OPHTHALMIC TECHNOLOGY/VISION CARE (OPT)

OPT1110 PHYSICAL AND GEOMETRIC OPTICS (3.00 Credits)

This course provides a foundation of mathematical ophthalmic concepts involving light energy as it passes through air, plastic, glass, and water with emphasis on how light is modified by prisms and curved lens surfaces. The principles relate to the effect these ophthalmic devices have in correcting refractive errors of human eye.

Total Contact Hrs: 48.00 Lecture Hrs: 48.00

Complete all the courses in the following option:

Option 1 - Pre or Corequisite: OPT1110L (minimum grade: S) and OPT1210 and OPT1330

OPT1110L PHYSICAL AND GEOMETRIC OPTICS LAB (1.00 Credits)

This course provides the opportunity for students to demonstrate, measure and explore the behavior of light energy as it passes through prisms and curved lens surfaces. Students will demonstrate the principles of ophthalmic devices and how they correct the errors of human vision.

Total Contact Hrs: 32.00

Lab Hrs: 32.00

Fees: LABORATORY FEE \$2.00

Complete all the courses in the following option:

• Option 1 - Pre or Corequisite: OPT1110 and OPT1210 and OPT1330

OPT1150 OPHTHALMIC LENSES (2.00 Credits)

Characteristics of single vision, multifocal, and free form lens design for proper lens selection to meet the visual needs of patients. Emphasis is placed on accurate positioning of the optical centers and selected multifocal addition design. ANSI and F.D.A. standards; prescription ordering; verification procedures; and absorptive lenses are presented. Low vision devices and occupational specialty lenses will be discussed.

Total Contact Hrs: 32.00 Lecture Hrs: 32.00

Complete all the courses in the following option:

 Option 1 - Prerequisite: OPT1110 and OPT1110L (minimum grade: S) and OPT1210, Corequisite: OPT1150L (minimum grade: S) and OPT2090 (minimum grade: S)

OPT1150L OPHTHALMIC LENSES LAB (2.00 Credits)

This course provides the opportunity for students to gain hands on experience in the accurate positioning of the optical centers and selected multifocal addition designs. ANSI and F.D.A. standards, prescription ordering and verification procedures will be applied to patient jobs. Emphasis will be placed on the use of the manual and automated Lensometer. Fitting of low vision devices and occupational specialty lenses will be discussed.

Total Contact Hrs: 64.00

Lab Hrs: 64.00

Fees: LABORATORY FEE \$2.00

Complete all the courses in the following option:

· Option 1 - Prerequisite: OPT1110 and OPT1110L (minimum grade: S) and OPT1210, Pre or Corequisite: OPT1150

OPT1210 ANATOMY AND PHYSIOLOGY OF THE EYE (3.00 Credits)

This course provides a review of the structure and function of the systems of the human body, emphasizing the anatomy of the human eye. Visual recognition of common eye disorders and refractive disorders are discussed.

Total Contact Hrs: 48.00 Lecture Hrs: 48.00

Complete all the courses in the following option:

Option 1 - Pre or Corequisite: OPT1110 and OPT1110L (minimum grade: S) and OPT1330

OPT1330 ORIENTATION TO VISION CARE (2.00 Credits)

This course reviews the techniques needed in a clinical environment for the collection of patient case history, visual acuity, basic visual skills ocular motility and accommodation, color discrimination, depth perception and binocular fusion. Medical terminology and Health Core standards are reviewed.

Total Contact Hrs: 32.00 Lecture Hrs: 32.00

Complete all the courses in the following option:

• Option 1 - Pre or Corequisite: OPT1110 and OPT1110L (minimum grade: S) and OPT1210

OPT1450 OPHTHALMIC DISPENSING (2.00 Credits)

This course reviews the theory and terminology of ophthalmic frame materials, multifocal lenses, including progressive power and occupational bifocals and high index lenses. The process of analyzing the patient's prescription and identifying the patient's specific visual needs for the proper frame and lens selection is highlighted.

