUR 2205C, NUR 2210, NUR 2210L

Co-requisites: NUR 2211, NUR 2811C

**NUR 2650C****Transcultural Nursing: Study of Healthcare in an International Setting**

3 Credits

Provides the student the opportunity to experience a direct relationship with healthcare providers and recipients from various cultural backgrounds in an international setting. The students will learn transcultural healthcare concepts related to health belief systems, major health issues across the life span, epidemiological rates of health issues, nutrition and environmental issues affecting health. Healthcare delivery systems and healthcare professions, including required education, will be examined. Students will learn and practice cross cultural communications skills. The students will travel to a supervised site for theoretical concepts as well as clinical experiences. The students will gain valuable components of learning process relating to culturally diverse communities with emphasis on holistic care.

Prerequisites: Nursing Student or Licensed Nurse. College level reading, writing and math skills required.

**NUR 2811C****Role Transformation**

3 Credits

This course focuses on the student's exploration of personal and professional topics leading to the successful transformation from nursing education to a rapidly changing work environment. Effective clinical judgement, inter-professional collaboration and optimizing patient outcomes will be demonstrated in both clinical and simulation settings. To ensure consistent, quality care for complex health problems across the life span. Emphasis is also placed on preparing students for the NCLEX exam by implementing NCLEX preparation plans based on various measurement tools.

Prerequisites: NUR 2205C, NUR 2210, NUR 2210L

Co-requisites: NUR 2211, NUR 2211L

**NUR 3065****Health Assessment and Physical Appraisal**

3 Credits

This course assists registered nurses in the integration of prior knowledge into the further development of interviewing and physical assessment skills, and clinical reasoning across the lifespan. The importance of therapeutic communication skills, cultural awareness, and preventative health interventions are emphasized when working with diverse populations. The

patterns of healthy individuals will be examined and used as a reference point for health promotion, health maintenance, and health education.

Prerequisites: College-level reading, writing and math skills are required. NUR 3805 and proof of active, unrestricted, unencumbered RN license.

**NUR 3125****Pathophysiology**

3 Credits

In this course, learners will build upon existing understanding of the pathophysiological processes of disease as they affect patients across the lifespan. Special emphasis is on critical thinking and decision making related to these alterations in homodynamic balance, their presentation and implications for nursing practice.

Prerequisites: College-level reading, writing and math skills are required. NUR 3805 and proof of active, unrestricted, unencumbered RN license.

**NUR 3145****Pharmacology**

3 Credits

Learners within this course will examine medications prescribed to patients for a variety of illnesses and symptoms. Discussions will occur about factors that can influence the effectiveness of the medication within the body, the actions of drugs, therapeutic and adverse effects, and food and drug interactions of these drugs used in the treatment of acute and chronic diseases while gaining a deeper understanding of the nurses' role as it relates to medication therapy. Learners will generate a deeper understanding of legal aspects of drug administration as well as patient education in collaboration with other treatment modalities and team members needed in patient care.

Prerequisites: College-level reading, writing and math skills are required. NUR 3805 and proof of active, unrestricted, unencumbered RN license.

**NUR 3655****Transcultural Factors in Health Care Delivery**

3 Credits

A comparative analytical approach to the study of communication, current problems, issues, health care beliefs, values, and practices of different systems and cultural norms as they affect health care practices which conflict with ethnic or cultural communication related to standards and value systems.

Prerequisites: College-level reading, writing and math skills are required.

**NUR 3805****Professional Roles and Dimensions of Nursing Practice**

3 Credits

The purpose of this course is to build upon initial nursing education to enhance professional development, prepare for a broader scope of practice, and provide deeper understanding of the cultural, political, economic, and social issues that affect clients and influence care delivery. Emphasis is on the concepts of culturally sensitive patient-centered care, evidence based practice, interprofessional teams, informatics, clinical



reasoning, and health promotion across the lifespan in an ever changing and complex healthcare environment.

Prerequisites: College-level reading, writing and math skills are required.

### **NUR 3826**

#### **Ethical and Legal Issues in Healthcare**

3 Credits

This course will examine ethical and legal matters which professional nurses and other healthcare providers encounter in their practice. The content will focus on ethical dilemmas which nurses confront in their work environment, accountability, conflict resolutions, as well as legal ramifications surrounding a changing health care system.

Prerequisites: College-level reading, writing and math skills are required. NUR 3805 and proof of active, unrestricted, unencumbered RN license.

### **NUR 3895**

#### **Teaching in Nursing**

3 Credits

This course will examine the role of teaching and learning in a variety of healthcare related settings. This course will utilize the concepts and principles of adult education and educational psychology. The nursing student will demonstrate the ability to apply learned teaching and learning strategies for teaching clients along the health care continuum in a variety of settings.

Prerequisites: College-level reading, writing and math skills are required.

### **NUR 3955C**

#### **Nursing in Global Health Care Systems**

3 Credits

The purpose of this course is to introduce students to global health care systems and models, and their influence on health disparities and delivery of healthcare. A major focus of this course is for students to critically think about and discuss health and health care within a global environment. Nursing students will be exposed to the health disparities that exist in the United States and countries around the world, and some of the efforts by individuals, groups, organizations, and countries to deal with disparities. In addition, students will be provided with information and tools that nurses and nursing can use to confront health and health care challenges.

Prerequisites: College-level reading, writing, and math skills are required.

### **NUR 4169**

#### **Evidence Based Practice: Nursing Research**

3 Credits

This course will examine up-to-date scientific evidence based on research findings applicable to the clinical practice of nursing. Students will discover methods to collect, process, and implement research findings to improve clinical practice, the work environment, and patient outcomes.

Prerequisites: College-level reading, writing and math skills are required. STA 2023, NUR 3805 and proof of active, unrestricted, unencumbered RN license.

### **NUR 4177**

#### **Introduction to Holistic Nursing**

3 Credits

"Holistic Nursing is not merely something we do. It is also an attitude, a philosophy and a way of being that requires nurses to integrate self-care, self-responsibility, spirituality, and reflection in their lives. This often leads the nurse to greater awareness of the interconnectedness of self, others, nature, spirit and relationship with the global community (American Holistic Nurses Association, 2019). This course provides for the acquisition and application of concepts fundamental to the practice of Integrative and Holistic Nursing. According to the American Nurses' Association (ANA), Holistic Nursing embraces all nursing that enhances whole person healing throughout the lifespan and "focuses on protecting, promoting, and optimizing health and wellness; assisting healing; preventing illness and injury; alleviating suffering; supporting people to find peace, comfort, harmony and balance through the diagnosis and treatment of human response; and advocacy in the care of individuals, families, communities, populations and the planet (ANA, 2013)."

Prerequisites: College-level reading, writing and math skills are required.

### **NUR 4257**

#### **Introduction to Critical Care**

3 Credits

This theoretical course focuses on synthesizing nursing knowledge and skills in caring for adult clients and their families impacted by critical illness. The emphasis is on pathophysiology and clinical management.

Prerequisites: College-level reading, writing and math skills are required.

### **NUR 4284**

#### **Dynamics of Aging**

3 Credits

An introduction to the dynamics of aging. This course will cover assessment of normal physical, sound, psychological, and environmental changes of aging, wellness, sexuality, and communication. The course includes discussion of common health problems and the most common pharmacologic interventions associated with each.

Prerequisites: College-level reading, writing and math skills are required.

### **NUR 4636C**

#### **Community and Public Health Nursing**

3 Credits

This course introduces learners to community and public health nursing care. The roles and responsibilities of the community and public health nurse will be explored while developing a deeper understanding of individual, family, community, and vulnerable population health factors. Topics investigated within this course include epidemiology, disaster management, emergency preparedness, community health prevention and promotion, and social advocacy within diverse

community settings. This course includes an instructor approved indirect clinical experience. This course is comprised of 2.5 didactic and 0.5 clinical credit hours.

Prerequisites: College-level reading, writing and math skills are required. NUR 3805 and proof of active, unrestricted, unencumbered RN license.

**NUR 4835C**  
**Leadership and Management in Professional Nursing**  
**Capstone**

3 Credits

The capstone in the BSN program concentrates on strategic planning concepts as they apply to professional nursing practice. The course will prepare the nurse leader on the integration of knowledge, skills, and abilities learned from taking the courses in the bachelors of science in the nursing program.

This course will be taken in the last semester. This course includes an instructor approved indirect clinical experience. This course is comprised of 2 didactic and 1 clinical credit hours.

Prerequisites: NUR 3065, NUR 3125, NUR 3145, NUR 3805, NUR 3826, NUR 4169, NUR 4636C

**OCB 2000**  
**Marine Biology**

3 Credits

An introductory course covering the complexities of the marine environment. Topics include an introduction to marine habitats, marine organisms, ecological interactions and methods used by oceanographers and marine biologists.

Prerequisites: College level reading, writing and math skills required.

Co-requisite: OCB 2000L

**OCB 2000H**  
**Honors Marine Biology**

3 Credits

Same as OCB 2000 with honors content. Honors Program permission required.

Co-requisite: OCB 2000L

**OCB 2000L**  
**Honors Marine Biology Laboratory**

1 Credit

Accompanies OCB 2000H; same as OCB 2000L with honors content. Honors Program permission required.

Co-requisite: OCB 2000H

**OCB 2000L**  
**Marine Biology Laboratory**

1 Credit

Accompanies OCB 2000; the emphasis is on experiments and field trips. A special fee will be charged for this course.

Co-requisite: OCB 2000

**OCE 2001C**  
**Introduction to Oceanography**

3 Credits

This course provides a study of the ocean and survey of the basic principles and procedures of physical, biological, chemical, and geological oceanography. This interdisciplinary approach to understanding ocean processes and ecosystems explores: the origins of the oceans, the physical and chemical features of seawater and ocean sediments; ocean basins, plate tectonics, climate; waves, tides, ocean currents, and oceanic ecosystems. The course introduces the oceanic lifestyles of plankton, benthos, and nekton; and it explores the importance of ocean resources in relation to policy, economics, and society. The laboratory component may include field trips.

Prerequisites: College level reading, writing and math skills are required.

**OCE 2001C**  
**Honors Introduction to Oceanography**

3 Credits

Same as OCE 2001C with honors content. Honors Program permission required.

**OPT 1000**  
**Ophthalmic Orientation**

1 Credit

Presents an introduction to the field of vision care, including opticianry, optometry, ophthalmology and optical manufacturing. Topics include ophthalmic history, legal and ethical principles, patient history, terminology and abbreviations.

**OPT 1155**  
**Ophthalmic Lens I**

3 Credits

Provides a brief history of the development of glass and plastic lenses, the various sphere, cylinder and prism powers, the use of optical cross, flat and toric transposition, and the aberrations of lenses.

Corequisite: OPT 1000

**OPT 1156**  
**Ophthalmic Lens II**

3 Credits

This course continues the study of optical theory. Topics include: prism notation; vertical imbalance and methods of correcting for it; vertex power; luminance; reflection and absorption; diffraction; third order lens aberrations, and lens tilt; anisometropia, and spectacle magnification.

Prerequisite: OPT 1155

**OPT 1225**  
**Low Vision**

3 Credits

Provides a definition of visual impairment and methods used to measure its severity. A description of the most common causes of visual impairment will be presented. Treatment plans including optical and non-optical aids will be reviewed.

**OPT 1400L****Ophthalmic Laboratory I**

3 Credits

Introduces the student to terms, instruments, lenses, frames, and materials to be used in the surfacing and finishing of ophthalmic prescription eyewear.

Prerequisite: OPT 1460L

**OPT 1430L****Ophthalmic Laboratory II**

3 Credits

Introduces the student to terms, instruments, lenses, frames and materials to be used in the finishing process and hand-work of ophthalmic prescription eyewear. This course is a continuation of Ophthalmic Laboratory I.

Prerequisite: OPT1400, OPT 1400L

**OPT 1460****Ophthalmic Dispensing I**

3 Credits

This course introduces the student to the skills necessary for becoming a dispensing optician. Included are the history of the profession, patient/client measurements, frame and lens materials, frame and lens selection, prescription, prescription analysis, and adjustment techniques.

Corequisite: OPT 1000

**OPT 1460L****Ophthalmic Dispensing Laboratory I**

3 Credits

Designed to introduce the students to the practical dispensing of optical products. The students will perform competencies related to the neutralization of single vision lenses and multi focal lenses for duplication, measurement of frames and mountings, and the measurement of PD's.

Corequisite: OPT 1000

**OPT 1666****Safety and Sports Vision**

3 Credits

Opticians are constantly requested to provide eyewear that will better protect, improve and enhance vision for occupational and recreational activities. This course will present the visual requirements for common occupations and sports. It will also discuss spectacle, contact lens, and non-optical solutions to safety and sports vision problems.

**OPT 2030****Ophthalmic Board Review**

1 Credit

Provides a comprehensive review and update of opticianry dispensing in preparation for the Florida State Board of Opticianry examination.

Corequisites: OPT 2376L, OPT 2502L

**OPT 2204****Anatomy and Physiology of the Eye**

3 Credits

Investigates the anatomical structure of the eye and the function of its parts as they pertain to the process of vision.

Corequisite: OPT 1000

**OPT 2375****Refractometry**

2 Credits

Designed to instruct the students in the theory of refractometry and testing for visual acuity. It will include identifying ametropias, the etiology and distribution of refractive errors and anomalies of binocular vision. The steps in performing retinoscopy, objective and subjective refraction procedures will be covered.

Prerequisite: OPT 1155, OPT 2204

**OPT 2375L****Refractometry Laboratory I**

2 Credits

Continuation of OPT 2375 designed to introduce the students to the procedures of an objective and subjective refraction. Students will perform competencies related to retinoscopy, patient history, binocular balance and subjective testing for visual acuity. Primarily a hands on course. The students will gain practice in testing VA (cc and sc), retinoscopy, subjective refraction and binocular balancing in a clinically safe environment.

Corequisite: OPT 2375

**OPT 2376L****Refractometry Laboratory II**

1 Credit

Continuation of OPT 2375L. Designed to fine tune the procedures of objective and subjective refractions. Students will perform competencies related to measuring visual acuity and taking a patient history, retinoscopy (review), confrontations and EOM's, pupillary functions, balance and binocular/ phoria/tropia testing. Primarily a hands-on course to help the students gain speed and accuracy in performing objective and subjective refractions.

Prerequisite: OPT 2375L

**OPT 2461****Ophthalmic Dispensing II**

3 Credits

This course presents ophthalmic instruments and devices; analysis of absorptive lenses; computing and compensation of vertical imbalance; discussion of ethics and legal issues; record keeping and communications; optical salesmanship, and visual impairment.

Prerequisite: OPT 1460L

**OPT 2461L****Ophthalmic Dispensing Laboratory II**

3 Credits

Designed to introduce students to the practical aspects of frame alignments and adjustments, and the insertion and removal of lenses from various frames. Includes further instruction and practice on neutralization of lenses for verification and duplication of an Rx order, measure and callipering of lenses and frames, the facial measurements of orders (PD and seg heights), frame repair and the identification of various types of lenses.

Prerequisite: OPT 2461

**OPT 2463L**  
**Ophthalmic Skills Laboratory I**

2 Credits

This course is designed to educate students in the technical skills of performing various procedures within the ophthalmic visual assessment area of a dispensary. The course will present the medical model to follow for healthy sight, equipment procedures, maintenance and use, calibration of equipment, low vision, and managed vision care plans.

Prerequisite: OPT 2461

**OPT 2500**  
**Contact Lens Theory I**

3 Credits

This course includes a historical review as well as theory; design and optical principle of contact lenses; indications and contraindications for contact lens wear; patient evaluation; discussion of lens types and availability; fundamental techniques and fitting philosophies including the role of the biomicroscope, keratometer and radiuscope; patient education on care, cleaning, insertion and removal of contact lenses.

Prerequisite: OPT 2204

**OPT 2500L**  
**Contact Lens I Laboratory**

2 Credits

Students will perform competencies related to the handling of instruments and charts used in the fitting and designing of contact lenses, and the handling and evaluation of contact lenses by the fitter and the patient.

Corequisite: OPT 2500

**OPT 2501**  
**Contact Lens Theory II**

2 Credits

Emphasizes contact lens verification, dispensing, and follow up care. The fitting of astigmatic, presbyopic, and special needs patients will also be covered.

Prerequisite: OPT 2500

**OPT 2501L**  
**Contact Lens II Laboratory**

2 Credits

Students will perform competencies related to the design, inspection, modification, evaluation and dispensing of spherical contact lenses. The fitting of astigmatic, presbyopia, and other special contact lens patients will also be covered.

Prerequisite: OPT 2500L

Corequisite: OPT 2501

**OPT 2502L**  
**Contact Lens III Laboratory**

1 Credit

Advanced hands-on experience in fitting contact lenses.

Prerequisite: OPT 2501L.

**OPT 2800L**  
**Vision Care Clinical I**

2 Credits

This course is designed to allow students to apply knowledge gained in lectures and laboratories to clinical situations. Depending on the placement, the student may utilize skills related to management, fabrication, dispensing, contact lenses or visual assessment.

Prerequisite: OPT 1460L

**OPT 2801L**  
**Vision Care Clinical II**

2 Credits

This course is designed to allow students to apply knowledge gained in lectures and laboratories to clinical situations. Depending on the placement, the student may utilize skills related to management, fabrication, dispensing, contact lenses or visual assessment.

