

MVW-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 one time for credit.

Corequisite: MUS-1010

MVW-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 one time for credit.

Corequisite: MUS-1010

MVW-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 one time for credit.

Corequisite: MUS-1010

MVW-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 one time for credit.

Corequisite: MUS-1010

MVW-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 one time for credit.

Corequisite: MUS-1010

MVW-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 one time for credit.

Corequisite: MUS-1010

MVW-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 one time for credit.

Corequisite: MUS-1010

MVW-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 one time for credit.

Corequisite: MUS-1010

MVW-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 one time for credit.

Prerequisite: MVW-1311

Corequisite: MUS-1010

MVW-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 one time for credit.

Prerequisite: MVW-1312

Corequisite: MUS-1010

MVW-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 one time for credit.

Prerequisite: MVW-1313

Corequisite: MUS-1010

MVW-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 one time for credit.

Prerequisite: MVW-1314

Corequisite: 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 one time for credit.

Prerequisite: MVW-1315

Corequisite: MUS-1010

NMT-1002**Introduction to Nuclear Medicine**

Technology

3 Credits

Focuses on the history of nuclear medicine, nuclear medicine procedures, basic concepts of radioactivity, radiation detection, instrumentation, radiation safety and production of radio-pharmaceuticals. Field trips to nuclear medicine training facilities are included.

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1051**Nuclear Medicine Data Analysis**

3 Credits

Presents concepts dealing with data acquisition and reduction relative to the practice of nuclear medicine technology.

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1103**Introduction to Patient Care**

2 Credits

Covers the basic concepts of patient care with an overview of proper patient management.

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1312**Radiation Safety & 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.

Credit for this course does NOT apply to the Associate in Arts degree.

Prerequisite: NMT-1613

NMT-1534**Nuclear Instrumentation**

3 Credits

Covers the basic operation of various radiation detection instruments including the Geiger-Muller detector, analyzers, ionization chambers, scanners and cameras.

Corequisite: NMT-1534L

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1534L**Nuclear Instrumentation Laboratory**

1 Credit

Accompanies NMT 1543. Laboratory exercises include plotting gamma spectra, instrument calibration, detector resolution, simultaneous and radio-nuclide quantification.

Corequisite: NMT-1543

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1613**Nuclear Physics**

3 Credits

Covers the basic concepts of atomic, nuclear and radiation physics with an emphasis on the interaction of radiation with matter. Alpha, beta and gamma sources are used with various detection devices to demonstrate these concepts.

Prerequisite: NMT-1051 or NMT-1002

Corequisite: NMT-1534

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1713**Nuclear Medicine Methodology I**

4 Credits

Teaches the foundations of nuclear medicine procedures. Emphasis is given to radiotracer methodology, preparation and properties of radiopharmaceuticals, routine imaging techniques, and radio-immunoassays. Prepares NMT students for the nuclear medicine practicum courses.

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1723**Nuclear Medicine Methodology II**

4 Credits

Teaches non-imaging nuclear medicine procedures as well as some basic imaging methodologies. Special emphasis is given to hematology, ferrokinetics, endocrine functions, and the radioimmunoassay of hormones and drugs. The students are guided in the preparation of their term papers.

Prerequisite: NMT-1713

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1804**Nuclear Medicine Practicum I**

4 Credits

Consists of up to 32 hours per week of clinical training at local hospitals affiliated with the NMT Program. Students follow a rotational schedule. Under the guidance of clinical supervisors and/or hospital staff, students learn routine nuclear medicine procedures while practicing radiation safety at all times.

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-1814**Nuclear Medicine Practicum II**

4 Credits

Consists of up to 32 hours per week of clinical training at local hospitals affiliated with the NMT Program. Students follow a rotational schedule. Under the guidance of clinical supervisors and/or hospital staff, students learn techniques in nuclear cardiology and basic tomography of various organ systems.

Credit for this course does NOT apply to the Associate in Arts degree.

Prerequisite: NMT-1804

NMT-2061**Nuclear Medicine Seminar**

3 Credits

A comprehensive review of all aspects of the Nuclear Medicine Technology program.

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-2733**Nuclear Medicine Methodology III**

4 Credits

Continues the teaching of routine and special nuclear medicine imaging procedures. The properties of radio-pharmaceuticals and the special instrumentation used in those procedures are also taught. In addition, students present their papers in oral and written form.

Prerequisite: NMT-1723

Credit for this course does NOT apply to the Associate in Arts degree.