Total Contact Hrs: 32.00 Lecture Hrs: 32.00

Complete all the courses in the following option:

• Option 1 - Prerequisite: OPT1150 and OPT1150L (minimum grade: S) and OPT2090 (minimum grade: S) and OPT2879 (minimum grade: S), Pre or Corequisite: OPT1450L (minimum grade: S) and OPT2500 and OPT2500L (minimum grade: S) and OPT2800L (minimum grade: S)

OPT1450L OPHTHALMIC DISPENSING LAB (2.00 Credits)

This course provides the opportunity for students to practice ophthalmic dispensing. Measurement and adjusting ophthalmic frame materials, multifocal lens, occupational bifocals, high index lenses and low vision devices will be emphasized. The process of analyzing the patient's prescription and identifying the patient's specific visual needs for the proper frame and lens selection is highlighted.

Total Contact Hrs: 64.00

Lab Hrs: 64.00

Complete all the courses in the following option:

• Option 1 - Prerequisite: OPT1150 and OPT1150L (minimum grade: S) and OPT1330 and OPT2375, Pre or Corequisite: OPT1450 and OPT2500 and OPT2500L (minimum grade: S) and OPT2800L (minimum grade: S)

OPT2060 OPHTHALMIC MANAGEMENT POLICY AND PROCEDURES (3.00 Credits)

This course provides a review of procedures and terminology in correspondence, legal and ethical principles, inter-and intra-professional relationships, and retail office management. The history of opticianry, optometry and ophthalmology is traced. Special emphasis is on a comprehensive review of the curriculum. The student will be required to present oral and written reports.

Total Contact Hrs: 48.00 Lecture Hrs: 48.00

Complete all the courses in the following option:

· Option 1 - Prerequisite: OPT2800L (minimum grade: S) and OPT2875 (minimum grade: S), Pre or Corequisite: OPT2876 (minimum grade: S)

OPT2090 ORIENTATION TO VISION CARE CLINIC (2.00 Credits)

This course provides an introduction to the Broward College Vision Care Clinic. Students will apply technical skills acquired in previous course work. Recording of clinical date, administrative procedures and techniques in patient handling under the close supervision of clinic instructors and 5th semester students. Perform pre-testing ocular health evaluations in clinical setting.

Total Contact Hrs: 64.00 Clinical Hrs: 64.00

Complete all the courses in the following option:

Prerequisite: OPT1330 (minimum grade: S)

OPT2375 REFRACTOMETRY (3.00 Credits)

This course reviews the theory and terminology used in determining the powers of corrective lenses in relation to a patient's refractive error. Emphasis will be placed on the phoropter, retinoscope, and automated refraction instruments. Problems associated with the change in refractive powers will also be discussed.

Total Contact Hrs: 48.00 Lecture Hrs: 48.00

Complete all the courses in the following option:

• Option 1 - Pre or Corequisite: OPT1110 (minimum grade: C) and OPT1110L (minimum grade: C)

OPT2420 EYEWEAR FABRICATION I (1.00 Credits)

This course presents a review of the theory of ophthalmic surfacing and finishing procedures. Students acquire knowledge to arrange single vision and multifocal lenses, use sensometers and lens clocks, operate project-o-markers for lens layout, select or fabricate frame patterns, and utilize several systems for surfacing and edging lenses for ophthalmic frames.

Total Contact Hrs: 16.00 Lecture Hrs: 16.00

Complete all the courses in the following option:

Option 1 - Prerequisite: OPT2500 and OPT2800L (minimum grade: S), Pre or Corequisite: OPT2420L (minimum grade: S)

OPT2420L EYEWEAR FABRICATION I LAB (2.00 Credits)

In this laboratory course students will gain practical experience in ophthalmic surfacing and finishing procedures. Students will fabricate single vision and multifocal lenses: use lensometers and lens clocks: operate project-o-markers for lens layout: select or fabricate frame patterns: and utilize several systems for surfacing and edging lenses for ophthalmic frames.