Prerequisite: OPT 1460L

**OPT 2802L**  
**Vision Care Clinical III**

2 Credits

This course is designed to allow students to apply knowledge gained in lectures and laboratories to clinical situations. Depending on the placement, the student may utilize skills related to management, fabrication, dispensing, contact lenses or visual assessment.

Prerequisites: OPT 2800L, OPT 2801L

**OPT 2803L**  
**Vision Care Clinical IV**

2 Credits

This course is designed to allow students to apply knowledge gained in lectures and laboratories to clinical situations. Depending on the placement, the student may utilize skills related to management, fabrication, dispensing, contact lenses or visual assessment.

Prerequisites: OPT 2800L, OPT 2801L

**OPT 2910**  
**Directed Research**

3 Credits

Covers the research, planning and development of an optical dispensary. Topics include the type, size, location and design, as well as financing, business structure, taxes, licenses and equipment.

Prerequisite: OPT 2461L

**ORH 1523**  
**Native Upland Plants**

2 Credits

This course includes the identification of approximately 100 plants and plant groups native or naturalized in the higher ground habitats of South Florida. The application of these plants as in situ, mitigation or landscape materials in the ecological and esthetic situations of this area will be an additional objective. Most instruction will be done in the field utilizing local passive and active-use parks.

**ORH 1524****Native Wetland Plants**

2 Credits

A continuation of ORH 1523, Native Upland Plants, and includes the identification of approximately 100 plants and plant groups native or naturalized in the fresh and salt water wetlands of South Florida. The application of these plants as in situ and mitigation species in ecological, landscape and esthetic situations will also be discussed. Most instruction will be done in the field.

**OST 1100C****Keyboarding and Document Processing**

3 Credits

Introduces proper keyboarding technique that develops touch control of the keyboard and builds speed and accuracy. Emphasis of using basic touch key skills will be continued while using word processing software features for the production and merging of business correspondence, tables, reports, mail, meeting, and travel documents. A minimum of one hour per week in the lab is required.

Prerequisite: College level reading and writing skills are required.

**OST 1142****Keyboarding I**

1 Credit

Provides instruction in the touch system of typing on the personal computer.

**OST 1143****Keyboarding II**

1 Credit

Provides instruction in the touch system of keyboarding with an emphasis on speed and accuracy.

Prerequisite: OST 1142

**OST 1335****Business Communications**

3 Credits

Presents an overview of business communications, including international considerations, and focuses on constructing proper business letters, with an emphasis on various styles, such as sales, claims, credit reference, collection, requests, order and refusal. Preparation for and formatting of proposals and business reports is also included.

**OST 1741****Word Processing I**

1 Credit

Provides hands-on experience in a specific word processing software. Students may select more than one software by repeating the course three times for credit. However, only one credit hour will apply toward meeting program graduation requirements.

Prerequisite: OST 1100

**OST 1813****Desktop Publishing**

3 Credits

Uses a page layout software program to cover the basic skills required for the preparation of flyers, brochures, and newsletters in camera ready form, with an emphasis on composition, type styles, and layout. Students must take noted prerequisite or obtain permission of instructor.

Prerequisite: CGS 1000 or OST 2854C

**OST 1831****Introduction to Windows I**

1 Credit

Covers basic commands of Windows software.

**OST 1832****Introduction to Windows II**

1 Credit

Intermediate course covering Windows commands.

Prerequisite: OST 1831 or permission of instructor.

**OST 1941****OST Internship**

3 Credits

On-the-job training related to the coursework completed at HCC in the Office Systems Technology Department. Involves a "learning by doing" educational approach. Internships will be provided at HCC and Tampa area businesses.

**OST 2135****Medical Office Procedures**

3 Credits

Uses a medical software program to input patient information, schedule appointments, and process insurance claims and billing. A minimum of one hour per week in the laboratory is required. College level reading, writing and math skills required.

**OST 2357****Electronic Records Management**

3 Credits

Develops managerial and decision-making techniques for the records manager. Involves the study of systems analysis, forms development, archival administration, personnel development, and the establishment of a records management program.

**OST 2501****Office Administration**

3 Credits

Focuses on organizing, planning and controlling office operations with an emphasis on motivation and productivity. Topics include human resources, work environment and information systems.

**OST 2742****Word Processing II**

1 Credit

Focuses on more complex technical procedures on the software studied in Word Processing I. Students may select more than one software application by repeating the course three times

for credit. However, only one credit hour will apply toward meeting program graduation requirements.  
Prerequisite: OST 1741

**OST 2743****Word Processing III**

1 Credit

Continues with more complex technical procedures on the software studied in Word Processing II. Students may select more than one software application by repeating this course three times for credit. However, only one credit hour will apply toward meeting program graduation requirements.  
Prerequisite: OST 2742

**OST 2797****Social Media for Business**

3 Credit

This course will examine the history, development and best practices of social media as they relate to business. Students will analyze which social media tools and platforms are being used to develop audiences for promoting business and providing customer service. Students will develop a clear understanding of the function of social media and generate an original perspective about the relevance of social media and its appropriate use in different platforms.  
Prerequisite: College reading, writing and math skills required.

**OST 2854C****Office Applications for Business**

3 Credit

This a beginning to intermediate office application course. Students will learn how to employ current productivity software in a Windows Operating System environment to solve business problems. Students will learn to create and edit documents using word processing, spreadsheet, database, presentation and personal information management software. Video conferencing software common in business environments will be applied. College reading and writing skills required.

**OST 2858****Excel Spreadsheets for Business**

3 Credit

Students will learn to create, format, modify, print worksheets, draw objects, and use spreadsheet data in ranges, functions, and charts. In addition, they will learn to apply special or custom formatting, sort and query data from lists; audit worksheets, use macros, templates, multiple workbooks; and import/export data. They will use data base features to extract and filter data, use data analysis, pivot tables, data validation, data map, conditioning formatting and other features. This is a Microsoft Office Specialist (MOUS) Certification preparation course.

Prerequisite: College-level reading, writing, and math skills are required.

**PCB 1730C****Human Reproduction and Inheritance**

3 Credits

Intended for those not majoring in the biological sciences or in allied health. Focuses on the various aspects of human reproduction. Topics include the male and female reproductive systems, embryology, birth control, sexually transmitted infections and heredity. Combined and integrated with a hands-on laboratory component. A special fee will be charged for this course.

Prerequisites: College reading, writing and math skills are required.

**PEL 1121****Golf**

2 Credits

Teaches the skills of recreational golf. This course may be repeated twice for credit.

**PEL 1321****Volleyball**

2 Credits

Teaches the skills and strategies of recreational volleyball.

**PEL 1341****Beginning Tennis**

2 Credits

Teaches the skills of recreational tennis on the elementary level. This course may be repeated two times for credit.

**PEL 1621****Basketball**

2 Credits

Teaches the skills and strategies of recreational basketball.

**PEM 1101****Fitness and Conditioning**

2 Credits

Focuses on applying the basic principles of movement, figure and fitness control, exercise and diet.

**PEM 1121****Beginning Yoga**

2 Credits

This course will focus on the forms of yoga training emphasizing flexibility and stress relief. Emphasis will be given to flexibility, breathing and relaxation techniques.

**PEM 1122****Intermediate Yoga**

2 Credits

This course is designed to be an extension of PEM 1121. The focus will be on the appreciation of yoga in everyday life. Emphasis will be on performing postures that are more challenging and remaining in the postures for longer. This course may be repeated twice for credit.

**PEM 1131**  
**Weight Training**

2 Credits

Presents an overview of weight training, with an emphasis on procedures, safety and theory. Men will focus on high resistance strength producing exercise and women will focus on high repetition, endurance and toning. This course may be repeated twice for credit.

**PEM 1405C**  
**Self-Defense**

2 Credits

An activity course designed to provide knowledge of basic self-defense techniques and skills.

**PEM 1954**  
**Intercollegiate Athletics**

1 Credit

Limited to students on HCC varsity teams. This course may be repeated four times for credit.

**PEM 2956**  
**Intercollegiate Athletics II**

1 Credit

The course is limited to student varsity athletes. The course involves participating in practice sessions, collegiate games and/or matches and study hall hours in accordance with the NJCAA, FCSAA/Suncoast Conference and HCC Athletic Department. Student athletes will gain and improve skills by competing against competition at the collegiate level.

**PEM 2930**  
**Ballroom Dance**

2 Credits

This course is intended to be an introduction to ballroom dance for students with little or no previous ballroom dance training. Students will learn the dance steps to the fox trot, cha cha, waltz, swing, and tango. Participants will experience valuable enrichment as they progress at their own individual pace beginning to intermediate. Each student will receive personal attention and beneficial feedback. Dancers will learn routines to showcase their artistry. This course may be repeated twice for credit.

**PEN 1136C**  
**Open Water Diver**

2 Credits

This is an extensive course for training persons in open water recreational diving. Satisfactory completion of this course leads to internationally recognized scuba certification. Students must demonstrate satisfactory swimming ability, physical stamina and emotional stability to instructor at the first lab. Medical certificate may be required.

**PGY 2401C**  
**Photography I**

3 Credits

Provides a basic understanding of the technical aspects of black and white photography involving camera operation, exposure control, film processing, print enlarging and finishing.

The students will become familiar with photographic materials, as well as artistic composition and design.

**PGY 2404C**  
**Photography II**

3 Credits

Presents advanced technical problems introducing the students to various manipulative techniques both in the camera and in the darkroom. The students will deal with refinement of the silver print, toning, hand coloring, collaging, and the production of a cohesive exhibition quality body of work.

Prerequisite: PGY 2401C

**PGY 2801C**  
**Digital Photography I**

3 Credits

This course is intended to introduce students to the basic concerns in digital photography as a fine art medium, and the computer as a darkroom. Includes digital imaging techniques of scanning, color correction, retouching, composition, content, and more. Hardware, image input and output processes, and software are also discussed. May be repeated once for credit.

Prerequisite: PGY 2401C

**PGY 2905**  
**Directed Independent Study**

3 Credits

Designed to establish a framework for further self-learning in various areas of photography, for the advanced student. The students will shape the course to fit their needs by planning activities and preparing a contract coordinated with an art faculty member. The contract will specifically outline a specific project, or a particular set of goals and requirements that the student wishes to achieve. The contract must be satisfactorily completed and reviewed by the assigned faculty member. May be taken four times for credit.

**PHC 2040**  
**Foundations in Epidemiology**

3 Credits

This course explores the basic principles and methods of the epidemiological approach to understanding the distribution and determinants of health and disease and how this knowledge informs public health practice and policy.

**PHC 2100**  
**Introduction to Public Health**

3 Credits

This course will serve as an introduction to the study of public health. It will provide students with an overview of various topics pertinent to the discipline. The core principles of public health will be discussed.

**PHC 2321**  
**Environmental Concepts in Public Health**

3 Credits

This course introduces students to the major topic areas of environmental health science. It examines the sources, routes, media, and health outcomes associated with biological, chemical and physical agents to the environment. It will cover how

these agents affect disease, water and air quality, food safety, and land resources in community and occupational settings.

**PHI 1010****Introduction to Philosophy**

3 Credits

Introduces the study of our human capacity to reflect consciously and critically on our experience and our routines. It introduces several basic concepts in philosophy such as the idea of being, the nature and criteria of knowledge claims, ethical foundations, free will, the existence of God, and methods of philosophical inquiry with selected applications to practice. Prerequisites: College reading and writing skills are required.

**PHI 1010H****Honors Introduction to Philosophy**

3 Credits

Same as PHI 1010 with honors content. Honors Program permission required.

Prerequisites: College reading and writing skills are required.

**PHI 1100****Elementary Logic**

3 Credits

A study of the principles of reasoning involving the detection of fallacies, analysis and criticism of arguments and concepts of formal proof.

Prerequisites: College reading and writing skills are required.

**PHI 1600****Ethics**

3 Credits

Covers several major ethical theories in philosophy and their applications, including contemporary issues.

Prerequisites: College reading and writing skills are required.

**PHI 1600H****Honors Ethics**

3 Credits

Same as PHI 1600 with honors content. Honors Program permission required.

Prerequisites: College reading and writing skills are required.

**PHI 1631****Business and Ethics**

3 Credits

PHI 1631 uses the tools of moral philosophy to investigate and analyze ethical issues that arise in the workplace, in commerce, in the organization and regulation of firms, and where business practices intersect with matters of social concern. Topics may include: the ethics of advertising, the role of honesty and trust in the workplace, the ethics of finance and investment, the social responsibilities of firms, the ethics of whistle-blowing, resource allocation and distributive justice, consumer rights and product liability, ethical leadership, markets and their limits, the ethics of globalization, and the role of business in promoting human flourishing.

Prerequisites: College reading and writing skills are required.

**PHI 2635****Biomedical Ethics**

3 Credits

A philosophical investigation and analysis of ethical issues that arise in the medical, nursing, and allied health professions, as well as in the biological and behavioral sciences. Topics may include reproductive ethics, the ethics of assisted death, research ethics, disability ethics, scarce medical resource allocation, biotechnology ethics, clinical ethics, and public health ethics. College level reading and writing skills are required.

**PHY 1020C****Conceptual Physics**

3 Credits

This course is a general education course for non-science majors. The course emphasizes conceptual understanding of physics through real-life applications and laboratory experiments and is designed as an introductory survey of physics. The use of mathematics is kept to a minimum. Topics include mechanics, properties of matter, heat, sound, electricity, magnetism and light. A special fee will be charged for this course. Prerequisites: College level reading, writing and math skills are required.

**PHY 1025****Fundamentals of Physics**

3 Credits

Emphasizes the conceptual principles of physics. Topics include mechanics, energy, momentum, gravitation, properties of matter, heat, waves, sound, electricity, and magnetism. Designed for students without the physics background needed for General Physics or other science courses.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: PHY 1025L, MAC 1105.

**PHY 1025L****Fundamentals of Physics Laboratory**

1 Credit

A physics laboratory course designed primarily for students lacking laboratory experience who need the background prior to taking PHY 2053L or other laboratory science courses. Topics include: measurement techniques, graphical analysis of data, study of bodies at rest or in motion, heat, sound, light, and electrical experiments, and introduction to computer applications. A special fee will be charged for this course. Prerequisites: College level reading, writing and math skills are required.

Co-requisite: PHY 1025

**PHY 2048****General Physics with Calculus I**

4 Credits

First semester of a two semester sequence of general physics (mechanics, wave motion, sound, thermodynamics, geometrical and physical optics, electricity and magnetism, selected topics from modern physics) and laboratory for physics majors and engineering students.



Prerequisite: MAC 2311 and either PHY 1025 or passing score on physics exemption test.

Co-requisite: PHY 2048L

### **PHY 2048L**

#### **General Physics with Calculus I Laboratory**

1 Credit

A special fee will be charged for this course. Prerequisites: College level reading, writing and math skills are required.

Co-requisite: PHY 2048

### **PHY 2049**

#### **General Physics with Calculus II**

4 Credits

Second semester of general physics and laboratory for physics majors and engineering students.

Prerequisites: MAC 2312, PHY 2048, PHY 2048L

Co-requisite: PHY 2049L

### **PHY 2049L**

#### **General Physics with Calculus II Laboratory**

1 Credit

A special fee will be charged for this course. Prerequisites:

MAC 2312, PHY 2048, PHY 2048L

Co-requisite: PHY 2049

### **PHY 2053**

#### **General Physics I**

3 Credits

Focuses on the fundamental concepts of natural physical laws as they apply to mechanics and thermodynamics. Topics include kinematics and dynamics, energy and momentum, properties of matter, rotational motion of rigid bodies, vibration motion, kinetic theory and thermal physics.

Prerequisites: PHY 1025 or passing score on physics exemption test and either MAC 1114 or MAC 1147.

Co-requisite: PHY 2053L

### **PHY 2053L**

#### **General Physics I Laboratory**

1 Credit

Students are provided with physical experiments to enable them to strengthen understanding developed in PHY 2053.

Students will perform experiments, record data, perform assigned calculations and interpret results in terms of the principles and concepts developed in PHY 2053. A special fee will be charged for this course.

Prerequisites: PHY 1025L. College level reading, writing and math skills are required.

Co-requisite: PHY 2053

### **PHY 2054**

#### **General Physics II**

3 Credits

Focuses on the fundamental concepts of natural physical laws as they apply to electricity, magnetism, electromagnetic radiation, optics, relativity, atomic and nuclear physics.

Prerequisites: PHY 2053, PHY 2053L

Co-requisite: PHY 2054L

### **PHY 2054L**

#### **General Physics II Laboratory**

1 Credit

Students are provided with physical experiments to enable them to strengthen understanding developed in PHY 2054.

Students will perform experiments, record data, perform assigned calculations, and interpret results in terms of the principles and concepts developed in PHY 2054. A special fee will be charged for this course.

Prerequisites: PHY 2053, PHY 2053L

Co-requisite: PHY 2054

### **PHY 2910L**

#### **Directed Research**

1 Credit

Training in methods of research. Projects are carried out by one or more students under the supervision of an instructor.

This course is intended to help students acquire skills in applying research principles and obtaining practice in rigorous data collection and reporting. Students who wish to perform research on more than one topic may enroll in the course more than once, but only once per semester.

Prerequisites: PHY 2053, 2053L or PHY 2048, 2048L

### **PLA 1003**

#### **Introduction to the Paralegal Profession**

3 Credits

Provides an overview of the training and purpose of paralegals. Examines the role of the lawyer and legal assistant in modern society and ethical and professional practice standards.

