



Broward Community College

Course Outline

Status: A

COMMON COURSE NUMBER: OPT 2350

COURSE TITLE: ADVANCED CLINICAL PROCEDURES I

CREDIT HOURS: 1

CONTACT HOURS BREAKDOWN:

Lecture / Discussion	<u>16</u>
Lab	<u>0</u>
Other (Clinic)	<u>0</u>
Contact Hours/ Week:	<u>1</u>

CATALOG COURSE DESCRIPTION

Theory and terminology of advanced ophthalmic medical procedures. Students will learn ocular photography, visual field testing, and internal and external examination procedures normal performed by an ophthalmic technician. .

Prerequisite: OPT 2800L, OPT 2375,
Co-requisite: OPT 2222, and OPT 2801L

UNIT TITLES:

- 1 EXAMINATION STRATEGY
- 2 PATIENT INTERACTION, SCREENING, AND EMERGENCIES
- 3 CARE OF OPHTHALMIC INSTRUMENTS
- 4 CONTROL OF MICROBIAL AGENTS BY ASEPTIC TECHNIQUE
- 5 MANUAL PERIMETRY
- 6 OCULAR MOTILITY: BINOCULAR FUNCTION
- 7 OCULAR MOTILITY: STRABISMUS EVALUATION
- 8 OCULAR MOTILITY: EXTRAOCULAR MUSCLE FUNCTION
- 9 OCULAR MOTILITY: INCOMITANT DEVIATIONS
- 10 OPHTHALMIC PHOTOGRAPHY : FUNDUS AND EXTERNAL STRUCTURES
- 11 SLIT LAMP BIOMICROSCOPY -- BASIC
- 12 TONOMETRY: APPLANATION AND INDENTATION
- 13 EYELID PROCEDURES
- 14 LACRIMAL SYSTEM TESTS

LAST REVIEW Academic Year 2004-2005 NEXT REVIEW Academic Year 2009-2010

Interim Revision Dates:

COURSE OVERVIEW:

Upon successful completion of this course, the students should be able to:

UNITS

UNIT 1: EXAMINATION STRATEGY

General Outcomes:

- 1 The student will be able to approach any examination with the intention to document all pertinent information, and to perform the examination quickly and efficiently.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 1.1 Devise a typical format for examination of the eye depending on the type of problem presented
- 1.2 Differentiate between false positive and false negative results
- 1.3 List the steps of a new patient work-up

UNIT 2: PATIENT INTERACTION, SCREENING, AND EMERGENCIES

General Outcomes:

- 2 The student will be able to discuss the proper procedure to interact, screen, and triage a patient effectively.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 2.1 Describe patient greeting procedures
- 2.2 Describe patient screening procedures
- 2.3 Explain triage procedure
- 2.4 Discuss emergencies encountered in the office

UNIT 3: CARE OF OPHTHALMIC INSTRUMENTS

General Outcomes:

- 3 The student will be able to describe the proper care of ophthalmic instruments found in the office.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 3.1 Describe the care of contact lenses
- 3.2 Explain the proper handling of office instruments
- 3.3 Discuss the proper aseptic technique when handling instruments

UNIT 4: CONTROL OF MICROBIAL AGENTS BY ASEPTIC TECHNIQUE

General Outcomes:

- 4 The student will be able to describe the proper aseptic technique and discuss basic microbiology.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 4.1 Discuss the classification of Microorganisms
- 4.2 Explain the transmission of infectious disease
- 4.3 Describe how to control microbial agents by aseptic technique
- 4.4 Identify microorganisms

UNIT 5: MANUAL PERIMETRY

General Outcomes:

- 5 The student will be able to discuss the procedure for performing manual perimetry and visual field screening.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 5.1 Differentiate between static and kinetic perimetry
- 5.2 Differentiate between manual and automated perimetry
- 5.3 Define terms associated with visual field testing
- 5.4 Describe methods for exploring defects with manual perimetry
- 5.5 Explain quantification of scotomas and depressions