NMT-2824**Nuclear Medicine Practicum III**

4 Credits

Consists of up to 32 hours per week of clinical training at local hospitals affiliated with the NMT Program. Students follow a rotational schedule. Under the guidance of clinical supervisors and/or hospital staff, students learn SPECT, PET and NMR procedures in cardiology, neurology and oncology.

Prerequisite: NMT-1814

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-1000
Basic Healthcare Concepts/LPN to RN Transition

1 Credit

This course will introduce transition students (LPN/RN) to the nursing process and the role of the associate degree nurse, utilizing previous knowledge and skills. Nursing history and theorists will be introduced. Emphasis will be placed on the role changes. The program threads of legal/ethical issues, communication, patient education, and cultural diversity will be introduced.

NUR-1002C
Transition Nursing Process I

3 Credits

Introduction to the nursing process and the role of the Associate Degree Registered Nurse utilizing previous knowledge and skills. The course will cover nursing theory and history, legal and ethical issues, communication skills, cultural diversity and common health problems.

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-1004C
Basic Nursing Skills Procedures

6 Credits

Provides an opportunity to review, practice or acquire basic nursing procedures with an Emphasis is on performance evaluation in both simulated laboratory and actual clinical settings. Designed for students enrolled in the transition option of the nursing program.

Corequisite: BSC-1086

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-1142
Introduction to Math/Pharmacology

1 Credit

Introduction to the principles and concepts related to pharmacology and the administration of medications. This course builds a solid foundation of the understanding enabling the student to calculate and administer medications competently within a nursing process framework.

Corequisite: BSC-1086

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-1213C
Nursing Process I

10 Credits

Focuses on nursing theory and application of the nursing process, including the understanding and setting of priorities in health care. Students will participate in simulated laboratory learning and will perform guided patient care in various health care settings. Class work will emphasize basic nursing care for clients with common health problems affecting oxygenation, circulation, elimination, neurosensory and musculoskeletal systems. Also included are concepts related to pharmacology, communication, teaching, legal/ethical and computer literacy.

Prerequisite: Acceptance into the Nursing program

Corequisite: BSC-1086

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-1260C
Nursing Process II

10 Credits

Focuses on the nursing theory and application of the nursing process for clients experiencing chronic health problems. Students will build on prior knowledge as they plan and implement care in the laboratory and clinical settings for clients dealing with chronic renal, cardiac/respiratory, psychiatric and neuromuscular disorders. Class work will emphasize the unique bio-psycho-social needs of this population. Content will continue to enhance the students understanding of pharmacology, communication, teaching, legal/ ethical and computer literacy concepts.

Prerequisite: NUR-1213C

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-2243C
Nursing Process IV

10 Credits

Focuses on advanced nursing theory, the nursing process and techniques involved in caring for the adult client with complex health problems. Decision-making and management theory will be emphasized. Selected clinical experiences will complement the class work. A portion of the clinical time will allow students to work with an RN preceptor to implement nursing care for groups of individuals in the acute care area.

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-2460C
Nursing Process III for Transition Students

9 Credits

Focuses on the nursing theory and application of the nursing process of the childbearing family and children from conception through the adolescence period of development. Students will be building on prior knowledge as they plan and implement care in the laboratory and clinical settings for clients dealing with related common, chronic and complex problems. Class work will emphasize the unique bio-psycho-social needs of this population. Content will continue to enhance the students understanding of pharmacology, communication, teaching, legal/ethical, and computer literacy concepts.

Prerequisite: NUR-1000 and NUR-1260C

Corequisite: NUR-2520C

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-2520C
Mental Health Nursing

2 Credits

This course emphasizes the role of the professional nurse in assessing, planning and implementing care of clients with psychiatric disorders that require hospitalization. An overview of psychopathology and treatment modalities are included. The clinical experience will focus on the nursing process in the planning and care of these clients.

Credit for this course does NOT apply to the Associate in Arts degree.

Prerequisite: NUR-1213C

NUR-2650C
Transcultural Nursing: Study of Healthcare in an International Setting

2 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 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 are required.

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-2701C
Nursing Care of Adults II

5 Credits

Focuses on the holistic needs of adults confronted with the stress of illness and to provide the health care of clients experiences deficits of neurological, musculo-skeletal function or sensory perception. A major consideration will be the impact of permanent, chronic illness and the preservation or restoration of function. Clinical experiences will provide opportunities to apply theoretical concepts with clients at various developmental stages.