Prerequisite: College level reading and writing skills are required.

### **PLA 1104**

#### **Writing and Research I**

3 Credits

Provides an in-depth exploration of the law library, legal research and writing legal memoranda.

### **PLA 1203**

#### **Litigation Procedures I**

3 Credits

Covers the Florida Rules of Civil Procedures, Criminal and Appellate Procedures and related matters.

### **PLA 1271**

#### **Tort Law**

3 Credits

This course provides a general perspective of areas of law relating to persons and property through civil law. Topics that may be included are Intentional Torts, Negligence, Product Liability, Defamation and other relevant civil law areas.

### **PLA 1433**

#### **Business Organizations**

3 Credits

Covers procedural information and basic law as it applies to corporations, partnerships and other business vehicles.

**PLA 1600****Administration of Wills, Trusts and Probate**

3 Credits

Presents a survey of estate planning and administration including the preparation of wills, trusts, probate forms and guardianship procedures.

**PLA 1611****Real Estate Law and Property Transactions I**

3 Credits

Covers common real estate transactions and drafting documents such as deeds, leases and contracts.

**PLA 1700****Legal Ethics and Professional Responsibility**

3 Credits

Introduces the student to the types of ethical situations and dilemmas they may encounter in the legal workforce. Students will learn applicable disciplinary rules for both the lawyer and the paralegal, in order to understand how to function responsibly as a legal professional. The content and course work is geared not only to the paralegal student, but also to the practicing paralegal and other legal professionals.

**PLA 1949****Paralegal Internship**

3 Credits

The internship program augments the paralegal curriculum by placing the student in a legal work environment under the supervision of an attorney. It provides the student with the opportunity to gain practical experience as a paralegal in a private law firm, governmental agency or corporation. Prerequisite: Program manager permission required.

**PLA 2114****Writing and Research II**

3 Credits

An advanced course in legal writing and research. Prerequisite: PLA 1104

**PLA 2223****Litigation Procedures II**

3 Credits

Covers advanced litigation procedures law to including interviewing techniques, preparing and organizing courtroom materials, compiling documentary evidence, applying investigative procedures and taking effective courtroom notes. Prerequisite: PLA 1203

**PLA 2303****Criminal Litigation**

3 Credits

This course provides students with a survey of the criminal justice system. Substantive and procedural aspects of criminal law are studied. Course content includes the nature of different crimes, and the penalties involved. Also covered are the pre-trial procedures, the discovery process, the plea bargaining process, and the problems involved in the conduct of trial proceedings.

**PLA 2421****Contract Law**

3 Credits

Covers the basic principles of contract law including both common law contract concepts and uniform commercial code concepts when applicable.

**PLA 2460****Bankruptcy Law**

3 Credits

Examines the principles and procedures for filing bankruptcy and reorganizations, including the preparation of forms.

**PLA 2531****Elder Law**

3 Credits

Covers the various aspects of law that have particular applications to the elderly client. The course is designed to familiarize the student with the practical and theoretical aspects of elder law.

Prerequisites: College level reading and writing skills are required.

**PLA 2612****Real Estate Law and Property Transactions II**

3 Credits

Advanced training in common real estate transactions and the preparation of documents such as deeds and leases.

Prerequisite: PLA 1611

**PLA 2732****Law Office Computer Applications**

3 Credits

This course introduces the student to the law office work environment and is designed to provide the student with an introduction to the different administrative functions that are most commonly used in a law office. Using the computer and various applications software, the student will learn to perform various legal related business tasks commonly used on the job. The student will prepare many of the common legal office documents. Methods of records management, basic computer file management, scheduling and other administrative duties will be explored. Ethical issues associated with computers and information systems will be explored, as will the importance of the procedures used in the legal office to protect attorney/client confidentiality. Students should have basic computer application skills before taking this course.

Prerequisite: CGS 1000

**PLA 2763****Law Office Management**

3 Credits

Covers managerial responsibility, effective planning and use of financial resources.

**PLA 2800****Family Law**

3 Credits

Covers such topics as marriage dissolution, separation, custody, legitimacy, adoption, change of name, guardianship, support, court procedures and separation agreements.

**PLA 2822****Sports and Entertainment Law**

3 Credits

The purpose of this course is to introduce students to a range of legal issues found in the sports and entertainment industries within the United States.

**PLA 2841****Immigration Law**

3 Credits

This course provides an in-depth study of immigration law. Topics covered include a historical overview of immigration law, types of immigration law practices, relevant immigration agencies, forms, and document drafting. It also covers The Immigration and Naturalization Act, and the administrative system.

**PLA 2932****Special Topics in Legal Assisting**

1 Credit

This is a one-credit special topics course that will have different topics involving current legal issues that are relevant today. Students can take this course multiple times; however, only the first one-credit class taken counts toward the AS degree in Paralegal Studies.

**PLA 2933****Seminar in Legal Assisting Studies**

3 Credits

This is seminar course that will have different topics involving legal issues that are currently relevant to the paralegal profession.

**PMT 1250C****Computer Numerical Control (CNC) I**

3 Credits

This course teaches the development of CNC machine programming methods, blueprint reading, gauging, statistical process control (SPC), and set-up and operation of drilling, milling and turning. College level reading, writing, and math skills are required.

**PMT 2254C****Computer Numerical Control (CNC) II**

3 Credits

Topics covered include tool and fixture offsets, plus outside programming from CAD/CAM software. Students will operate CNC machines in the advanced manufacturing lab. Students will perform complete part fabrication from the beginning stage, write an M & G code program, verify the tool-path and then operate the CNC machine to complete fabrication. College level reading, writing, and math skills are required.

Prerequisite: PMT 1250C

**POS 1001****Introduction Political Science**

3 Credits

Covers the basic concepts and theories of government and politics.

Prerequisites: College level reading and writing skills are required.

**POS 2041****American Government**

3 Credits

Covers the structure and function of the American government, the dynamics of political change and contemporary issues.

Prerequisites: College level reading and writing skills are required.

**POS 2041H****Honors American Government**

3 Credits

Same as POS 2041 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**POS 2112****State and Local Government**

3 Credits

Covers the mechanics of state and local governments, public participation and current political issues. Topics include the role of the governor, cabinet, legislature, courts, interest groups, voters and political parties.

**PSC 1515****Energy and the Environment**

3 Credits

Focuses on the basic scientific principles related to energy and their application to society. Topics include fossil fuel resources, environmental impact of energy usage, energy conversions, electricity, resource depletion, alternative forms of energy and energy conservation; intended for non-science majors.

Prerequisites: College level reading, writing and math skills are required.

Co-requisite: PSC 1515L

**PSC 1515L****Energy and the Environment Laboratory**

1 Credit

Accompanies PSC 1515. Topics include an understanding of solar energy, nuclear energy, fossil fuels and electricity, through exercises and experiments. Addresses computer applications to energy problems. A special fee will be charged for this course. Prerequisites: College level reading, writing and math skills are required.

Co-requisite: PSC 1515

**PSY 2012****General Psychology**

3 Credits

This course presents a survey of the field of modern scientific psychology. Topics include, but are not limited to biological aspects of behavior, lifespan development, sensation and perception, learning, memory, cognition, psychological disorders and therapy, and theories and methods used in psychological research.

Prerequisites: College level reading and writing skills are required.

**PSY 2012H****Honors General Psychology**

3 Credits

Same as PSY 2012 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**PSY 2933****Selected Topics in Psychology**

3 Credits

Focuses on an in-depth coverage of specialized aspects of psychology not covered in introductory courses. The course content varies according to the interests of the students and faculty. This course may be repeated once for credit. College level reading and writing skills are required.

Prerequisite: PSY 2012.

**PUR 2003****Introduction to Public Relations**

3 Credits

The underlying theory and professional practice of public relations within corporate and institutional structures and its vital role in society; ethical standards of practice; relationships of the practice to the public media; and public relations problem-solving process.

Prerequisite: MMC 2000

**RAT 1614****Radiation Therapy and Physics I**

2 Credits

Provides the students with the fundamentals of physics and its importance to the field of Radiography in general and Radiation Therapy specifically. A review of mathematics as applied to radiology and radiation therapy is completed. Fundamentals principles, concepts and terminology are discussed.

**RAT 1618****Radiation Therapy and Physics II**

2 Credits

Provides the students with the fundamentals of physics and its importance to the field of radiography in general and radiation therapy specifically. A review of mathematics as applied to radiology and radiation therapy is completed. Fundamentals principles, concepts and terminology are discussed.

Prerequisite: RAT 1614

**RAT 1691L****Introduction to Clinical Concepts**

1 Credits

This course content is designed to provide students with an overview of clinical skills and concepts necessary to be successful in a radiation therapy clinical setting. Labs will give students the ability to practice clinical skills in an academically challenging atmosphere where critical thinking and problem solving are vital.

Prerequisites: Admission to the Radiation Therapy program. College level reading, writing, and math skills are required.

**RAT 1800****Introduction to Radiation Therapy Clinic I**

1 Credit

Clinical experience designed to allow the students to apply knowledge gained in the classroom and lab to the clinical situation. Clinical will enable the students to understand and relate the role of all medical imaging working as a team in the diagnosis and treatment of malignant process. The students will clinically utilize those lab skills learned related to monitoring equipment (IVs, catheters, chest tubes, wheelchairs, stretchers, etc.) and patient contact. Students will also become familiar with the radiation therapy simulator and utilization of such.

Prerequisites: HSC 1220.

Additional Prerequisite: Admission to the Radiation Therapy or Radiation Therapy Specialist programs.

**RAT 1810****Introduction to Radiation Therapy Clinic II**

2 Credits

The clinical experience is designed to give the student the ability to apply the knowledge gained in the classroom and lab in the practical experience. Students will work directly with radiation therapists and patients applying radiation therapy treatments.

**RAT 2001C****Introduction to Radiation Therapy**

2 Credits

Designed to instruct the students in patient care, medical terminology and an introduction to the radiation therapy department and profession. Includes self-directed medical terminology section.

Prerequisite: Admission to the Radiation Therapy program.

**RAT 2021****Radiation Therapy Treatment Planning**

3 Credits

Factors involved in the development of a treatment plan are explained and what measurements are reviewed for each anatomical site that is routinely treated with external beam irradiation. Time, dose fractionation schedules are given for all sites with variations (hyper-fractionation and accelerated fractionation) are discussed. Tissue radio-sensitivity as related to side effects are given as well as other modifiers of radio-sensitivity.

Prerequisites: RAT 2001C, RAT 2621

Co-requisite: RAT 2902L

**RAT 2023****Principles and Practices in Radiation Therapy I**

3 Credits

Content designed to provide an overview of cancer and the specialty of radiation therapy. The medical, biological and pathological aspect as well as the fundamentals of oncology including the terminology, behaviors of malignant disease, and review of the cell and the cell cycle.

**RAT 2061****Radiation Therapy Seminar**

2 Credits

Provides the students with the opportunity to evaluate their cumulative retention of the radiation therapy curriculum content. Some areas may be identified as areas that require more reinforcement and study.

**RAT 2242****Principles and Practices in Radiation Therapy II**

3 Credits

Provides the students with content designed to examine and evaluate the management of malignant conditions, etiology, epidemiology, diagnosis, staging/grading, regional spread, lymphatic involvement and the treatment methods utilized in the management and treatment of the disease. The radiation therapist responsibility in patient care, prognosis, treatment results and the effect of using combined modalities will be presented. Various treatment methods and technical components or treatment will be integrated with the histological types of disease and the area of the body in which they occur will be linked to the skills required to analyze complex issues.

**RAT 2303****Psychosocial Aspects in Oncology**

2 Credits

Describes the effects of cancer and its treatments on patients, family and medical staff. It will examine the behavioral and psychological components of cancer, including its effects on psychological, social and physical functions. Participants will explore their own responses to cancer and their patients. Participants will learn how their role as medical professional interacts with other health care professionals as part of a multidisciplinary team member. Coping strategies and typical crisis points for patients and families will be discussed. Included in this will be managing the consequences of treatment and receiving a terminal prognosis.

Prerequisite: ENC 1101

**RAT 2619L****Computer Applications in Treatment Planning**

2 Credits

Provides the students with the development of treatment plans utilizing radiation therapy treatment planning computers. All parameters of the plan are explained including isocenter, multiple fields' utilization, tumor normalization minimization methods.

Prerequisites: RAT 2021, college level reading, writing and math skills are required.

**RAT 2620****Radiation Therapy Physics III**

3 Credits

Provides the student with the fundamentals of the physics involved with radiation protection, practical applications of dose calculations, the physics involved in generating isodose distributions and factors that influence dose distributions, the structure of matter, nuclear transformations, production of X-rays and clinical radiation generators. A review of mathematics as applied to radiology and radiation therapy will be included.

Prerequisite: RAT 1618

**RAT 2621C****Radiation Therapy Physics IV**

3 Credits

Provides the students with the fundamentals of the physics involved with radiation protection, nuclear transformation and the interaction of radiation with matter. The measurement of ionizing radiation, the quality of radiation, measurement and calculations of absorbed doses will be covered. Integration of individual practical experiences in radiation therapy measurements and calculation of radiation doses. Students will perform data collection and analysis using radiation detection devices including ionization chambers, diodes, use of film densitometry and the various methods of dose measurements and clinical application of dose and beam data. Beam data collection, quality assurance and radiation safety labs will be integrated with didactic portion of the class.

**RAT 2804****Radiation Therapy Clinical I**

3 Credits

The clinical experience is designed to allow the students to apply the knowledge gained in the classroom and laboratory toward developing the skills necessary to accurately treat and simulate the patient. Students must successfully complete the required competencies to obtain proficiency. Successful completion of all clinical courses demonstrates competence in the field of radiation therapy at the entry level position.

Prerequisite: RAT 1810

**RAT 2814****Radiation Therapy Clinical II**

3 Credits

The clinical experience is designed to allow the students to apply the knowledge gained in the classroom towards developing the skills and understanding necessary to accurately apply ionizing radiations for the treatment of malignant neoplasms.

Prerequisite: RAT 2804

Co-requisite: RAT 2901L

**RAT 2824****Radiation Therapy Clinical III**

3 Credits

The clinical experience is designed to allow the students to apply the knowledge gained in the classroom toward developing the skills and understanding necessary to accurately apply ionizing radiations for the treatment of malignant neoplasms. Students will refine that behavior which demonstrates

competence in the field of radiation therapy at the level of job entry radiation therapists.  
Prerequisite: RAT 2814

**RAT 2901**  
**Simulation Lecture I**

1 Credit  
Provides the student with the knowledge of simulation in preparation for the practical application in the simulation lab. All parameters of simulation and CT simulation of the virtual patient from simple to intermediate complexity will be discussed. Simulation parameters such as TAD/TSD, field size, custom shielding, tumor dose, critical structure and field arrangement will be discussed. Content in sectional anatomy and CT will be discussed.  
Co-requisite: RAT 2901L

**RAT 2901L**  
**Simulation Laboratory I**

1 Credit  
The simulation lab is designed to give the students individual hands on experience with a radiation therapy simulator and a general knowledge of the typical treatment methods for the types of cancers treated with external beam radiation therapy. Each student will use the simulator to perform simulated treatment areas on an anthropomorphic phantom, "Pixie." Each treatment area is reviewed in the simulation lecture to include the treatment technique, field arrangement, treatment parameters, dose prescription, and adjacent critical normal tissues with their tolerance doses and side effects.  
Prerequisite: Admission to the Radiation Therapy and Radiation Therapy Specialist programs.  
Co-requisite: RAT 2901

**RAT 2902**  
**Simulation Lecture II**

1 Credit  
Content is designed to provide the student with the knowledge of simulation in preparation for the practical application in the simulation lab. All parameters of simulation including CT simulation of the virtual patient utilizing complex situations which required advanced thinking skills. Co-requisite: RAT 2902L

**RAT 2902L**  
**Simulation Laboratory II**

1 Credit  
The simulation laboratory is designed to give the students individual hands on experience with a radiation therapy simulator. Each student will use the simulator to perform simulated treatment areas on a phantom. Each treatment area is reviewed to include the techniques, treatment borders, dose prescription, adjacent normal structures and their tolerance doses and treatment side effects.  
Prerequisite: RAT 2901L

**REA 0018**  
**Developmental Reading**

2 Credits  
This course combines the skills of REA0007 and REA 0017 in a co-requisite format. Topics develop vocabulary and critical thinking through three levels of comprehension: literal, inferential, and applied. This course will be paired with a general education course to enhance the skill level necessary for success in general education coursework. It does not satisfy general education requirements and generates compensatory credit only.  
Co-requisite: Any general education course

**REA 0019**  
**Developmental Reading**

4 Credits  
This course is a preparatory course meant to prepare students for college level reading and to enhance skills that are taught in writing courses. This course does not satisfy general education requirements and generates compensatory credit only.

**REA 0055**  
**Developmental Reading Module I**

1 Credit  
This course combines the skills of REA 0007 and REA 0017 in modular format. Topics develop vocabulary and critical thinking through three levels of comprehension: literal, inferential, and applied. Students will take a diagnostic test to identify skills that have not been mastered and to determine placement into the appropriate module. Module 1 addresses topic, stated main ideas, implied main ideas, supporting details, and vocabulary in context. This course does not satisfy General Education requirements and generates compensatory credit only.