UNIT 6: OCULAR MOTILITY: BINOCULAR FUNCTION

General Outcomes:

- 6 The student will be able explain the procedure used to test binocular function.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 6.1 Explain fixation
- 6.2 Explain how sensory tests evaluate fusion
- 6.3 Describe how to evaluate fusional amplitudes
- 6.4 Differentiate between different types of convergence
- 6.5 Explain the relationship between accommodation and convergence
- 6.6 Understand how prisms should be held

UNIT 7: OCULAR MOTILITY: STRABISMUS EVALUATION

General Outcomes:

- 7 The student will be able describe the procedure to evaluate strabismus.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 7.1 Assess fixation in both eyes simultaneously
- 7.2 Differentiate a phoria from a tropia
- 7.3 Explain the cover-uncover test
- 7.4 Explain how to measure deviation by prism and alternate cover test
- 7.5 Understand the strabismus notations used to record the amount and direction of a deviation

UNIT 8: OCULAR MOTILITY: EXTRAOCULAR MUSCLE FUNCTION

General Outcomes:

- 8 The student will be able to discuss the process of evaluating extraocular muscle function.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 8.1 Differentiate ductions from versions
- 8.2 Describe the six (6) cardinal positions of gaze
- 8.3 Explain Hering's and Sherrington's laws
- 8.4 Understand and describe the six pairs of yoke muscles
- 8.5 Understand the descriptive terminology concerning extraocular muscular interactions

UNIT 9: OCULAR MOTILITY: INCOMITANT DEVIATIONS

General Outcomes:

- 9 The student will be able to describe the method used to test incomitant deviations.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 9.1 Differentiate comitant from incomitant deviations
- 9.2 Explain the Bielschowsky's head tilt test
- 9.3 Explain the results of a three step test to find the paretic extraocular muscle
- 9.4 Explain A and V patterns
- 9.5 Understand the how and why of abnormal head postures

UNIT 10: OPTHALMIC PHOTOGRAPHY : FUNDUS AND EXTERNAL STRUCTURES

General Outcomes:

- 10 The student will be able to describe the procedures followed in basic ophthalmic photography.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 10.1 Describe the relationships among shutter speed, aperture and film speed
- 10.2 Describe the benefit of an electronic flash
- 10.3 Differentiate digital, fluorescein, and indocyanine green angiograms
- 10.4 Describe the non-mydratic fundus camera
- 10.5 Describe the mydratic fundus camera

UNIT 11: SLIT LAMP BIOMICROSCOPY -- BASIC

General Outcomes:

- 11 The student will be able to explain the basic procedures used in a slit lamp examination.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 11.1 Describe the operation of the slit lamp
- 11.2 Describe six (6) methods of illuminations and an example of when to use each one
- 11.3 Discuss common signs of inflammation, scars, lens and cornea changes, and abnormal tissue formation

UNIT 12: TONOMETRY: APPLANATION AND INDENTATION

General Outcomes:

- 12 The student will be able to discuss the use of the various methods for determining intraocular pressure.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 12.1 Discuss the principal difference between applanation and indentation tonometry
- 12.2 Identify three commonly used tonometers

UNIT 13: EYELID PROCEDURES

General Outcomes:

- 13 The student will be able to discuss the methods used to examine the eyelids.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 13.1 Discuss single and double eyelid eversion
- 13.2 Describe speculum insertion
- 13.3 Explain Meibomian gland expression
- 13.4 Describe sebaceous and sudoriferous cyst evacuation
- 13.5 Describe eyelid scrubs

UNIT 14: LACRIMAL SYSTEM TESTS

General Outcomes:

- 14 The student will be able to explain tear systems tests.

SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 14.1 Explain the Schirmer Tear Test
- 14.2 Describe the Lactoferrin Immunoassay test
- 14.3 Describe punctal regurgitation and lacrimal sac palpation
- 14.4 Describe lacrimal dilation and irrigation
- 14.5 Describe the Jones Dye tests 1 and 2
- 14.6 Explain temporary intracanalicular collagen implants
- 14.7 Describe punctal plug insertion