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-2704C
Nursing Care of Adults III

5.50 Credits

Focuses on the holistic needs of adults experiencing difficulties with oxygenation, circulation and hematology. Advanced nursing concepts of trauma and burns will be introduced. Clinical experiences will focus on advanced concepts, nursing practice, assessment, decision making and critical thinking skills. Application of classroom theory is emphasized.

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-2823C
Leadership in Health Care

2.50 Credits

This is a capstone course integrating all theory and clinical objectives and focusing on nursing leadership. Decision making, management theory and practice are emphasized. Clinical experiences compliment theoretical content.

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-2930L
Nursing Clinical I

3 Credits

Nursing Clinical I for Advanced Technical Certificate is an entry level clinical learning experience related to theory content. The clinical experience will prepare the registered nurse to perform basic competencies related to course content. This course prepares the registered nurse to provide direct care to the patient related to course content.

Credit for this course does NOT apply to the Associate in Arts degree.

Corequisite: NUR-2932C

NUR-2931L
Nursing Clinical II

3 Credits

The Nursing Clinical II for Advanced Technical Certificate is an advanced level clinical learning experience related to theory content. The clinical experience will prepare the registered nurse to perform advanced competencies related to course content. This course prepares the registered nurse to provide direct care to the patient.

Credit for this course does NOT apply to the Associate in Arts degree.

NUR-2932C
Perioperative Nursing

3 Credits

The perioperative nursing Advanced Technical Certificate is an entry-level operating room nursing specialty course designed to provide didactic and clinical learning experiences. Focuses on the perioperative management of patients within the operating room environment. This course prepares the registered nurse to function

as a professional member of the surgical team with primary emphasis on the scrub and circulating roles.

Credit for this course does NOT apply to the Associate in Arts degree.

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 are required.

Corequisite: OCB-2000L

OCB-2000H
Honors Marine Biology

3 Credits

Same as OCB 2000 with honors content. Honors Institute permission required.

Corequisite: OCB-2000L

OCB-2000L
Honors Marine Biology Laboratory

1 Credit

Accompanies OCB 2000H; same as OCB 2000L with honors content. Honors Institute permission required.

Corequisite: OCB-2000H

OCB-2000L
Marine Biology Laboratory

1 Credit

Accompanies OCB 2000; the emphasis is on experiments and field trips.

Corequisite: OCB-2000

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree

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 handwork of ophthalmic prescription eyewear. This course is a continuation of Ophthalmic Laboratory I.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

OPT-1460L**Ophthalmic Dispensing I Laboratory**

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 PDs.

Credit for this course does NOT apply to the Associate in Arts degree.

OPT-1666**Safety & 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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

OPT-2375L**Refractometry Laboratory**

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

OPT-2461L**Ophthalmic Dispensing II Laboratory**

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 caliper of lenses and frames, the facial measurements of orders (PD and seg heights), frame repair and the identification of various types of lenses.

Credit for this course does NOT apply to the Associate in Arts degree.

OPT-2463L**Ophthalmic Skills Lab 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 technical equipment procedures, maintenance and use, as well as the skills needed in assisting Optometrists and patients with various procedures such as administering medicines and pharmacology identification and uses.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

OPT-2500L
Contact Lens Theory 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. Also, the handling and evaluation of contact lenses by the fitter and the patient.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

OPT-2501L
Contact Lens Theory 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, presbyopic, and other special contact lens patients will also be covered.

Credit for this course does NOT apply to the Associate in Arts degree.

OPT-2502L
Contact Lens Laboratory III

1 Credit

Advanced hands-on experience in fitting contact lenses.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

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.

Credit for this course does NOT apply to the Associate in Arts degree.

ORH-1002
Water Resources and Land Use

3 Credits

This course focuses on the interrelationship of water resources and land use. Emphasis will be placed on water source and land use policies, classification, identification, water quality and quantity. The relationship between land use and water pollution, pollution prevention, the hydrologic cycle and water shed, land and water conservation practices and principles will be addressed.

ORH-1005C
Horticulture Field Skills

3 Credits

This course is designed to provide hands-on teaching experiences on outdoor and horticultural vocational skills. The skills will be those required for certification by the Florida Nursery and Growers Association, and employers in the areas of landscape technicians, contracting, landscape design and installation.

ORH-1007
Home Environment Horticulture

3 Credits

Focuses on plant trouble-shooting, fertilizers, watering, planting and identification of houseplants.