**REA 0057**  
**Developmental Reading Module II**

1 Credit  
This course combines the skills of REA 0007 and REA 0017 in modular format. Topics develop vocabulary and critical thinking through three levels of comprehension: literal, inferential, and applied. Students will take a diagnostic test to identify skills that have not been mastered and to determine placement into the appropriate module. Module 2 addresses relationships, patterns of organization, transitions, purpose, tone, and vocabulary in context. This course does not satisfy General Education requirements and generates compensatory credit only.

**REA 0058**  
**Developmental Reading Module III**

1 Credit  
This course combines the skills of REA 0007 and REA 0017 in modular format. Topics develop vocabulary and critical thinking through three levels of comprehension: literal, inferential, and applied. Students take a diagnostic test to identify skills that have not been mastered and to determine placement into

the appropriate module. Module 3 addresses inferences, argument, critical thinking skills including fact/opinion and bias, and vocabulary in context. This course does not satisfy General Education requirement and generates compensatory credit only.

**REA 1105****Critical Reading Techniques**

3 Credits

This course is designed to develop efficient reading skills for purposeful application. Emphasis is on development of vocabulary, comprehension, reading techniques, and critical analysis of text. Instruction is presented through a lecture-participation approach.

Prerequisites: REA 0017, or REA 0018, or REA 0019, or REA 0055, REA 0057, REA 0058, or exemption from preparatory reading, or appropriate placement test score

**REA 1605****College Study Skills**

2 Credits

This course prepares students for successful college careers through the development of efficient study skills, critical reading and thinking skills, effective test taking and effective management of test anxiety. It introduces students to college culture and the college environment and provides students with the opportunity to explore academic and career goals.

**REA 2505****Vocabulary Improvement**

3 Credits

Focuses on improving vocabulary through contextual practice and word usage. Topics include word analysis, context clues, affixes, specialized vocabularies, connotation/denotation and analogies.

**REL 1210****Old Testament Survey**

3 Credits

A study of the history and writings of the Hebrew people through a review of the background, purpose and setting of books in the Old Testament.

Prerequisites: College level reading and writing skills are required.

**REL 1240****New Testament Survey**

3 Credits

A study of the background of the New Testament, the life and teachings of Jesus, the expansion of Christianity by early missionaries and an overview of the major Christian teachings.

Prerequisites: College level reading and writing skills are required.

**REL 2300****Introduction to Religion**

3 Credits

An introductory course which explores such topics as the nature of religion, features shared in world religions, differences

among world religions, the relationship between belief and behavior, and methods and problems associated with classifying and studying religion.

Prerequisites: College level reading and writing skills are required.

**RET 1024****Introduction to Respiratory Care**

4 Credits

This course provides an introduction to the Respiratory Care profession. The course work includes basic cardiopulmonary anatomy and physiology, patient assessment skills, infection control and basic respiratory therapy procedures.

Prerequisite: Admission into Respiratory Care Programs.

Corequisite: RET 1024L, RET 1350, RET 1485.

**RET 1024L****Introduction to Respiratory Care Laboratory**

1 Credit

Laboratory component for RET 1024. Hands-on learning with associated respiratory devices: nasal cannulas, oxygen masks, flowmeters, oxygen tanks, cough assist, CPT vest, IPV, SVN, IPPB, medications, professionalism, and safety procedures at hospitals.

Corequisite: RET 1024

**RET 1274C****Basic Respiratory Care**

6 Credits

Provides instruction of advanced cardiopulmonary anatomy and physiology. Course work includes basic theory of respiratory care procedures including airway care and arterial blood gas puncture and analysis. The lab portion of the course allows for hands on instruction in a controlled setting to acquire skills prior to performance in a clinical setting.

**RET 1350****Pharmacology for Respiratory Care**

3 Credits

Provides a comprehensive understanding of the pharmacologic agents used in the practice of respiratory care and provides a fundamental understanding of other drugs used in anesthesia and critical care which involve the cardiopulmonary system.

**RET 1485****Cardiopulmonary Anatomy and Physiology**

3 Credits

This is a course covering all aspects of normal cardiopulmonary physiology, and the effects of related systems. Topics include respiratory anatomy, mechanics of breathing, arterial blood gases, pulmonary ventilation/perfusion relationships, gas transport mechanisms of blood, neurologic control of ventilation, cardiac and renal function, and respiratory adjustments in health and disease.

Prerequisite: Admission into Respiratory Care Program.

Co-requisites: RET 1024, RET 1024L, RET 1350.

**RET 1503****Cardiopulmonary Pathophysiology**

3 Credits

Provides a study of the causes, characteristics and treatments of the most commonly encountered cardiopulmonary diseases.

Prerequisites: College level reading writing and math skills are required.

**RET 1832****Respiratory Care Clinic I**

2 Credits

Provides the student with an opportunity to perform basic respiratory care procedures in the clinical setting.

Prerequisites: College level reading writing and math skills are required.

**RET 1833****Respiratory Care Clinic II**

1 Credit

Provides an introduction to the practice of respiratory care in the intensive care environment. Advanced patient care skills are emphasized. The skills included are life support, physiologic monitoring, mechanical ventilation and communication skills.

Prerequisites: College level reading writing and math skills are required.

**RET 2264C****Principles Mechanical Ventilation**

5 Credits

Instruction of the basic theory of mechanical ventilation including indications for artificial ventilation, classification of ventilators and monitoring patients on a ventilator. Provides hands-on laboratory experience with different ventilators to prepare the student for clinical practice.

**RET 2283****Respiratory Intensive Care**

3 Credits

Focuses on theory and application of respiratory care in the critical care unit. Coursework includes ventilator management, ECG interpretation and advanced assessment techniques.

**RET 2413C****Pulmonary Diagnostics**

2 Credits

A focus on respiratory care theory and application in pulmonary function testing and interpretation. The course includes testing for volumes and ventilation, pulmonary distribution and diffusion, exercise physiology, cardiovascular stress testing and equipment maintenance. Lab will include performing pulmonary functions and interpretation of results.

**RET 2533C****Advanced Respiratory Care**

8 Credits

The coursework focuses on areas to prepare students for the last term prior to graduation. Areas will include new areas as well as content areas that are important and/or have been determined to be weak in the present cohort's understanding.

This includes but is not limited to: New Areas - Medical reimbursement, ethics and administration, home care and rehabilitation of the cardiopulmonary patient, chest tubes, and clinical laboratory tests (homological). Review Areas - Cardiac and hemodynamic monitoring, renal physiology, sleep apnea, ABG's & patient management, mechanical ventilation. Students will be certified in AHA Advanced Cardiac Life Support during the lab portion of this course.

**RET 2714C****Pediatric and Neonatal Respiratory Care**

3 Credits

Focuses on fetal development, neonatal and pediatric patient; assessment, treatment of cardiopulmonary disorders, mechanical ventilation, and homecare. Lab will be included for skills practice prior to clinical practice.

**RET 2834****Respiratory Care Clinic III**

2 Credits

Continuation of advanced respiratory care practice in the intensive care environment. Advanced patient care skills are emphasized. The skills included are life support, physiologic monitoring, mechanical ventilation and communications skills. Rotations through specialty areas such as pediatrics, neonatal, pulmonary function, management and arterial blood gas lab will also be included.

**RET 2835****Respiratory Care Clinic IV**

2 Credits

Continuation of advanced respiratory care practice in the intensive care environment. Advanced patient care skills are emphasized. The skills included are life support, physiologic monitoring mechanical ventilation and communication skills. Rotations through specialty areas such as pediatrics, neonatal, pulmonary function, management and arterial blood gas lab will also be included.

Prerequisites: College level reading writing and math skills are required.

**RET 2836****Respiratory Care Clinic V**

1 Credit

Continuation of advanced respiratory care practice in the intensive care environment. Advanced patient care skills are emphasized. The skills included are life support, physiologic monitoring, mechanical ventilation and communication skills. Rotation will include a complete evaluation of afferent, cognitive, and motor skills.

Prerequisites: RET 1832, RET 1833, RET 2834, RET 2835

**RET 2930****Respiratory Care Seminar**

3 Credits

Includes an overview of advance respiratory care skills and preparation for the NBRC exams. Self-assessment exams will be taken. A case study presentation will be required.

Prerequisites: College level reading, writing and math skills are required.



**RTE 1000****Introduction to Radiography**

1.5 Credits

Covers all aspects of radiographic image production from the x-ray tube to the image receptor with emphasis on basic radiation protection practices. Radiographic formulae are introduced and fundamental concepts of radiation interactions are addressed.

Co-requisite: HSC 1220

**RTE 1111****Introduction to Radiography Patient Care**

1.5 Credits

Designed to introduce the first year Radiography students to basic medical terminology/medical abbreviations, patient care procedures and general body mechanics needed for effective patient transfers (wheelchair/stretcher). Emphasis is placed on the importance of obtaining accurate patient information and the necessary required confidentiality as expressed in the Patient's Bill of Rights.

Co-requisites: RTE 1000, HSC 1220

**RTE 1157****Medical Imaging of the Human Structure**

3 Credits

Focuses on examining the body through medical imaging, with an emphasis on nuclear medicine, sonography, radiography, thermography and the applications of radiation therapy.

Prerequisites: RAT 1614, RAT 2001C.

**RTE 1308****Radiation Protection and Safety**

2 Credits

Focuses on radiation safety/protection practices for both patients and personnel. Laboratory exercises are included in this course.

Prerequisite: Admission to the Radiography program, RTE 1000.

**RTE 1418****Principles of Radiographic Exposure I**

3 Credits

Covers the principles of radiographic exposure to include prime factors, radiographic quality, latent image formation, intensifying screens, tube rating charts and radiographic accessory devices. Admission to Radiography program required

Prerequisites: RTE 1000, RTE 1607

Co-requisite: RTE 1418L

**RTE 1418L****Principles of Radiographic Exposure I Laboratory**

1 Credit

Provides the students the opportunity to radiographically demonstrate Viz lab exercises exposure concepts as delivered in lectures. Admission to the Radiography program required.

Prerequisites: RTE 1000, RTE 1607

Co-requisite: RTE 1418

**RTE 1457****Principles Radiographic Exposure II**

1 Credit

Focuses on darkroom chemistry, processor design and sensitometry used to monitor processor conditions.

Prerequisites: RTE 1418, RTE 1418L

**RTE 1503****Radiographic Positioning I**

3 Credits

Focuses on proper positioning for various projections of the chest, abdomen and skeletal system.

Prerequisite: Admission to the Radiography program.

Co-requisite: RTE 1503L

**RTE 1503L****Radiographic Positioning I Laboratory**

1 Credit

Designed to give the students the opportunity to practice positioning skills introduced in the lectures dealing with radiography of the chest, abdomen and skeletal system.

Prerequisite: Admission to the Radiography program.

Co-requisite: RTE 1503

**RTE 1513****Radiographic Positioning II**

3 Credits

Focuses on radiographic procedures and anatomical identification, with an emphasis on the urinary, biliary and gastrointestinal systems, as well as the vertebral column. Topics include the use, composition and effects of contrast media on the human body.

Prerequisite: RTE 1503

Co-requisite: RTE 1513L

**RTE 1513L****Radiographic Positioning II Laboratory**

1 Credit

Designed to coincide with the lecture material of RTE 1513.

This will give the student an opportunity to practice positioning techniques, which have been covered in RTE 1513. It also enables the student to become more familiar with film evaluation and identification.

Prerequisites: RTE 1503, RTE 1503L

Co-requisite: RTE 1513

**RTE 1523****Radiographic Positioning III**

3 Credits

Focuses on radiographic procedures and anatomical identification, with an emphasis on the skull and facial bones.

Prerequisites: RTE 1513, RTE 1513L

Co-requisite: RTE 1523L

**RTE 1523L****Radiographic Positioning III Laboratory**

1 Credit

Provides experience in positioning the skull phantom to demonstrate various projections of the skull and facial bones.

Prerequisites: Admission to the Radiography program, RTE 1513, RTE 1513L.

Co-requisite: RTE 1523

### **RTE 1597C**

#### **Principles of Computed Tomography I**

4 Credits

Introduction to the methodology of computed tomography. Topics include but are not limited to computed tomography physics and instrumentation, quality control, patient care, contrast agents, radiation safety and dosimetry, cross-section anatomy and pathology, and CT procedures.

Prerequisites: Current certification in ARRT (R), (T), (N), or CNMT and FL licensure.

### **RTE 1607**

#### **Radiographic Science Principles**

1 Credit

Focuses on the basic natural laws, metric conversions, atomic structure and mathematical formulae.

Prerequisite: Admission to the Radiography Program.

### **RTE 1613**

#### **Radiographic Physics I**

3 Credits

Includes the fundamental of electrical and radiation physics and basic principles underlying the operation of x-ray equipment and auxiliary devices.

### **RTE 1782**

#### **Pathology of Medical and Surgical Diseases**

3 Credits

Focuses on terminology, the nature of diseases and their effect on tissues and organs. Prerequisite: Admission to the Diagnostic Medical Sonography, Nuclear Medicine Technology, Occupational Therapy Assistant, Radiation Therapy, or Radiography programs.

### **RTE 1800**

#### **Introduction to Radiography Practicum**

2 Credits

Designed to introduce the entering first year radiography students to the clinical education settings and associated patient care methodologies.

Prerequisite: Admission to the Radiography program.

### **RTE 1804**

#### **Radiography Practicum I**

3 Credits

See the description for RTE 2844.

Prerequisites: Admission to the Radiography program, HSC 1220, RTE 1800

### **RTE 1805**

#### **CT Clinical Education I**

3 Credits

Hands-on experience in the clinical setting performing computed tomography procedures under the direct supervision of a CT technologist. Requires completion of a minimum of 50

competencies to be applied towards American Registry of Radiologic Technologists computed tomography eligibility requirements.

Prerequisite: Admission the AS degree Radiography Program

### **RTE 1814**

#### **Radiography Practicum II**

3 Credits

See course description for RTE 2844.

Prerequisite: Admission to the Radiography program, RTE 1804.

### **RTE 1824**

#### **Radiography Practicum III**

3 Credits

See the description for RTE 2844.

Prerequisite: Admission to the Radiography program, RTE 1814.

### **RTE 1949**

#### **Radiography Internship**

3 Credits

A coordinated work study course involving class work and field experience. Objectives determined by the students and teacher coordinator will be used to evaluate the students. Additional prerequisite: Successful completion of one half of all clinical competencies to include all contrast studies and must have earned a grade of "C" on all previous radiology internship sections. Co-op/Independent Study. This course may be taken four times for credit.

### **RTE 2061**

#### **Radiographic Seminar**

2 Credits

Provides the students a comprehensive review of all aspects of the Radiography Program.

Prerequisites: Admission to Radiography program, RTE 1613, RTE 2385

### **RTE 2385**

#### **Radiation Biology**

3 Credits

Focuses on the interaction of radiation with physiological systems, genetics, radiation injury, and radiation dosimetry with emphasis on the principles of radiation safety.

Prerequisite: Admission to the Nuclear Medicine Technology, Radiation Therapy, Radiation Therapy Specialist, or Radiography programs.

### **RTE 2473L**

#### **Quality Assurance**

1 Credit

Covers all aspects of quality assurance. Laboratory exercises are included.

Prerequisite: Admission to the Radiation Therapy, Radiation Therapy Specialist, or Radiography programs

**RTE 2563****Special Radiographic Processes**

2.5 Credits

Focuses on special radiographic and angiographic procedures with an emphasis on procedural tasks and anatomical structures.

Prerequisites: Admission to the Radiography program, RTE 1523, RTE 1523L.

**RTE 2575****MRI Imaging I**

3 Credits

This course should provide information on the essential components for MRI (MR) safety concepts, equipment and organizations. To prevent MR incidents, patients and personnel must be properly educated. Also the following sections are covered: MR Safety, Fundamentals of Imaging Science and HealthCare, MR Instrumentation and Imaging, Physical Principles of MRI, MR Parameters, Imaging Options and Quality Assurance, Pharmacology and Drug Administration, Clinical Practice and Patient Management, Computers in Imaging and Medical Informatics.

Prerequisites: College-level reading, writing and math skills required.

Co-requisites: RTE 2760 and RTE 2940

**RTE 2576****MRI Imaging II**

3 Credits

This course should provide information on the essential components for MRI (MR) safety concepts and equipment. The following is also covered: Fundamentals of Imaging Science and Healthcare, MR Pulse sequences, Image Formation and Image contrast, MR Imaging Procedures, MR Pathology, Ethics and Law in the Imaging Sciences.

Prerequisites: RTE 2575, RTE 2760, and RTE 2940

Co-requisites: RTE 2941

**RTE 2596****Principles of Computed Tomography II**

4 Credits

Advanced methodology of computed tomography. Topics include but are not limited to computed tomography instrumentation, quality control and assurance, advanced patient care specific to CT, applied radiation safety and dosimetry, cross-sectional anatomy and pathology, CT procedures, data acquisition, image processing and reconstruction, image quality, and medical informatics.

Prerequisites: RTE 1597C, RTE 1805

**RTE 2760****MRI Anatomy**

3 Credits

This course should serve as a guide to identify and comprehend cross-sectional anatomy in various formats for the imaging professional. The Magnetic Resonance Imaging (MRI) technologist is a vital member in the health care environment. The MRI technologist must recognize anatomy to perform and construct diagnostic imaging examinations to facilitate a diagnosis. Emphasis is placed on the following anatomy: Head and

Brain, Neck, Spine, Chest and Mediastinum Abdomen, Pelvis, and Musculoskeletal-upper and lower extremities.