Total Contact Hrs: 64.00

Lab Hrs: 64.00

Fees: LABORATORY FEE \$35.00

Complete all the courses in the following option:

• Option 1 - Prerequisite: OPT2500L (minimum grade: S) and OPT2879 (minimum grade: S), Pre or Corequisite: OPT2420

OPT2421 EYEWEAR FABRICATION II (1.00 Credits)

Advanced techniques in measurement, fabrication and verification of single vision and multifocal lenses. Theory of ophthalmic surfacing and finishing procedures from written specifications ensuring that current ANSI and FDA standards are exceeded.

Total Contact Hrs: 16.00 Lecture Hrs: 16.00

Complete all the courses in the following option:

• Option 1 - Prerequisite: OPT2420 and OPT2420L (minimum grade: S), Pre or Corequisite: OPT2421L (minimum grade: S)

OPT2421L EYEWEAR FABRICATION II LAB (2.00 Credits)

Laboratory for OPT2421. Students will fabricate eyewear for the patients of the Vision Care Clinic using advanced techniques in measurement, fabrication and verification of single vision and multifocal lenses. Advanced techniques in the operation and maintenance of manual and computerized equipment.

Total Contact Hrs: 64.00

Lab Hrs: 64.00

Fees: LABORATORY FEE \$35.00

Complete all the courses in the following option:

· Pre or Corequisite: OPT2420L (minimum grade: S)

OPT2460 OPHTHALMIC DISPENSING CLINIC I (2.00 Credits)

Development of skills in the fitting and dispensing of ophthalmic lenses. Students will work under the close supervision of clinical staff in dispensing glasses to patients of the Vision Care Clinic. Emphasis will be placed on techniques used to dispense new technology in ophthalmic frame materials; multifocal lenses including progressive power and occupational bifocals; and high index lenses. The process of analyzing the patient's prescription and identifying the patient's specific visual needs for proper frame and lens selection is highlighted.

Total Contact Hrs: 80.00 Clinical Hrs: 80.00

Fees: LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

• Option 1 - Prerequisite: OPT2375 and OPT2500 and OPT2800L (minimum grade: S), Pre or Corequisite: OPT2420 and OPT2830L (minimum grade: S) and OPT2875 (minimum grade: S)

OPT2461 OPHTHALMIC DISPENSING CLINIC II (2.00 Credits)

This is a continuation of OPT2460. It involves advanced skills in the fitting and dispensing of ophthalmic lenses. Students will work under the supervision of clinical staff in dispensing glasses to patients of the Vision Care Clinic. Students will practice advanced techniques used to dispense new technology in ophthalmic frame materials, multifocal lenses including progressive power and occupational bifocals, high index lenses, and low vision devices.

Total Contact Hrs: 80.00 Clinical Hrs: 80.00

Fees: EDU/ACCIDENT INSURANCE \$4.75 Complete all the courses in the following option:

· Pre or Corequisite: OPT2460 (minimum grade: S)

OPT2500 CONTACT LENS THEORY (2.00 Credits)

This course provides a review of the theory and terminology of contact lenses including fitting, application and removal procedures, care of soft and hard lenses, verification of contact lens prescription and "in-office" modification of contact lenses.

Total Contact Hrs: 32.00 Lecture Hrs: 32.00

Complete all the courses in the following option:

Option 1 - Prerequisite: OPT1150, Corequisite: OPT1450, Pre or Corequisite: OPT2500L (minimum grade: S)

OPT2500L CONTACT LENS THEORY LAB (2.00 Credits)

This course provides a review of the practical procedures used to apply technical skills of contact fitting, application and removal procedures, care of soft and hard lenses, verification of contact lens prescription and in-office" modification of contact lenses.

Total Contact Hrs: 64.00

Lab Hrs: 64.00

Fees: LABORATORY FEE \$17.00

Complete all the courses in the following option:

Option 1 - Prerequisite: OPT1150L (minimum grade: S), Corequisite: OPT1450L (minimum grade: S), Pre or Corequisite: OPT2500

OPT2800L VISION CARE CLINIC I (2.00 Credits)

This course provides a review of the practical procedures used to apply technical skills of contact fitting, application and removal procedures, care of soft and hard lenses, verification of contact lens prescription and in-office" modification of contact lenses.