ORH-1016
Environmental Issues in Horticulture

3 Credits

This course will explore the hazards of and contribution of the horticultural industry on the environment. It will focus on providing sound practices for a safe environment. Topics will include but not limited to, water contamination sources, soil contamination, industry and farm roles in contamination, ecology of pesticides, invasive exotic species and their control, soil subsidence, wetland mitigation, habitat restoration, urban wildlife, plants and air quality, remediation, plant use in environmentally sensitive design and xeriscaping.

ORH-1220**Turf and Landscape Maintenance**

3 Credits

Focuses on the care of turfgrass and landscape plants on residential and commercial properties. topics will include the maintenance of trees, shrubs, the diagnosis of landscape problems and landscape structure repair.

ORH-1251**Principles of Plant Production**

3 Credits

Focuses on the physiological and environmental factors affecting growth and yield of ornamental crops and greenhouse and field production.

Prerequisite: HOS-1010 and BOT-1000

ORH-1252**Retail Nursery Operations**

3 Credits

Focuses on operating a retail garden center. topics include licenses, purchasing, merchandising, sales, personnel management, business analysis and regulation.

ORH-1262**Floriculture Lecture**

3 Credits

Focuses on the production, handling and marketing of major and potential floriculture, foliage, fern and bedding crops in Florida and the Southeast.

Corequisite: ORH-1262L

ORH-1262L**Floriculture Laboratory**

1 Credit

Field experiences related to the production, handling, and marketing of flowering foliage fern and bedding crops.

Corequisite: ORH-1262

ORH-1302**Irrigation System Installation**

3 Credits

This course will provide students with the basics and techniques used in installing irrigation systems. Students will understand the role of designs, materials and supplies, water supply, layout, trenching, backfilling, routing, looping, systems and components, landform, grading and pipe drainage, equipment and buildings, plants and soils. Students will understand the role of individuals, specifications, electricity, quality control, instructions, and pipe connection and testing. Installing irrigation in athletic fields, greenhouses, residents and commercial, parks and other public places will be addressed. Students will be introduced to sources of equipment, materials and supplies used in installation and cost estimation.

Prerequisite: LDE-1310

ORH-1304**Low Volume Irrigation Systems**

3 Credits

This course will focus on low volume irrigation systems and their function in the landscape. topics covered will include fittings, pipes, layout, installation, cost estimation, water resources, maintenance, troubleshooting and problems associated with low volume systems. Students will get hands-on exercises in low volume irrigation systems. Areas to be covered include irrigation for lawn and landscape, crops, topography, soil, watering frequency, climate, backflow prevention, advantages and disadvantages of low volume irrigation in the landscape and greenhouses.

ORH-1306**Computer Software for Irrigation**

3 Credits

Focuses on the use of computers and software for irrigation systems. Topics to be covered include golf course, athletic fields, nursery, parks, residential and commercial properties and irrigation scheduling. Introduction to products such as basics and commercial software as well as the WWW as a tool for marketing and understanding software systems will also be included.

ORH-1309**Irrigation Troubleshooting and Repair**

3 Credits

Students will learn and develop a knowledge of the components of troubleshooting and repairing systems. Students will be able to use diagnostic tools of sight, equipment to solve problems. Students will be able to understand the reasons for poor or non-performance in a system. Manufacturers, materials and supplies, availability, costs and estimating repairs will be addressed.

Prerequisite: LDE-1310

ORH-1312**Residential Irrigation Design**

3 Credits

Topics include cost, water, resources, crops, soil and terrain. Zoning, pipes and fittings, layout, installation, maintenance will also be addressed. Students will get hands-on exercises in residential designs and be able to understand the factors that impact the designing of residential landscapes. The use of technology such as computer and the WWW in irrigation designs will be addressed.

Prerequisite: LDE-1310

ORH-1314**Commercial Irrigation Design**

3 Credits

Provides the foundation for effective systems commercial water management. Emphasis will be placed on athletic fields, golf courses, parks, schools, housing developments, resorts and commercial crop production. Determining water requirements to meet the needs of plants based on soil, plant and atmosphere relation and components of systems will be covered. Students will be able to understand and use computers as a tool in irrigation design and will estimate cost effectiveness of designs.

Prerequisite: LDE-1310

ORH-1510**Plant Identification**

3 Credits

Focuses on the identification of woody ornamental plants, trees, grasses, foliage, flowering and annual bedding plants common to Florida.