Prerequisites: College-level reading, writing and math skills required.

Co-requisites: RTE 2575, RTE 2940

**RTE 2815****CT Clinical Education II**

3 Credits

Hands-on experience in the clinical setting performing computed tomography procedures under the direct supervision of a CT technologist. Required completion of remaining competencies totaling 125 in accordance with American Registry of Radiologic Technologists computed tomography eligibility requirements.

Prerequisites: RTE 1597C, RTE 1805

Co-requisite: RTE 2596

**RTE 2834****Radiography Practicum IV**

3 Credits

See the description for RTE 2844.

Prerequisites: Admission to the Radiography program, RTE 1824.

**RTE 2844****Radiography Practicum V**

1.5 Credits

Focuses on hands on experience in radiographic procedures through clinical rotations designed for radiography students only. Practicums require 24 hours per week. Designed to meet the requirements of the American Registry of Radiologic Technologists. Includes potentially strenuous skills such as lifting and carrying.

Prerequisite: Admission to the Radiography program, RTE 2834.

**RTE 2940****MRI Clinical I**

1 Credits

This first clinical course provides hands on experience in the clinical setting performing MRI procedures under the direct supervision of a MRI technologist. Requires a minimum of 25 competencies to be applied toward American Registry of Radiologic Technologists MRI eligibility requirements. This one credit clinical course has a total of 105 clock hours and should meet 7 hours per week based on a 15 week semester.

Prerequisites: College-level reading, writing and math skills required.

Co-requisites: RTE 2760 and RTE 2575

**RTE 2941****MRI Clinical II**

2 Credits

This second clinical course provides hands on experience in the clinical setting performing MRI procedures under the direct supervision of a MRI technologist. This two credit clinical course has a total of 210 clock hours and should meet 14 hours per week based on a 15 week semester.

Prerequisite: RTE 2760, RTE 2575, and RTE 2940

Co-requisites: RTE 2576

**RTE 2942**  
**MRI Clinical III**

3 Credits

This third clinical course provides hands on experience in the clinical setting performing MRI procedures under the direct supervision of a MRI technologist. This three credit clinical course has a total of 315 clock hours and should meet 21 hours per week based on a 15 weeks semester.

Prerequisite: RTE 2760, RTE 2575, RTE 2576, RTE 2940, and RTE 2941

**RTV 1530**  
**Electronic Field Production**

3 Credits

The course will provide an opportunity for students to create a variety of video productions, allowing them to express personal creativity while developing the ability to conceptualize story ideas and effectively translate them into video productions.

**RTV 1941**  
**Radio and TV Internship I**

3 Credits

An opportunity to study and gain experience by working on-the-job with a broadcast film, or multimedia organization. Designed for students enrolled in the Digital Television and Media Production program.

**RTV 2000**  
**Introduction to Broadcasting**

3 Credits

This is an introductory course in principles, tools, and skills involved in the broadcasting field today.

**RTV 2460**  
**Broadcasting Practicum**

3 Credits

A course that allows the student to get hands-on experience in producing actual programming for radio, television or the Internet.

Prerequisites: RTV 2510, RTV 2000, RTV 2560, RTV 2630, RTV 1530

**RTV 2510**  
**Broadcasting Techniques**

3 Credits

An introduction to multi-camera television studio production with an emphasis on directing. Students will learn to direct a "live" three-camera studio production as well as assume studio crew positions. Students will learn about and act as a technical director, assistant director, lighting director, audio director, floor director, and camera operator.

Prerequisite: RTV 2000

**RTV 2512**  
**Advanced TV Studio Production**

3 Credits

This course is designed to provide students with more practical experience in producing live and live-to-tape three-camera television studio productions from pre to post production.

Prerequisite: RTV 2510

**RTV 2532**  
**Advanced Electronic Field Production**

3 Credits

This course builds on what the student has learned in the beginning electronic field production class. It a very practical approach toward learning the techniques of how to write, produce, direct and edit short form field productions such as the corporate demonstration, short documentary and fictional short.

Prerequisite: RTV 1530

**RTV 2560**  
**Radio Production and Programming**

3 Credits

This course covers the development of announcing and audio production skills for radio and other media. Students will learn to operate a professional audio console and use professional multi-track audio software to produce content for the college radio station. Students will also study radio formats, learn how to analyze radio ratings, program a station, and build a station promotions campaign.

**RTV 2630**  
**Broadcast News**

3 Credits

Designed to increase student employment potential and to maintain job performance in news and documentaries for radio, television, or closed circuit through basic and practical familiarization with the mechanics and procedures of the news room. Adaptation of local and wire copy for audio and film, placement of commercials, approaches to information sources, methods of applying for work are discussed.

**RTV 2942**  
**Radio and TV Internship II**

3 Credits

The second Radio/TV internship allows the student an opportunity to work at another broadcast film, or media production company to gain more on the job practical experience and extend their professional network. Designed for students enrolled in the Digital Television and Media Production program.

Prerequisite: RTV 1941

**RTV 2944**  
**Radio and TV Internship III**

3 Credits

The final Radio/TV internship experience is designed to provide the Digital Television and Media Production student with an opportunity to develop entry level competence in the practical skills required for employment as a broadcast director.

**SBM 2000****Small Business Management**

3 Credits

Introduces the fundamentals of small business management, including planning, choosing the types and forms of business, raising capital, using business information, managing employees, and marketing products and services. The course is oriented toward principles needed to operate a small business and is designed for those who may eventually have their own businesses or for those who desire to upgrade their skills in their present businesses. Students will prepare a feasibility study and present a comprehensive small business startup plan. Completion of ENT 1000 strongly recommended.

Prerequisite: GEB 2214

**SCC 1000****Introduction to Security**

3 Credits

This course will examine the origins and development of security from medieval England to current times. The concept of security will be covered as a response to and a reflection of society's structure. This course will cover the various aspects of security to include community, retail, corporate, business, and industrial problems and concerns as well as the governmental and legal aspects of security. The use of security equipment and loss prevention will also be covered.

**SCC 1001****Introduction to Private Investigation**

3 Credits

This course will provide students with an overview of the private investigation field. The course will focus on employment opportunities, history, evolution, methods, and management of private investigation, sources of information, investigative technology, and ethical, public policy, and legal considerations related to investigations in the private sector.

**SCM 1010****Introduction to Supply Chain Management**

3 Credits

This course provides a general overview of Supply Chain Management (SCM) and the associated functions necessary for delivery of goods and services to customers. The course focuses on effective techniques of employees and managers that ensure that an effective supply chain exists in an organization. Students study an overview of SCM functions such as order processing, transportation, warehousing, purchasing and inventory, E-Commerce, information flow, and customer service.

Prerequisite: College level reading, writing and math skills are required.

**SCM 2150****Purchasing and Inventory Management**

3 Credits

This course provides a comprehensive introduction to the purchasing and supply chain management field. Cases cover purchasing and supply chain issues in a variety of settings, from process industries to high-tech manufacturing and services,

and public institutions. The curriculum emphasizes the purchasing process as it relates to such topics as inventory control procedures, price versus cost analyses, laws and ethics, vendor selection, and the development of vendor relationships.

Prerequisite: SCM 1010, College level reading, writing and math skills are required.

**SCM 2230****Warehouse Management**

3 Credits

This course provides an introduction to practical concepts of warehousing including the types of equipment, storage processes, and systems; the technologies used to identify and track units in a warehouse; and the regulations designed to ensure safety in warehouse operations.

Prerequisite: SCM 1010, College level reading, writing and math skills are required.

**SCM 2270****Transportation and Distribution**

3 Credits

This course explores the role and importance of transportation in the distribution of goods. The course focuses on the infrastructure of the freight transportation system, modes of transportation, transportation regulations, and public policies. Students study carrier cost structures, operating characteristics, and policy regulations regarding each of the transportation modes.

Prerequisite: College level reading, writing and math skills are required.

**SLS 1101****Orientation**

1 Credit

An introduction to the campus facilities, student services and college policies and procedures. Provides assistance in planning a two-year program of study and offers guidance in transferring to other educational institutions.

**SLS 1106****First Year Experience Orientation**

3 Credit

This course emphasizes early academic planning that aligns students' aptitudes, career interests, and life goals. In addition to the early development of a comprehensive academic life plan, first-time-in-college students will learn about HCC's support services and how to navigate toward successful completion of courses and programs. Moreover, students will engage with the College community in meaningful ways to help prepare them to realize their academic and career goals. Pedagogical approaches include lecture, faculty-advisor partnership, peer group collaboration, library research, self-exploration, written reflection, oral presentation, experiential learning, and other modalities.

**SLS 1261****Personal Skills for Business**

3 Credits

Prepares students, business managers, and supervisors to meet the challenges of today's rapidly changing, technological world

by helping them examine and perfect the personal skills required for an understanding of self and others on the job. Provides students with the skills necessary to recognize and cope with life's challenges. Emphasis is placed on making good business decisions goal setting, problem solving, time and stress management, and coping and leadership skills.

**SLS 1301**  
**Career Decision Making**

3 Credits

Emphasizes the development of decision-making skills needed to make realistic career choices in terms of values, interests, and educational goals, using the facilities of the Career Lab.

**SLS 1501**  
**College Success**

3 Credits

This interdisciplinary course empowers students by preparing them for a successful college experience and providing them with additional opportunities to develop intellectual potential and life skills. It enhances student understanding of library resources, student services, and other areas of academic support. Topics include goal assessment, time management, power reading, creative and critical thinking, test taking, memory, note taking, and communication skills.

**SON 1000**  
**Basic Sonography**

3 Credits

Designed to present the fundamental principles of sonography to the entry level sonography student. The focus of the course will be the role of the sonographer in the health care environment, professionalism and the legal issues facing the health care provider. Students will be introduced to the relevance of sonography in abdominal, obstetrical and gynecologic imaging and basic sonographic physics and instrumentation.

Prerequisite: BSC 2085

Co-requisite: SON 1804C

**SON 1053**  
**Sonographic Imaging of Medical and Surgical Diseases**

1 Credit

Students shall review their knowledge base of gross anatomy, scan planes, patient positions and the proper terminology as related to sonographic imaging. This course prepares students for clinical practicum courses by reviewing disease processes as they appear on sonographic images. Students will review videotapes, paper printer images and transparency films, and correlated studies from other imaging modalities demonstrating medical and/or surgical diseases. In addition, students shall review clinical signs and symptoms and related lab tests associated with the disease processes.

Prerequisite: SON 1000

Co-requisites: RTE 1782, SON 1311

**SON 1100**  
**Sonographic Scanning Protocol I**

1 Credit

Students shall review their knowledge base of gross anatomy, scan planes, patient positions and the proper terminology as

related to sonographic imaging. Designed to prepare students for the proper utilization of abdominal sonographic practicum courses. Quality images and techniques shall be discussed. Students shall be guided in how to adapt protocols to anatomical variations or in the demonstration of pathology. In addition, patient preparation, the application of appropriate measurements and equipment utilization will be discussed.

Prerequisites: SON 1000, SON 1804C.

Co-requisite: SON 1840

**SON 1101**  
**Sonographic Scanning Protocol II**

1 Credit

Students shall review their knowledge base of gross anatomy, scan planes, patient positions and the proper terminology as related to sonographic imaging. This course is designed to prepare students for the proper utilization of small parts, obstetrical, gynecology and vascular sonographic protocols during clinical practicum courses. Quality images and techniques shall be discussed. Students shall be guided in how to adapt protocols to anatomical variations or in the demonstration of pathology. In addition, patient preparation, the application of appropriate measurements and equipment utilization will be discussed.

Prerequisite: SON 1100

Co-requisites: SON 1850

**SON 1171C**  
**Introduction to Vascular Technology**

2 Credits

This course will provide a thorough understanding of the cerebrovascular anatomy, physiology, and pathology. The clinical assessment of patients for cerebrovascular disease will be discussed to include normal and abnormal anatomy. This course will discuss non-invasive and invasive tests for cerebrovascular procedures. Patient factors and patient histories will be described. In addition, this course will provide a thorough understanding of the anatomy, physiology and pathology of the lower extremity venous procedures. The clinical assessment of patients with acute and chronic venous disease will be discussed. A description of non-invasive tests used to evaluate extremity venous vascular examinations will be discussed.

Prerequisite: SON 1210

Co-requisite: SON 1850

**SON 1210**  
**Introduction to Sonographic Physics and Instrumentation**

3 Credits

Designed to expand upon the basic physics and instrumentation concepts that were presented in Basic Sonography. Discussion will include how each component is interrelated and how all components contribute to the production of a sonographic image. Basic sonographic physics will be introduced. Introduction to computers hardware and software. An introductory computer literacy course for the Diagnostic Medical Sonography student with emphasis on current technology and the implications for and the effects on our society. Topics will include cyberspace; communications, including the impact of the Internet and World Wide Web; ethical, privacy, environmental, and health related issues. Software applications will include a brief

introduction to Windows, word processing, spreadsheets, and graphics.

Prerequisites: SON 1000 or CVT 1000

Co-requisite: SON 1840 or CVT 2320

### **SON 1311**

#### **Introduction to Cross Sectional Anatomy I**

1 Credit

Provides an introduction to sonographic representation of the abdominal/pelvic areas and developing fetus. Topics include scanning planes, patient positions and terminology.

### **SON 1312**

#### **Introduction to Cross Sectional Anatomy II**

1 Credit

Designed to introduce the student to the sonographic representation of the female pelvis and the developing fetus. Students shall review their knowledge base of gross anatomy and embryological development. Students will then be introduced to scan planes, patient positions and the proper terminology associated with these concepts. Anatomical and sonographic relationships female pelvis and the developing fetus will be discussed extensively. From this basis, the course is then designed to assist the student in visualizing gross anatomy as it is represented sonographically.

Prerequisite: SON 1311

Co-requisite: SON 1840

### **SON 1313**

#### **Introduction to Cross Sectional Anatomy III**

1 Credit

Students shall review their knowledge base of these structures. Students will then be introduced to scan planes, patient positions and the proper terminology associated with these concepts. This course is designed to introduce the student to the sonographic representation when imaging small parts, neonatal brains and vascular structures. Anatomical and sonographic relationships of these structures, vessels and organs will be discussed extensively. From this basis, the course is then designed to assist the student in visualizing gross anatomy as it is represented sonographically.

Prerequisites: SON 1312

Co-requisites: SON 2814

### **SON 1804C**

#### **Introduction to Practicum I**

2 Credits

Introduction to the patient/sonographic role in a simulated environment. Designed to ease the student into the hospital situation by becoming familiar with the role and responsibilities of a sonographer and the basic fundamentals of a career such as darkroom chemistry, medical terminology and machine operations. Students will spend a minimum of 50 minutes per week in lecture and eight clock hours in simulated hospital/ clinical experience each week in the on campus laboratory.

Prerequisite: BSC 2085.

Co-requisite: SON 1000

### **SON 1840**

#### **Introduction to Practicum II**

1 Credit

Continues to explore the role of the sonographer in a simulated as well as an actual clinical environment. This course is designed to expose the student to the role and responsibilities of a clinical sonographer in the hospital situation by allowing observation of the sonographer in daily hospital routine. The student will begin the initial phase of instruction in scanning protocols. The student will spend eight clock hours a week in the clinical and/or laboratory setting.

Prerequisites: SON 1804C, SON 1000.

Co-requisite: RTE 1782

### **SON 1850**

#### **Introduction to Practicum III**

1 Credit

Provides 8 hours per week of clinical sonographic experience in various health care settings. Topics include scanning protocols, sonographic equipment, terminology and patient care.

Prerequisite: SON 1840

Co-requisite: SON 1101

### **SON 2061**

#### **Seminar in Sonography**

3 Credits

Provides a comprehensive review of all aspects of the sonography program to include abdominal, obstetrics, gynecology, physics and instrumentation, and miscellaneous small parts. Topics include quality assurance in sonography labs, bio-effects related to sonography, sonographic artifacts, an introduction to Doppler, an introduction to neurosonography, pediatric sonography and resume preparation and job hunting.

Prerequisites: SON 2122, SON 2211, SON 2112

Co-requisite: SON 2834

### **SON 2111**

#### **Abdominal Sonography I**

3 Credits

Designed to give the student an understanding of the anatomy, physiology and pathology of the abdominal aorta, pancreas, biliary system and liver. Emphasis will be placed on sonographic features and characteristics of normal anatomy as well as the various disease processes that affect each organ. Remaining course content will integrate clinical procedures, diagnostic procedures, etc., common to all and specific to each organ.

Prerequisite: SON 1312

Co-requisite: SON 2814

### **SON 2112**

#### **Abdominal Sonography II**

3 Credits

Designed to give the student an understanding of the anatomy, physiology and pathology of the liver urogenital system as well as the adrenal glands, spleen, neonatal brain, thyroid and breast.

Prerequisite: SON 2111

Co-requisites: SON 2211, SON 2211L

**SON 2121****Obstetrics and Gynecology Sonography I**

4 Credits

Designed to give the student an understanding of the anatomy, physiology and pathology of the female pelvis as well as its normal and abnormal sonographic appearance. Also introduces the student to the first trimester of pregnancy and its related anatomy, physiology and possible pathology and/or complications. Embryology, early fetal development, sonographic identification and imaging of the embryo and fetus, trans-abdominal and trans-vaginal scanning techniques will be covered.