Total Contact Hrs: 80.00 Clinical Hrs: 80.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15, LABORATORY FEE \$17.00

Complete all the courses in the following option:

 Option 1 - Prerequisite: OPT1150 and OPT1150L (minimum grade: S), Corequisite: OPT1450L and OPT2500L, Pre or Corequisite: OPT2375 and OPT2879 (minimum grade: S)

OPT2830L CONTACT LENS CLINIC I (2.00 Credits)

Assist eye care specialists in the fitting and follow-up care of rigid and soft contact lenses for patients referred from the Vision Care Clinic.

Familiarization with over-refraction, instructions for lens handling, cleaning, care and storage, and basic contact lens pathology.

Total Contact Hrs: 120.00 Clinical Hrs: 120.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15, LABORATORY FEE \$17.00

Complete all the courses in the following option:

· Option 1 - Prerequisite: OPT2500 and OPT2500L (minimum grade: S) and OPT2800L (minimum grade: S), Pre or Corequisite: OPT2420 and OPT2460 and OPT2875 (minimum grade: S)

OPT2831L CONTACT LENS CLINIC II (2.00 Credits)

This course involves the use of contact lens instruments to confirm all parameters for replacement lenses. Particular attention is given to the patient who is having problems with contact lenses after long-term wear due to corneal changes and sensitivity to solutions. Advanced over-refraction and contact lens fitting procedures are practiced.

Total Contact Hrs: 80.00 Clinical Hrs: 80.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15, LABORATORY FEE \$17.00

Complete all the courses in the following option:

 Option 1 - Prerequisite: OPT2420L (minimum grade: S) and OPT2460 and OPT2830L (minimum grade: S), Pre or Corequisite: OPT2421 and OPT2461 and OPT2876 (minimum grade: S)

OPT2875 OPHTHALMIC DISPENSING PRACTICUM I (2.00 Credits)

This is an externship in an approved ophthalmic practice with a retail dispensing optical. The student will gain a working knowledge of ophthalmic c frame, lens stock, inventory system, layout and blocking, chemical and heat treating, edging, sur facing, tinting, retail sells, dispensing, assembly and alignment of eyewear according to the written prescription. Students are placed for 16 weeks to gain outside externship experience under the tutelage of a Florida Licensed Dispensing Optician. Site preceptor and course professor will work closely to ensure student success.

Total Contact Hrs: 120.00 Clinical Hrs: 120.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

Option 1 - Corequisite: OPT2420 and OPT2830L (minimum grade: S)

OPT2876 OPHTHALMIC DISPENSING PRACTICUM II (2.00 Credits)

This is the second phase of student externship in an approved retail ophthalmic dispensing establishment involving frame styling, ordering of appropriately designed lenses, adjustment, repair and dispensing of eyewear. The student will gain a working knowledge of administrative management procedures of the practice.

Total Contact Hrs: 120.00 Clinical Hrs: 120.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

• Option 1 - Prerequisite: OPT2420 and OPT2830L (minimum grade: S) and OPT2875 (minimum grade: S), Pre or Corequisite: OPT2060 and OPT2421 and OPT2461

OPT2879 REFRACTOMETRY LAB (2.00 Credits)

Practicum for OPT2375. Practical procedures used in determining the powers of corrective lenses in relation to a patient's refractive error. The student will learn to use the Phoropter, retinoscope, and automated refraction instruments in determining the patient's subjective and objective refraction. Problems associated with the change in refractive powers will be demonstrated.

Total Contact Hrs: 64.00 Clinical Hrs: 64.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

• Option 1 - Prerequisite: OPT1110 and OPT1110L (minimum grade: S) and OPT1210, Pre or Corequisite: OPT1150 and OPT1150L (minimum grade: S) and OPT1330 and OPT2375