ORH-1515**Plant Identification II**

3 Credits

Focuses on the identification of foliage, flowering and annual bedding plants common to Florida.

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 insitu and mitigation species in ecological, landscape and esthetic situations will also be discussed. Most instruction will be done in the field.

**ORH-1830
Landscape Design**

3 Credits

Focuses on the use and planting of appropriate plants for particular area. Emphasizes the development of a sound basic knowledge of proper plant materials, height, spread, flowers, fruit, soil requirements and insects. Also addresses the drawing skills needed for the presentation of design, and sales training techniques.

**ORH-1851
Landscape Installation**

3 Credits

Focuses on preparing students for certification in landscape installation and maintenance. Emphasizes landscape crew supervision, reading plans, construction, establishing lawns, planting and transplanting, watering, pest and weed control, chemicals and fertilizers.

**ORH-1873
Interiorscaping**

3 Credits

Focuses on the interior use of ornamental plants. topics include appropriate species, design, installation, maintenance and acclimation. Also addresses business aspects, including leasing, rental and bidding.

**ORH-1936
Irrigation Seminar**

3 Credits

The course is designed to expose students to and provide information on irrigation topics that are common in agriculture. Students will prepare and present seminar, attend field trips to operations utilizing different irrigation systems and attend instructional seminars given by professionals.

Prerequisite: LDE-1310 and HOS-1010

**ORH-2212
Principles of Woody Ornamental Plants**

2 Credits

Focuses on nursery design, structures, irrigation systems and watering practices, equipment, media components and preparation, fertilization, management theory of wholesale nursery production and operations. Topics include weed control, pest management and physiological disorders.

Prerequisite: SOS-1102, HOS-1030, BOT-1000 and PLS-1002

Corequisite: ORH-2212L

**ORH-2212L
Principles of Ornamental Plants Lab**

2 Credits

Practical, hands-on application of techniques learned in Principles of Woody Ornamental Plant Production classroom sessions. Potting activities, weed control, chemical application and fertilization will be performed plus field trips to area nurseries for practical application appraisal.

Corequisite: ORH-2212

**ORH-2251
Florida Horticulture Professional Preparation**

3 Credits

This course will offer a broad perspective of the nursery industry. Topics will include but not limited to, business management, nursery organization and development, marketing, inventory control, cultural practices, pest management, employer/employee relations, and industry requirements.

**OST-1100
Beginning PC Typing**

3 Credits

Introduces the techniques of touch typing and speed development on the personal computer, with an emphasis on business letter styles, centering, and manuscript formatting. A minimum of one hour per week in the lab is required.

**OST-1110
Intermediate PC Typing**

3 Credits

Covers advanced letter writing, tabulation and manuscript typing with an emphasis on developing speed and skills. A minimum of one hour per week in the laboratory is required.

Prerequisite: OST-1100

**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-1211
Shorthand I**

3 Credits

Basic course covering shorthand theory and dictation with options of alpha or symbol methods.

Prerequisite: OST-1330 and OST-1100

**OST-1330
Skills for Transcription**

3 Credits

Provides an in-depth review of grammar, punctuation and spelling with an emphasis on proofreading and editing. Topics include numbers usage, word division, possessives, grammatical context, use of secretarial reference books, formatting, and transcription procedures.

**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-1345**Forms Design and Management**

2 Credits

Focuses on the creation of business forms, emphasizing design of both paper and electronic forms. Various software programs may be used to design forms. Also focuses on management of forms in a business organization. Emphasis is placed on the procedures for establishing and maintaining a forms management program.

OST-1355**Records Information**

3 Credits

Provides a general overview of records management, focusing on manual and electronic filing systems and procedures, the creation and organization of files, scheduling, maintaining, storing and retrieving of records, and the scope and employment potential in the field.

OST-1382**International Office Protocol**

1 Credit

Focuses on the tasks required of office personnel employed by organizations doing business internationally.

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.

Prerequisite: CGS-1000 or permission of instructor.

OST-1825**Desktop Design**

3 Credits

Using a variety of popular computer software, this course focuses on preparing professional quality, camera-ready designs and layouts for newsletters, brochures and print advertisements. Topics include printing terms and requirements and selecting paper stock.

Prerequisite: OST-1813 or permission of instructor.

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-1833**Introduction to Windows III**

1 Credit

Advanced course covering Windows commands.

Prerequisite: OST-1832 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. Paid or unpaid internships will be provided at HCC and Tampa area businesses.