Prerequisite: SON 1311 (waiver by permission of instructor).

**SON 2122****Obstetrics and Gynecology Sonography II**

3 Credits

Designed to give the student detailed instruction in the role of sonography in the second and third trimesters of pregnancy. Fetal development, physiology, all major fetal anomalies, and maternal complications directly related to the second and third trimesters of pregnancy will be covered in detail.

Prerequisite: SON 2121

Co-requisites: SON 2211, SON 2211L

**SON 2175C****Vascular Technology**

3 Credits

This course is a review of physiology and fluid dynamics, and is designated to give the student an understanding of the anatomy, physiology, and pathology of the arterial and the venous circulatory systems. This course will provide a thorough understanding of the lower and upper extremity arterial anatomy, physiology, and pathology. The clinical assessment of patients for peripheral vascular disease will be discussed. This course will discuss Doppler waveform analysis in the lower and upper extremities. Patient factors and patient histories will be described. This course will also provide a thorough understanding of Doppler segmental pressures in the lower and upper extremities, duplex scanning and color Doppler flow imaging of abdominal vessels, description of preoperative mapping procedures, Transcranial Doppler (TCD), and statistical profile and test correlation.

Prerequisite: SON 2211

**SON 2211****Sonographic Physics and Instrumentation**

3 Credits

Designed to present to the student a detailed explanation of ultrasound physics and instrumentation. The theory of physics principles and their practical applications, basic principles of instrumentation, and practical applications are presented.

Prerequisite: SON 1210

Co-requisite SON 2211L

**SON 2211L****Sonographic Physics and Instrumentation Laboratory**

1 Credit

Designed to parallel the sonographic physics and instrumentation lecture course. The student will apply the concepts and mathematical calculations in clinical projects and various exercises.

Prerequisite: SON 1210

Co-requisite: SON 2211

**SON 2814****Sonographic Clinical Practicum I**

3 Credits

Provides on campus instruction in scanning protocols of the abdominal aorta, pancreas and gallbladder. Patient care, the role and duties of the sonographer in the health care environment and instruction in the use of various types of ultrasound equipment will be discussed. Students receive instruction and guidance in producing quality sonographic images and the parameters used to evaluate the images. Affiliate: Student rotation through clinical affiliates provides experience in the performance of ultrasound procedures in dynamic health care environments.

Prerequisites: SON 1850

Co-requisites: SON 2111, SON 2121

**SON 2824****Sonographic Clinical Practicum II**

3 Credits

Provides on campus instruction in scanning protocols of the abdominal aorta, pancreas and gallbladder. Patient care, the role and duties of the sonographer in the health care environment and instruction in the use of various types of ultrasound equipment will be discussed. Students receive instruction and guidance in producing quality sonographic images and the parameters used to evaluate the images. Affiliate: Student rotation through clinical affiliates provides experience in the performance of ultrasound procedures in dynamic health care environments.

Prerequisite: SON 2814

Co-requisites: SON 2122, SON 2112

**SON 2834****Sonographic Clinical Practicum III**

3 Credits

Provides on campus instruction in scanning protocols of the thyroid, female pelvis and the total abdomen. This course further expands upon the sonographer's role and responsibilities, and use of ultrasound equipment. The student receives additional instruction in film evaluation and image quality. Off campus: Student rotates through clinical affiliates gaining continued experience and knowledge in the performance of ultrasound procedures.

Prerequisite: SON 2824

Co-requisite: SON 2061



**SOP 1740****Feminine Psychology**

3 Credits

Focuses on theories of feminine personality using a social psychological approach, with an emphasis on gender differences and roles, family, work and the socialization process.

**SPC 1006****Speech Improvement**

1 Credit

Focuses on the basic methods of speech presentation and critical listening. For those students that began prior to the fall term 2002 and have had continuous enrollment, this meets the speech component of the general education communication requirements.

**SPC 1608****Public Speaking**

3 Credits

Focuses on practical methods of speech composition organizational pattern and presentation; addresses the individual needs of students. Meets speech component of the general education communication requirement.

Prerequisites: College level reading and writing skills are required.

**SPC 1608H****Honors Public Speaking**

3 Credits

Same as SPC 1608 with honors content. Honors Program permission required.

**SPC 2300****Interpersonal Communication**

3 Credits

Provides students with working definitions, conceptual knowledge and practical examples regarding the development and improving of interpersonal communication skills in personal and professional settings. Topics such as self-disclosure, verbal and non-verbal message sending and receiving, interpersonal and family relationships and conflict are addressed. While not designed to be therapeutic, the course offers practical, real world examples of interpersonal interactions.

Prerequisites: College level reading and writing skills are required.

**SPC 2300H****Honors Interpersonal Communications**

3 Credits

Same as SPC 2300 with honors content. Honors Program permission required.

**SPC 2930H****Honors Selected Topics in Communications**

3 Credits

This course provides an in-depth study of topics in communication not covered in other courses. The course will examine various aspects of communication through reading, case studies, participant observations, guided research, and/or field

trips. Topics vary from semester to semester. Course may be repeated up to 6 credit hours. Honors Program permission required.

**SPN 1120****Elementary Spanish I**

4 Credits

Covers the fundamental of reading, writing, listening and speaking the Spanish language while developing an understanding of the Spanish and Hispanic cultures. Native speakers of Spanish will be asked to seek credit by exam.

Prerequisites: College level reading and writing skills are required.

**SPN 1121****Elementary Spanish II**

4 Credits

Enhances skills learned in SPN 1120. Native speakers of Spanish will be asked to seek credit by exam.

Prerequisites: SPN 1120 with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

**SPN 1340****Spanish I for Heritage Speakers**

4 Credits

This course is designed for native Spanish speakers who lack knowledge of written and/or formal Spanish. Class is conducted entirely in Spanish with emphasis on the development of spelling, grammar, vocabulary, reading comprehension, writing, and oral skills. Special emphasis will be placed on the specific linguistic needs of Spanish heritage speakers. This course will also cover important aspects of the Hispanic World. College level reading and writing skills are required.

**SPN 1341****Spanish II for Heritage Speakers**

4 Credits

This course is a continuation of SPN 1340. It is designed for native Spanish speakers without formal instruction in Spanish. This course will expand upon the skills learned in SPN 1340 by further developing reading and writing skills necessary to understand literary selections, business and technical documents, and journalistic writings. Students will learn to make oral presentations in Spanish for different purposes and for diverse audiences. They will demonstrate knowledge of the usage of regional, dialectical, and colloquial language appropriately, as well as cultural variances of Spanish. College level reading and writing skills are required.

**SPN 2220****Intermediate Spanish I**

4 Credits

Designed to help students reach fluency in understanding, speaking, reading, writing, and cross-cultural awareness. Emphasis on written composition and oral presentation as well as values and ideas of the Spanish and Hispanic cultures.

Prerequisite: SPN 1121 with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

**SPN 2221****Intermediate Spanish II**

4 Credits

A continuation of SPN 2220, this course further develops fluency in the basic skills through systematic review. Continued emphasis on cross-cultural awareness as well as exposure to Spanish and Hispanic values and ideas.

Prerequisite: SPN 2220 with a minimum grade of "C" or instructor's permission. College level reading and writing skills are required.

**STA 2023****Elementary Statistics**

3 Credits

This course introduces the student to the concepts of statistical design and data analysis with emphasis on introductory descriptive and inferential statistics. Topics include data organization and analysis, probability, discrete and continuous probability distributions, confidence intervals, hypothesis testing, correlation and simple linear regression.

Prerequisite: MAT 0022, or MAT 0028, or MAT 0029 with a grade of 'S', or appropriate score on placement test.

**STA 2023H****Honors Elementary Statistics**

3 Credits

Same as STA 2023 with honors content. Honors Program permission required.

Prerequisite: MAT 0022, or MAT 0028, or MAT 0029 with a grade of 'S', or appropriate score on placement test.

**STS 1300****Surgical Anatomy and Pathophysiology**

4 Credits

This course has been designed to provide general knowledge about the healthy functions of the human body and the structures related to these functions. It is divided into six units of study. Each unit will be taught separately, correlating each system's contributions to the total function of the body, as a synergistic and unified whole. Instruction will also include anatomical positions, planes of the body, systems of the body and their inter-relationships, body chemistry, and introduction to physics.

Prerequisite: Admission to the Surgical Technology Program

**STS 1310****Surgical Techniques and Procedures**

6 Credits

This course is an overview of the profession including surgical skills and terminology related to surgical procedures performed in the operating room. Infection control techniques, aseptic technique and surgical instrumentation are covered in this course. Surgical procedures, patient positioning and surgical hazards are also covered.

Prerequisite: HSC 2006

Corequisite: STS 1310L

**STS 1310L****Surgical Techniques and Procedures Simulation Laboratory**

2 Credits

This course is designed to utilize simulation as related to surgical procedures. The simulators are designed to review anatomy and teach surgical procedures while evaluating the student's ability in reaction times and accuracy as related to anatomy and patient positioning. The simulators also evaluate the accuracy in stabilization of surgical instrumentation.

Prerequisite: HSC 2006

Corequisite: STS 1310

**STS 1340****Pharmacology and Anesthesia**

3 Credits

This course is an overview of the basic skills and terminology related to anesthesia and pharmacology. The course details the safety when working with medications in the perioperative setting and the understanding of current clinical laboratory tests, and vital signs. The anesthesia selection required for each surgical procedure and patient safety are all discussed in the course.

Prerequisite: Admission to the Surgical Technology Program

**STS 1940****Introduction to Surgery Clinical**

2 Credits

This course is an overview of the profession including basic clinical skills and terminology related to the surgical setting. The professionalism, profession organizations, patient confidentiality, infection control, asepsis, and demonstrating aseptic technique are covered in this course.

Prerequisite: HSC 2006L

Corequisite: STA 1310L

**STS 2323****Surgical Procedures I**

4 Credits

This course is an overview of surgical procedures covering a wide variety of surgical specialties. This course covers some surgical simulation use and mock surgeries. Surgical simulation focuses on instant performance feedback. Anatomy, aseptic technique and surgical instrumentation are covered in the course. Surgical procedures, patient positioning and surgical hazards are also covered.

Prerequisite: STS 1310

Corequisite: STS 2323L

**STS 2323L****Surgical Procedures Simulation Laboratory I**

1 Credit

This course is an overview of surgical procedures utilizing simulation equipment and laboratory skills. Focusing on the relationship of surgical simulation use (camera management) in a realistic surgical environment. Surgical simulation focuses on instant performance feedback. Anatomy, aseptic technique and surgical instrumentation are covered in this course. Medical terminology, asepsis, and surgical sterile technique are all covered in the disciplinary of this course.

Prerequisite: STS 1310

Corequisite: STS 2323

**STS 2324**  
**Surgical Procedures II**

4 Credits

This course presents an overview into the surgical environment. Instrumentation and sterilization key components of this course. Demonstrate the use of sterilization process monitors, including temperature and frequency of appropriate chemical indicators and bacterial spore tests for all sterilizers. Demonstrate the ability to identify and select appropriate instrumentation and equipment that meets the needs of the specialty.

Prerequisite: STS 2323

Corequisite: STS 2324L

**STS 2324L**  
**Surgical Procedures Simulation Laboratory II**

1 Credit

This course is an overview into the surgical setting using simulated surgeries and simulation equipment. By providing instant performance feedback through surgical anatomy simulation the learner gains hands-on experience instantly. This course requires clinical hours and surgical suite experience. General surgery, plastics/burns, E.N.T., genito-urinary, cardiothoracic, gynecological, orthopedic, neuro and ophthalmic surgery are all areas of experience.

Prerequisite: STS 2323L

Corequisite: STS 2324

**STS 2365**  
**Professional Skills for the OR Team**

1 Credit

This course is an overview of the medical professionalism and the mastery of skills, interpersonal skills and communication as related to surgical technology. Present information both formally and informally and the ability to draft, revise, and edit medical presentations. Conducting technical research and gathering formation to make professional presentations based on clinical experience is captured in the disciplinary of this course.

**STS 2936**  
**Surgical Certification Symposium**

2 Credits

This course presents an overview into the surgical technologists certification exam. Preparation and understanding of the basic sciences as related to surgical technology. Correlate the preoperative diagnosis interventions, common complications, and operative pathophysiology relative to specific surgical procedures. Describe the principles of problem solving, ethical decision making and risk management as related to the surgical patient. Provide health care within the ethical/legal framework of the surgical technologists role.

Prerequisite: STS 2944

**STS 2944**  
**Surgical Clinical I**

3 Credits

This course is an overview of clinical skills as applied to real time surgery. Students perform in the clinical setting basic surgical skills. Surgical procedural documentation is required. Medical asepsis and aseptic technique are required to be observed and mastered.

Prerequisite: HSC 2006L

Corequisite: STS 2323L

**STS 2945**  
**Surgical Clinical II**

3 Credits

This course presents an overview into the clinical experience focusing on aseptic technique and patient safety. Interpersonal skills as related to surgical technology and working within a medical team as needed for patient safety. This course contains all required surgical rotations and hours needed to sit for the National Exam. This course is performed in the clinical setting.

Prerequisite: STS 2944

**STS 2954**  
**Surgical Technologist Portfolio**

1 Credits

This course is an overview of the clinical experience. The creation of a professional portfolio is utilized in employability skills. The course captures the required documentation needed to sit for the National Certification exam. Professionalism, documentation and medical experience is captured in this course.

Corequisite: STS 2936

**SUR 2000C**  
**Surveying I**

3 Credits

This course introduces students to the basic methods of plane surveying, use of field-measurement instruments, field-notes recording, and the development of a site plan for use in building and construction projects.

**SYG 2000**  
**Introduction to Sociology**

3 Credits

Emphasizes the scientific method in examining society. Topics include group structure, roles, social stratification, socialization, deviance, collective behavior, ethnic diversity and globalism.

Prerequisites: College level reading and writing skills are required.

**SYG 2000H**  
**Honors Introduction to Sociology**

3 Credits

Same as SYG 2000 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**SYG 2010****Social Problems**

3 Credits

Focuses on the description and analysis of current social problems, with an emphasis on cause and effect and possible solutions. Topics include racism, sexism, poverty, pollution, over population, crime, drugs, and other social issues.

**SYG 2010H****Honors Social Problems**

3 Credits

Same as SYG 2010 with honors content. Honors Program permission required.

**SYG 2012****Introduction to Globalization**

3 Credits

Globalization is an umbrella term that encompasses changes in economies, politics, cultures, technologies and societies. The course will help students understand globalization and adopt a global perspective. Converging global institutions and cultures, and the consequences of global interdependence will be studied. Issues of poverty, food, energy, development and democratization will be assessed. Protests against western corporations and the challenges posed to small businesses and local cultures will be evaluated. The relationship between globalization and inequity, the fate of cultural diversity in a globalizing world, immigration trends, integration and xenophobia will be investigated. Challenges to environment and issues of social justice will also be identified. Finally, resistance movements to globalization that have helped steer it, but not retard it will be analyzed.

Prerequisite: SYG 2000

**SYG 2340****Human Sexuality**

3 Credits

Examines physical intrapsychic, and interpersonal aspects of sexuality; also anatomical, physiological and emotional aspects of sexuality, love and attraction, sexual communication, adult sexual behavior, childhood sexual behavior, sexual dysfunction and treatments, sexually transmitted diseases, sex and aging, legal aspects of sexual behavior, sexual exploitation, and eroticism in American culture. Presentations will be frank and explicit.

**SYG 2430****Marriage and Family**

3 Credits

Focuses on marriage and the family, with an emphasis on changing values and structures. Topics include sex roles, love relationships, sexuality, dating, singlehood, parenthood, husband wife interaction, divorce and remarriage.

**SYG 2930****Selected Topics in Sociology**

3 Credits

Provides an in-depth study of topics in Sociology not covered in other courses. May be repeated once for credit.

Prerequisite: SYG 2000

**SYG 2930H****Honors Selected Topics in Sociology**

3 Credits

Same as SYG 2930 with honors content. Honors Program permission required. This course may be repeated once for credit under a different topic.

Prerequisite: SYG 2000

**TAR 1170C****B.I.M. I Revit Residential**

3 Credits

An introduction to standard architectural drawing types and techniques using Autodesk Revit software. Students will create plans, elevations, sections, and detail drawings while exploring the 3-D and BIM capabilities of Autodesk Revit software on residential-scale projects.

Prerequisite: BCN 1250

**TAR 1171C****B.I.M. II Revit Commercial**

3 Credits

A second-level course exploring the 3-D and BIM capabilities of Revit software on commercial-scale projects. Topics include content creation, commercial structural systems and architectural visualization.

Prerequisite: TAR 1170C

**TAR 1172C****B.I.M. III Revit M.E.P.**

3 Credits

An introduction to standard MEP (mechanical, electrical and plumbing) systems using Revit computer software. Course work focuses on the collaborative efforts of architects and engineers in the design of building systems. Software capabilities are explored for analyzing and selecting building system components.

Prerequisite: TAR 1170C

**TAR 2053****Introduction to Computer-Aided Design and Drafting**

3 Credits

A first term course in the use of industry standard CADD software (latest version of CAD) for the development of design and construction documents. Topics covered include advanced editing techniques, dimensioning, multi-view drawings and isometric drawings. Completion of BCN 1250 or prior drafting experience strongly recommended.

**TAR 2054****Intermediate Computer Aided Design and Drafting**

3 Credits

A second level course in the use of industry standard CADD software (latest version of CAD) for the development or design and construction documents. Topics covered include advanced editing techniques, dimensioning, multi-view drawings and isometric drawings. Completion of TAR 2053 or prior CADD experience strongly recommended.

**TAX 2000****Federal Tax Accounting I**

3 Credits

This course covers practice in the application of the Internal Revenue Code to determine individual income tax.

Prerequisite: ACG 2021 or APA 1111

**TAX 2010****Federal Tax Accounting II**

3 Credits

This course covers practice in the application of the Internal Revenue Code to determine partnership and corporate income taxes.

Prerequisite: TAX 2000

**THE 1000****Introduction to Theatre Arts**

3 Credits

Provides an orientation to theater as an art form, with an emphasis on reading and reviewing dramatic plays.

Prerequisites: College level reading and writing skills are required.

**THE 1000H****Honors Introduction to Theatre Arts**

3 Credits

Same as THE 1000 with honors content. Honors Program permission required.

Prerequisites: College level reading and writing skills are required.

**THE 1304****Script Analysis**

3 Credits

Teaches the techniques of close reading of dramatic texts for the purpose of acting, directing and designing for the stage.

Prerequisite: THE 1000

**TPA 1200****Stagecraft**

3 Credits

An introductory course in technical production including scenic construction, sound and properties, state lighting, and theatre organization.

**TPA 1248****Makeup for the Stage**

3 Credits

The study of principles, materials, and applications of theatrical makeup.

**TPA 1290****Performance Workshop**

3 Credits

Provides the opportunity for participation in a major theatrical production as an actor. This course may be repeated two times for credit.

**TPP 1110****Acting I**

3 Credits

Emphasizes the basic techniques of acting, with an emphasis on the Stanislavsky system.

**TPP 1111****Acting II**

3 Credits

Emphasizes the use of the Stanislavsky system in more advanced scenes. Additional prerequisite: consent of instructor.

Prerequisite: TPP 1110

**TPP 1160****Voice and Movement Techniques for the Stage**

3 Credits

An exploration of basic vocal skills. Exercises for self-awareness, physical strength, flexibility, and versatility for the actor. Required for all theatre majors. (Also open for non-majors.)

**ZOO 1010C****General Zoology**

3 Credits

Basic course pertaining to the development, anatomy, physiology, genetics, ecology, and natural relationships of the animal kingdom combined and integrated with a hands-on laboratory component. A special fee will be charged for this course.

Prerequisites: College level reading, writing, and math skills are required.

**ZOO 1450****Ichthyology**

3 Credits

Designed to provide an introduction to the study of fish. Topics introduced include fish anatomy, reproduction, physiology, nutrition, classification and differences among the families of fish.

Prerequisites: College level reading and writing skills are required.

Co-requisite: ZOO 1450L

**ZOO 1450L****Ichthyology Lab**

1 Credit

Focuses on fish identification.

Prerequisites: College level reading and writing skills are required.

Co-requisite: ZOO 1450

## PSAV Course Descriptions

### AER 0014

#### Automotive Services Assistor

Vocational Credits 10

Clock Hours 300

A general introduction to the procedures related to automotive shop safety, tool and equipment orientation, hazardous waste handling and disposal, the use of service information, mathematical computations commonly used in the automotive industry, preventive maintenance services, employability, and communication skills.

### AER 0110

#### Engine Repair Technician

Vocational Credits 5

Clock Hours 150

An in-depth study of engine operations, engine components, construction and materials, engine problem diagnosis to include engine removal and replacement, engine disassembly, inspection and reassembly to manufacturer's specifications.

### AER 0172

#### Automotive Heating and Air Conditioning Technician

Vocational Credits 5

Clock Hours 150

Provides the student with an in depth examination of air conditioning and heating system operation including Title IV of the Clean Air Act. Students will receive hands-on instruction in industry accepted practices for recovery and recycling of refrigerants, service, repair, testing, and diagnosis of automotive air conditioning systems using state-of-the-art tools and equipment.

### AER 0257

#### Automatic Transmission and Transaxles Technician

Vocational Credits 5

Clock Hours 150

Student technicians will learn the theory of operation, inspection, testing, diagnosis, in-vehicle services, and overhaul of automatic transmissions and transaxles. Component analysis includes: planetary gears, multiple disc clutches, bands, hydraulic systems and controls, torque converters, electrical, and electronic controls.

### AER 0274C

#### Manual Drivetrain and Axle Technician

Vocational Credits 5

Clock Hours 150

A theoretical and practical application course of study that includes the diagnosis, service and repair of four and five speed manual transmissions and transaxles, mechanical and hydraulic clutch systems, front and rear wheel drive axles, all-wheel drive systems (AWD) and 4X4 transfer cases and drive systems.

### AER 0360

#### Automobile Electrical/Electronic System Technician

Vocational Credits 10

Clock Hours 300

This course provides an in-depth study of automotive electrical systems including interpreting wiring diagrams and using testing and diagnostic equipment. Specific component analysis includes batteries, starting systems, charging systems, lighting systems, gauges, and power accessories (windows, door locks, windshield wipers, etc.).

### AER 0418

#### Automotive Brake Systems Technician

Vocational Credits 5

Clock Hours 150

Students will learn the theory of operation, testing, diagnosis, and service of brake systems. Specific component analysis will include drum and disc brakes, hydraulic controls, power assist units, parking brakes, braking electrical circuits, and antilock braking systems.

### AER 0453

#### Automobile Suspension and Steering Technician

Vocational Credits 5

Clock Hours 150

Students will learn the design, components, theory of operation, inspection, diagnosis, and service of suspension and steering systems. Component analysis will include front and rear suspensions, steering linkages, steering gears, steering columns, wheels, tires, and alignment angle measurement and adjustment.

### AER 0503

#### Automotive Engine Performance Technician

Vocational Credits 10

Clock Hours 300

Provides an in-depth study of the fuel, ignition, and emission control systems of an automobile. Major topics include engine operation, solid state ignition, electronic fuel injection and the use of comprehensive engine systems tests to isolate and repair common engine performance and emission system malfunctions.

### AER 0871

#### Automotive Compressed Natural Gas Technician

Vocational Credits 5

Clock Hours 150

Prepares students for entry into the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study the diagnosis, service, maintenance, installation, and repair of automotive compressed natural gas systems.

### AER 0872

#### Automotive Liquid Propane Gas Technician

Vocational Credits 5

Clock Hours 150

This course prepares students for entry into the automotive service industry. Students explore career opportunities and requirements of a professional auto mechanic. Students study

diagnostics, maintenance, installation, and repair of automotive liquid propane gas systems.

**AER 0875****Alternative Fuels Maintenance Technician**

Vocational Credits 10

Clock Hours 300

This course prepares students for entry into the Alternative Fuels Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study facility and personal safety, engine operation, types of alternative fuels, hybrid, and electric vehicles. Alternative fuel and electric vehicle maintenance and customer service are included.

**AER 0876****Advanced Alternative Fuels Technician**

Vocational Credits 10

Clock Hours 300

The Alternative Fuels Technician course includes the diagnosis, service, and repair of hybrid, electric vehicle system components, battery, charging systems, and general alternative fuel vehicles. Methods of using natural gas fuel systems and alternative fuel conversions are included.

**AER 0877****CNG Fuel System Inspector**

Vocational Credits 5

Clock Hours 150

The CNG Fuel System Inspector course includes methods for inspecting CNG storage containers, and CNG components. Students study safety inspection methods for compressed natural gas storage containers, system installations, vehicle installations, vehicle components, fuel delivery systems and types of potential damage.

**ARR 0022****Damage Analysis and Estimating**

Vocational Credits 2.5

Clock Hours 75

The Damage Analysis and Estimating course prepares students for entry into the Automotive Collision and Repair industry. Students study damage analysis; estimating; vehicle construction and parts identification; and customer relations and sales skills.

**ARR 0112****Automotive Collision Welding, Cutting and Joining**

Vocational Credits 2.5

Clock Hours 75

The Automotive Collision Welding, Cutting and Joining course prepares students for entry into the Automotive Collision and Repair industry. Students study basic welding skills specifically related to automotive collision and repair; safety precautions; metal welding, cutting, and joining.

**ARR 0140****Automotive Collision Repair Helper/Assistant**

Vocational Credits 5

Clock Hours 150

The Auto Body Helper/Assistant course prepares students for entry into the Auto Collision industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study shop and personal safety skills, basic automotive components, tools and equipment, occupational safety, engine operation, and workplace employment skills.

**ARR 0141****Automotive Collision Refinish Technician**

Vocational Credits 15

Clock Hours 450

The Automotive Collision Refinishing Technician course prepares students for entry into the Automotive Collision and Repair industry. Students study safety precautions; surface preparation; spray gun and related equipment operation; paint mixing, matching and applying; paint defects (causes and cures); and final detailing.

**ARR 0295****Structural Repair Technician**

Vocational Credits 11.6

Clock Hours 350

The Structural Damage Repair Technician course prepares students for entry into the Automotive Collision and Repair industry. Students study frame inspection and repair; unibody and unitized structure inspection, measurement, and repair; fixed glass; steering and suspension; heating and air conditioning; cooling systems; drive train; fuel, intake and exhaust systems; and restraint systems.

**ARR 0312****Non-Structural Damage Repair Technician**

Vocational Credits 10

Clock Hours 300

The Non-Structural Damage Repair Technician course prepares students for entry into the Automotive Collision and Repair industry. Students study safety the preparation; outer body panel repairs, replacements, and adjustments; metal finishing and body filling; movable glass and hardware; plastics and adhesives; electrical; and brakes.

**CJK 0002****Introduction to Law Enforcement**

Vocational Credits .40

Clock Hours 12

This course provides an overview of the law enforcement basic recruit training program and the requirements to become a sworn officer. It describes basic criminal justice ethics and command structure. The course also provides a basic introduction to the criminal justice system.

**CJK 0006****Introduction to Law Enforcement 1-6**

Vocational Credits 2.2

Clock Hours 67

This module includes units of instruction in the following topics: The Florida Criminal Justice System, Constitutional Law and Florida Statutes, Criminal Justice Values and Ethics, Communication and Interpersonal Skills, and Human Interaction.

**CJK 0016****Communication**

Vocational Credits 0.80

Clock Hours 24

This course focuses on aspects of professional communication officers should use on the job. It explains challenges to effective communication and concepts such as procedural justice, empathy, and professionalism.

**CJK 0018****Legal**

Vocational Credits 2.13

Clock Hours 64

The course provides foundational knowledge of the law and how officers apply the law to specific situations. The course describes the basics of enforcing laws without infringing on individual rights.

**CJK 0019****Interviewing and Report Writing**

Vocational Credits 1.86

Clock Hours 56

This course provides an introduction to lawful and effective interviews as part of the investigative process as well as the fundamentals of note-taking and report writing.

**CJK 0020****Law Enforcement Vehicle Operations**

Vocational Credits 1.6

Clock Hours 48

This module includes instruction in the following topics: physiological and psychological factors which impact vehicle operation and control; legal considerations involved in the operation of emergency vehicles; civil and criminal liability; routine maintenance and inspection of police vehicles; vehicle dynamics; types of skids and their causes; and basic driving skills.

**CJK 0021****Serving Your Community**

Vocational Credits 1.13

Clock Hours 34

This course provides an introduction to some of the diverse communities officers serve and provides an overview of how to respond with professionalism while keeping everyone on the scene safe.

**CJK 0023****Introduction to Law Enforcement**

Vocational Credits 0.13

Clock Hours 4

At the end of this course, the student will understand the importance of the Criminal Justice Standards and Training Commission and the requirements for certification as a law enforcement auxiliary officer in the state of Florida.

**CJK 0024****Legal Concepts**

Vocational Credits 0.66

Clock Hours 20

At the end of this course, the student will have a foundational understanding of the United States legal system and the various sources of laws.

**CJK 0025****Patrol and Professional Communication**

Vocational Credits 0.4

Clock Hours 12

At the end of this course, the student will know the elements of effective communication.

**CJK 0026****Interactions in a Diverse Community**

Vocational Credits 0.4

Clock Hours 12

At the end of this course, the student will recognize a disability as defined by the Americans with Disabilities Act (ADA) and use the guidelines to maintain the rights of a disabled person. The student will also know the criminal elements of abuse, neglect, or exploitation of an elderly or disabled adult. The student will identify the characteristics of a crisis and determine an appropriate crisis management intervention resolution.

**CJK 0027****Calls for Service and Arrest Procedures**

Vocational Credits .8

Clock Hours 24

At the end of this course, the student will understand how to respond to calls for service, assess a situation upon arrival, and contact complainants and witnesses at the scene.

**CJK 0028****Traffic Stops and Crash Investigations**

Vocational Credits .93

Clock Hours 28

At the end of this course, the student will identify common traffic violations and direct pedestrian traffic by identifying safe and efficient actions in planned or emergency situations.

**CJK 0029****Crime Scene and Courtroom Procedures**

Vocational Credits .26

Clock Hours 8

At the end of this course, the student will understand how to secure and protect a crime scene. The student will understand



possible responses the defense may raise in a criminal case and understand the different types of court proceedings.

**CJK 0031****First Aid for Criminal Justice Officers**

Vocational Credits 1.3

Clock Hours 40

This module includes instruction in the following topics: responding to medical emergencies; musculoskeletal and soft tissue injuries; medical related issues.

**CJK 0040****Criminal Justice Firearms**

Vocational Credits 2.7

Clock Hours 80

This module includes instruction in the following topics: firearm familiarization; types of ammunition, fundamentals of marksmanship; drawing and holstering a weapon; loading and unloading a weapon; use of cover; weapon malfunctions; live fire exercises; weapon cleaning; qualification; and survival shooting.

**CJK 0051****Criminal Justice Defensive Tactics**

Vocational Credits 2.7

Clock Hours 80

This course teaches prospective officers how to control subjects and defend themselves using appropriate defensive tactics in accordance with the recommended response to resistance matrix.

**CJK 0063****Fundamentals of Patrol**

Vocational Credits 1.33

Clock Hours 40

This course provides an overview of the law enforcement techniques and tactics that officers use while on patrol. This course is an introduction to the use of communications equipment, community-oriented policing, and officer safety and survival skills. It also explains how to respond to non-criminal calls and conduct structure and area searches and provides resources that officers use while on patrol.

**CJK 0072****Crimes against Persons**

Vocational Credits 1.60

Clock Hours 48

This course provides an introduction to the basics of conducting investigations and describes a variety of crimes involving people such as assault and battery, domestic violence, child abuse, sexual offenses, and human trafficking. It provides the foundational knowledge for initial response and investigation of these crimes.

**CJK 0073****Crimes Involving Property and Society**

Vocational Credits 0.40

Clock Hours 12

This course provides an introduction to a variety of crimes involving property and society, such as retail theft, fraud, and animal cruelty. It provides the foundational knowledge for initial response and investigation of these crimes.

**CJK 0079****Crimes Scenes Follow-Up Investigations**

Vocational Credits 1.13

Clock Hours 34

This course is an introduction to methods for securing, protecting, and preserving a crime scene to avoid contaminating any evidence. The course also explains the importance of collecting, documenting, and maintaining the physical evidence.

**CJK 0090****Tactical Applications, Module 11-14**

Vocational Credits 1.8

Clock Hours 54

This module includes units of instruction in the following topics: how courts relate to law enforcement; rules of court procedure; responsibilities of an officer in court proceedings; the first response to an emergency situation; recognition techniques for identifying bombs, explosives and weapons of mass destruction; and riot control procedures for parades, concerts, festivals and other public events.

**CJK 0093****Critical Incidents**

Vocational Credits 1.46

Clock Hours 44

This course provides an overview of law enforcement techniques and tactics used when confronting large-scale or critical incidents, including natural disasters, active shooters, exposure to hazardous materials, and explosive devices.

**CJK 0096****Criminal Justice Officer Physical Fitness Training**

Vocational Credits 2.0

Clock Hours 60

This course provides the student with the physical conditioning necessary to perform the essential functions of a police officer.

**CJK 0283****Interpersonal Skills I**

Vocational Credits 2.1

Clock Hours 62

This course provides the students with the verbal skills necessary to communicate effectively with diverse inmate populations.

**CJK 0300****Introduction to Corrections**

Vocational Credits 1.1

Clock Hours 32

This course provides the student with an overview of the correctional officer training program to include inmate rights.

**CJK 0305****Communications**

Vocational Credits 1.3

Clock Hours 40

This course provides the student with practical skills for interpersonal communication, interviewing, note taking and report writing.

**CJK 0310****Officer Safety**

Vocational Credits 0.5

Clock Hours 16

This course provides the student with practical skills to identify inmate threats, manipulations, deception and contraband.

**CJK 0315****Facility and Equipment**

Vocational Credits 0.3

Clock Hours 8

This course provides the student with practical skills to issue, receive and inventory equipment used within a correctional facility.

**CJK 0320****Intake and Release**

Vocational Credits 0.6

Clock Hours 18

This course provides the student with an overview of inmate intake, classification and release procedures.