OST-1949**Co-Op Office Education**

3 Credits

A coordinated work-study course involving classwork and field experience. Objectives determined by the student and teacher-coordinator will be used to evaluate the student.

OST-2053**Successful Job Search**

1 Credit

Presents a study of employability skills and focuses on the keys to career success. Establishes the skills needed for goal setting and life achievement. Topics include occupational skills, positive self-image, attitude, setting priorities, time management, resume writing, and tracking down career leads. Information about careers in the customer service industry will be presented. A strong foundation in ethics and relationships will be included.

OST-2131**Legal Document Production on the PC**

3 Credits

Covers basic skills, with an emphasis on legal terminology and the preparation of legal documents. Topics include fill-in forms, derivation of information from one document for inclusion in another, and spelling. A minimum of one hour per week in the laboratory is required.

OST-2135**Medical Document Production on the PC**

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.

Prerequisite: OST-1741

OST-2145**Data Entry Applications**

3 Credits

Covers data entry skills, with an emphasis on dexterity and accuracy. Topics include point of sale, sale invoices, questionnaires, auto insurance applications, auto registration and inventory.

OST-2251**Legal Shorthand**

3 Credits

Focuses on legal terminology and secretarial procedures that are unique to the law office, with an emphasis on taking legal dictation and transcribing it accurately. A minimum of one hour per week in the laboratory is required.

Prerequisite: OST-1110 and OST-1211

OST-2303**Customer Communication**

3 Credits

Focuses on the basic communications skills crucial for career success in writing, speaking, and interpersonal communication skills. Topics include appropriate language use, proven communication principles, media, communication with a diverse audience, document writing, clarity with sensitivity, using reports and proposals, listening and presentations. Discussions of communications technology and the nature of today's business audience will be included.

Prerequisite: MAR-1011

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-2402

Office Procedures

3 Credits

Provides a comprehensive review of office skills and procedures, with an emphasis on problem solving, decision making, and work habits. May use personal information management software.

Prerequisite: OST-1741

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-2512

Customer Service Supervisory Skills

3 Credits

Focuses on the role of the supervisor/team leader in managing human resources. Topics covered include interviewing, coaching, motivation, planning, organization, decision making, problem solving, risk taking, and creativity. Simulated work situations are utilized to demonstrate effective supervisory skills for a changing workplace.

OST-2582

Applied Tech/Customer Service

1 Credit

Implementation of office systems and automation concepts will be examined as they relate to people, technology and organizations. These concepts will be applied to organizational and strategic planning to enhance productivity in the office. topics include office equipment operations, interactive media, quick response, just-in-time, mass customization, the virtual office, electronic data interchange, and automatic replenishment.

OST-2601

Machine Transcription/Terminology

3 Credits

Covers basic dictation and transcription techniques. Specialized vocabulary is emphasized, and students can choose the legal, medical or general options.

Prerequisite: OST-1110 and OST-1330

OST-2611

Medical Transcription I

3 Credits

Provides a working knowledge of the transcription of medical reports based on individual case studies.

Prerequisite: OST-1330, OST-1741 and CGS-1500

OST-2612

Medical Transcription II

3 Credits

Presents advanced transcription of medical reports, with an emphasis on speed and accuracy.

Prerequisite: OST-2611

OST-2722

Advanced Word Processing

3 Credits

Focuses on advanced word processing functions such as macros, math calculations, equation-editor, tables, column formats, importing and exporting files, text imaging and formatting, integrating graphics, generating tables of contents, indexes, and lists. Topics include design techniques for production of multi-page documents such as newsletters, brochures, reports, and flyers.

Prerequisite: OST-2743

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 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 by repeating this course three times for credit. However, only one Credit hour will apply toward meeting program graduation requirements.

Prerequisite: OST-2742

OST-2826

Desktop Graphics

3 Credits

Covers the basics of graphics software, focusing on techniques for creating original art. Topics include composition, colorization and scanning.

PCB-1730

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 diseases and heredity.

Corequisite: PCB-1730L

PCB-1730L

Human Reproduction and Inheritance Lab

1 Credit

A laboratory course designed to reinforce concepts covered in PCB 1730.

Corequisite: PCB-1730

PEL-1121

Golf

2 Credits

Teaches the skills of recreational golf. This course may be repeated two times for credit.

PEL-1321

Volleyball

2 Credits

Teaches the skills and strategies of recreational volleyball.