**CJK 0325****Supervising in a Correctional Facility**

Vocational Credits 1.3

Clock Hours 40

This course provides the student with practical skills to observe and supervise inmates conducting a variety of activities.

**CJK 0330****Supervising Special Populations**

Vocational Credits 0.7

Clock Hours 20

This course provides the student with awareness of special inmate populations.

**CJK 0335****Responding to Incidents and Emergencies**

Vocational Credits 0.5

Clock Hours 16

This course prepares the student to use equipment, crime scene control and chain of custody procedures for responding to emergencies.

**CJK 0340****Officer Wellness and Physical Abilities**

Vocational Credits 1.0

Clock Hours 30

This course prepares the student for the physical demands of being a correctional officer through a wellness and fitness training program.

**CJK 0393****Cross-Over Program Updates**

Vocational Credits 0.27

Clock Hours 8

This course is designed for instructors to deliver expanded or updated instruction on curriculum topics contained in this cross-over program. The eight hours do not have to be taught in one block but may be distributed as needed throughout the program with the approval of the training center director. For example, additional time may be used to integrate updated techniques or instruction from the high liability textbook, apply relevant case law, or review topics from the curriculum textbook not specifically designated for classroom instruction in this cross-over program. Because these hours may be distributed to other courses in the cross-over program, a written end-of-course exam is not required for the cross-over program updates course.

**CJK 0394****Cross-Over Program Updates**

Vocational Credits 0.33

Clock Hours 10

This course is designed for instructors to deliver expanded or updated instruction on curriculum topics contained in this cross-over program, e.g., new techniques in a high liability area or application of relevant case law. The ten hours do not have to be taught in one block but may be distributed as needed throughout the program.

**CJK 0400****Traffic Incidents**

Vocational Credits 0.40

Clock Hours 12

This course is an introduction to the basics of traffic incidents other than traffic stops and includes lessons on legal terms and the fundamentals of directing traffic, addressing parking violations and conducting vehicle searches.

**CJK 0401****Traffic Stops**

Vocational Credits 0.80

Clock Hours 24

This course is an introduction to the fundamentals of conducting traffic stops with professionalism while maintaining the safety of all involved. The course covers the basics of unknown and high-risk traffic stops.

**CJK 0402****Traffic Crash Investigations**

Vocational Credits 1.00

Clock Hours 30

This course provides an overview of conducting traffic crash investigations using a systematic approach. The course describes how to respond to, assess, and protect the scene as well as documentation and returning the scene to normal conditions.

**CJK 0403****DUI Traffic Stops**

Vocational Credits 0.80

Clock Hours 24

This course provides an overview of detecting impaired driving, administering field sobriety tests, making arrests, and recording the evidence of a dui offense.

**CJK 0421****Dart Firing Stun Gun**

Vocational Credits 0.13

Clock Hours 4

This course provides foundational knowledge of the operation of conducted electrical weapons (CEW), particularly dart-firing stun guns, as well as the effect on the human body.

**CJK 0771****Criminal Justice Legal II**

Vocational Credits 0.7

Clock Hours 22

This course covers a variety of legal topics to include constitutional law, evidence rules, arrest laws, search and seizure and crimes against persons.

**DEA 0931****Dental Assisting in Orthodontics**

Vocational Credits 0.5

Clock Hours 15

This course includes instruction on the history of orthodontics, malocclusion, orthodontic vocabulary, photographs, bracket slot, wires, tooth movement, and all phases of bonding, wires, headgear, and retainer finishing. This course includes taking the State Expanded Functions Orthodontics Examination and is required for completion of the Dental Assisting Program.

**DEA 0931L****Dental Assisting Orthodontics Lab**

Vocational Credits 1.0

Clock Hours 30

This course includes instruction on the history of orthodontics, malocclusion, orthodontic vocabulary, photographs, bracket slot, wires, tooth movement, and all phases of bonding, wires, headgear, and retainer finishing. This course includes taking the State Expanded Functions Orthodontics Examination. This course is required for completion of the Dental Assisting Program.

**DES 0021****Head, Neck and Dental Anatomy**

Vocational Credits 1.5

Clock Hours 45

A study of the anatomy of the head and neck with emphasis on the maxilla and mandible. In addition, the anatomy of the deciduous and permanent dentitions and supporting structures is covered.

**DES 0053L****Dental Pharmacology and Pain Control Lab**

Vocational Credits 0.5

Clock Hours 15

This course is a study of agents used in dentistry for local anesthesia and pain control. Nitrous oxide sedation and its use will be covered.

**DES 0400****Dental Anatomy and Physiology**

Vocational Credits 1.5

Clock Hours 45

A study of the development of the human body along with a survey of the structure, growth, and function of the body's organ system.

**DES 0500****Computer Applications in Modern Dentistry**

Vocational Credits 1.0

Clock Hours 30

Introduces the student to basic computer and word processing concepts including dental software, file management, system back up, and equipment maintenance.

**DES 0804****Introduction to Clinical Procedures I**

Vocational Credits 2.0

Clock Hours 60

This core course introduces the dental assisting and dental hygiene student to the basic concepts of clinical practice. Topics include the history of dentistry, dental health team members, professional organizations, medical/dental history, operation and maintenance of dental equipment, operator/patient, four handed techniques, oral evacuation, dental charting, cleaning of removable appliances, coronal polishing, and fluoride application techniques.

**DES 0830L****Expanded Functions for Dental Auxiliaries Lab**

Vocational Credits 1.50

Clock Hours 45

This course is designed to provide basic knowledge and clinical practice necessary for the dental assistant to perform the expanded functions permitted by the Rules and Regulations of the Florida State Board of Dentistry.

**DIM 0101****Diesel Engine Mechanic/Technician Helper**

Vocational Credits 5

Clock Hours 150

The Diesel Engine Mechanic/Technician Helper course prepares students for entry into the Diesel Engine Service Industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study shop and personal safety skills, basic diesel components, tools and equipment, occupational safety, engine operation, and workplace employment skills.

**DIM 0102****Diesel Electrical & Electronics Technician**

Vocational Credits 10

Clock Hours 300

The Diesel Electrical and Electronics Technician course prepares students for entry into the Diesel Engine Service Industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study general electrical systems, batteries starting, charging, lighting, gauges, warning devices, and related electrical system diagnostics, service, and repair.

**DIM 0103****Diesel Engine Preventive Maintenance Technician**

Vocational Credits 5

Clock Hours 150

The Diesel Engine Preventive Maintenance Technician course prepares students for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study engine system, cab and hood systems, electrical/electronic systems, frame and chassis systems diagnostics, service, and repair.

**DIM 0104****Diesel Engine Technician**

Vocational Credits 10

Clock Hours 300

The Diesel Engine Technician course prepares students for entry into the Diesel Engine Service Industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study engine, cylinder head, valve train, engine block, lubrication, cooling, air induction, exhaust, fuel, and engine brakes diagnostics, service, and repair.

**DIM 0105****Diesel Brakes Technician**

Vocational Credits 10

Clock Hours 300

The Diesel Brakes Technician course prepares students for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study diagnostic, service, and repair of air, and hydraulic brakes.

**DIM 0106****Diesel Heating & A/C Technician**

Vocational Credits 5

Clock Hours 150

The Diesel Heating and Air Conditioning Technician course prepares students for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study diagnostic, service, and repair of HVAC, and NC systems.

**DIM 0107****Diesel Steering & Suspension Technician**

Vocational Credits 5

Clock Hours 150

The Diesel Steering and Suspension Technician course prepares students for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study diagnostic, service, and repair of steering, suspension, wheel alignment, wheels, tires, and frame systems.

**DIM 0108****Diesel Drivetrain Technician**

Vocational Credits 5

Clock Hours 150

The Diesel Drivetrain Technician course prepares students for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study diagnostic, service, and repair of clutch, transmission, driveshaft, universal joint, and drive axle systems.

**DIM 0109****Diesel Hydraulics Technician**

Vocational Credits 5

Clock Hours 150

The Diesel Hydraulics Technician course prepares students for entry into the Diesel Engine Service industry. Content emphasizes beginning skills and concepts as a recommended requisite. Students study diagnostic, service, and repair of hydraulic, pumps, filtration/reservoir, hoses, fittings, connectors, control valves, and actuator systems.

**DIM 0110****Diesel Power Train Technician**

Vocational Credits 5

Clock Hours 150

The Diesel Power Train Technician course is designed to build on the skills and knowledge students learned in the Diesel Drivetrain Technician course for entry into the Heavy Equipment industry. Content emphasizes beginning skills. Students study shop safety procedures, track systems, power trains, components, and qualifications for employment.

**DIM 0130****Diesel Brakes/Fluids Technician**

Vocational Credits 10

Clock Hours 300

The Diesel Brakes/Fluids Technician course is designed to build on the skills and knowledge students learned for entry into the Heavy Equipment industry. Content emphasizes beginning skills and concepts. Students study air and hydraulic brakes/fluid systems.

**DIM 0810****Transit Equipment Preventative Maintenance**

Vocational Credits 6.7

Clock Hours 200

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. The competencies include understanding shop organization and management, demonstrating safety awareness and practices, and performing basic preventive maintenance procedures.

**DIM 0811****Transit Basic Electrical Systems**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus electrical systems and components, and demonstrating the qualifications for employment.

**DIM 0812****Transit Wheelchair Lift/Ramp**

Vocational Credits 2.0

Clock Hours 60

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. The competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus wheelchair lift and ramp systems and components, and demonstrating the qualifications for employment.

**DIM 0813****Transit Diesel Engine Preventative Maintenance**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, performing diesel engine preventive maintenance, and demonstrating the qualifications for employment.

**DIM 0814****Transit Steering and Suspension**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational

safety procedures, maintaining and repairing transit bus steering and suspension, and demonstrating the qualifications for employment.

**DIM 0820****Transit Hydraulics**

Vocational Credits 2.0

Clock Hours 60

The purpose of the course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus hydraulic systems and demonstrating the qualifications for employment.

**DIM 0821****Transit Diesel Electrical and Diesel Engine Electronics**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, identifying and applying electronic principles related to diesel technology, maintaining and repairing electrical systems, and demonstrating the qualifications for employment.

**DIM 0822****Transit Drive Train**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus alternative fuels systems and components, and demonstrating the qualifications for employment.

**DIM 0823****Transit Intermediate Electrical Systems**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing electrical systems and components, and demonstrating the qualifications for employment.

**DIM 0824****Transit Brakes/Air System**

Vocational Credits 6.6

Clock Hours 200

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit bus brake and air systems, and demonstrating the qualifications for employment.

**DIM 0830****Transit Alternative Fuels Systems**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit alternative fuels systems, and demonstrating the qualifications for employment.

**DIM 0831****Transit Advanced Electrical Systems**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing advanced electrical systems and components, and demonstrating the qualifications for employment.

**DIM 0832****Transit Heating and Air Conditioning**

Vocational Credits 6.7

Clock Hours 200

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit heating and air conditioning systems, and demonstrating the qualifications for employment.

**DIM 0833****Transmission Diagnosis, Rebuild and Repair**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing transit transmissions, and demonstrating the qualifications for employment.

**DIM 0834****Diesel Engine Diagnosis**

Vocational Credits 4.0

Clock Hours 120

The purpose of this course is to develop the competencies essential to the public transit bus technology industry. These competencies include demonstrating shop and occupational safety procedures, maintaining and repairing diesel engines systems, and demonstrating the qualifications for employment.

**EMS 0110****Emergency Medical Technician**

Vocational Credits 10

Clock Hours 300

This course prepares students for employment as state certified Emergency Technicians in accordance with Chapter 401, Florida Statute and Rule Chapter 64J, Florida Administrative Code.

This course is required for firefighter students seeking to become state certified as either a Fire Fighter I/II in accordance with Chapter 633, Florida Statutes and Rule Chapter 69A-37, F.A.C. The course content includes but is not limited to patent assessment, airway management, cardiac arrest, external and internal bleeding and shock, traumatic injuries, poisoning, stroke, communicable diseases, alcohol and drug abuse, transportation of patient.

**FFP 0030****Fire Fighter I**

Vocational Credits 6.4

Clock Hours 191

The Firefighter program content includes, but is not limited to, orientation to the fire service, fire alarms and communication, vehicles, apparatus and equipment, fire behavior, portable extinguishers, fire streams, fundamentals of extinguishment, ladders, hoses, tools and equipment, forcible entry, salvage, overhaul, ventilation, rescue, protective breathing equipment, first responder emergency medical techniques, water supplies, principles of in-service inspections, safety, controlled burning (Live Fire Training), and employability skills. This course also includes Wild Land firefighting and Hazardous Materials.

**FFP 0031****Fire Fighter II**

Vocational Credits 10.0

Clock Hours 301

The Firefighter program content includes, but is not limited to, orientation to the fire service, fire alarms and communication, vehicles, apparatus and equipment, fire behavior, portable extinguishers, fire streams, fundamentals of extinguishment, ladders, hoses, tools and equipment, forcible entry, salvage, overhaul, ventilation, rescue, protective breathing equipment, first responder emergency medical techniques, water supplies, principles of in-service inspections, safety, controlled burning (Live Fire Training), and employability skills. This course also includes Hazardous Materials Operations Level training.  
Prerequisite: FFP 0030

**FFP 0141****Emergency Services First Responder**

Vocational Credits 1.8

Clock Hours 53

Trains individuals to accept and recognize medical standards in emergency first aid procedures to include medical, environmental, and trauma related emergencies.

**HSC 0003****Fundamentals Allied Health Occupations**

Vocational Credits 0.5

Clock Hours 16

This course introduces the student to skills and procedures common to allied health occupations, including basic first aid and emergency care, safety, security, proper body mechanics, vital signs, wellness, disease control, blood borne pathogens and AIDS.

**PMT 0070****Welder Assistant I**

Vocational Credits 5

Clock Hours 150

This course prepares students for entry into the welding industry. Students explore career opportunities and requirements of a professional welder. Content emphasizes beginning skills key to the success of working in the industry. Students study workplace safety and organization, basic manufacturing processes, metals identification, basic interpretation of welding symbols, and oxyfuel gas cutting practices.

**PMT 0071****Welder Assistant II**

Vocational Credits 5

Clock Hours 150

This course is designed to build on the skills and knowledge students learned in Welder Assistant I for entry into the welding industry. Students explore career opportunities and requirements of a professional welder. Content emphasizes beginning skills key to success of working in the welding industry. Students study drawings and welding symbols, intermediate oxyfuel gas cutting practices, plasma arc cutting principles, and basic shielded metal arc welding (SMAW).

**PMT 0072****Welder, SMAW I**

Vocational Credits 5

Clock Hours 150

This course prepares students for entry into the welding industry as a basic shielded metal arc welder (SMAW). Students explore career opportunities and requirements of a professional welder. Content emphasizes beginning skills key to the success of working in the welding industry. Students study basic shielded metal arc welding (SMAW), carbon arc gouging (CAG) principles and visual examination skills.

**PMT 0073****Welder: SMAW 2**

Vocational Credits 5

Clock Hours 150

This course is designed to build on the skills and knowledge students learned in Welder SMAW I for entry into the welding industry as a basic shielded metal arc welder (SMAW). Students explore career opportunities and requirements of a professional welder. Content emphasizes beginning skills key to the success of working in the welding industry. Students study employability and welding careers, and intermediate shielded metal arc welding (SMAW).

**PMT 0074****Welder: Welder**

Vocational Credits 15.0

Clock Hours 450

This welder course builds on the skills and knowledge students earned in Welder Assistant and SMAW courses. Students explore career opportunities and requirements of a professional welder. Content emphasizes skills key to the success of working in the welding industry. Students study basic and intermediate Gas Metal Arc Welding (GMAW), and basic

and intermediate Flux-Core Arc Welding (FCAW), basic and intermediate Gas Tungsten Arc Welding (GTAW), and a basic understanding of pipe welding.

**PMT 0075****Advanced Welder I**

Vocational Credits 20.0

Clock Hours 600

The Advanced Welder I course prepares students for entry into the welding industry. Students explore career opportunities and requirements of a professional welder. Content emphasizes advanced skills key to the success of working in the welding industry. Students study intermediate and advanced Shielded Metal Arc Welding (SMAW) Class-B Pipe Welder, pipe fitting fabrication techniques, and advanced Gas Tungsten Arc Welding (GTAW) skills.

Prerequisite: Passed secondary/post-secondary welding technology course.

**PMT 0076****Advanced Welder II**

Vocational Credits 5.0

Clock Hours 150

The Advanced Welder II course is designed to prepares advanced welders for entry into emerging welding industries. Students explore career opportunities and requirements of a professional welder. Content emphasizes advanced skills key to the success of working in the welding industry. Students study emerging technologies directly related to geographically relevant welding needs of business and industry.

Prerequisite: Passed secondary/post-secondary welding technology course.

**SCY 0010****Bail Bonds**

Vocational Credits 4.0

Clock Hours 120

In this course the student will learn how to apprehend and detain defendants, surrender defendants to the proper authorities, execute and sign bonds, handle collateral receipts, and deliver bonds to the proper authorities.

**SCY 0051****Private Investigation I**

Vocational Credits 0.8

Clock Hours 24

Prepares students for the unarmed Private Investigation, Class "CC" License.

**SCY 0052****Private Investigation II**

Vocational Credits 0.5

Clock Hours 16

Completes the training for a Private Investigator Intern to obtain a Class "CC" license.