



# Broward Community College

## Course Outline

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Status: A

COMMON COURSE NUMBER: OPT 2351

COURSE TITLE: ADVANCED CLINICAL PROCEDURES II

CREDIT HOURS: 2

### CONTACT HOURS BREAKDOWN:

Lecture / Discussion	<u>2</u>
Lab	<u>0</u>
Other (Clinic)	<u>0</u>

Contact Hours/ Week: 2

### CATALOG COURSE DESCRIPTION

Continuation of OPT 2350: Students will be introduced to the theory and terminology of Topography, Tonography, fluorescein Angiography, advanced visual fields, outpatient surgical assisting, and other advanced ophthalmic medical procedures.

Prerequisite: OPT2222 OPT 2350, OPT 2801 and OPH 2940

Co-requisite: OPT 2802, OPT2223 and OPT 2941

### UNIT TITLES:

- 1 ADVANCED TONOGRAPHY
- 2 BIOMETRY: A & B SCANS
- 3 ADVANCED AND AUTOMATED PERIMETRY
- 4 FLUORESCEIN ANGIOGRAPHY
- 5 PHOTOGRAPHIC ANGIOGRAPHIC PROCESSING
- 6 ADVANCED EXTERNAL AND SLIT LAMP PHOTOGRAPHY
- 7 ADVANCED CHAIRSIDE ASSISTING: GONIOSCOPY AND OPHTHALMOSCOPY
- 8 PREOPERATIVE AND POSTOPERATIVE PROCEDURES
- 9 SURGICAL ASSISTING
- 10 SURGICAL MATERIALS AND INSTRUMENTS
- 11 OCULAR LABORATORY PROCEDURES
- 12 ADVANCED PHYSICAL EXAMINATION PROCEDURES

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:       ADVANCED TONOGRAPHY

General Outcomes:

- 1       The student will be able to describe the methods and the reasons for tonography.

#### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 1.1    Define tonography
- 1.2    Discuss the pathology that would require this type of test
- 1.3    Describe the procedure for tonography
- 1.4    Discuss the interpretation of the results of tonography

#### UNIT 2:       BIOMETRY: A & B SCANS

General Outcomes:

- 2       The student will be able to describe the methods and the reasons for Biometry

#### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 2.1    Understand how ultrasound echoes are used to measure axial length
- 2.2    Name four (4) ocular structures that reflect ultrasound echoes
- 2.3    Describe the best position for holding the probe to obtain the highest spikes
- 2.4    Understand the effect of compression on axial length measurements

#### UNIT 3:       ADVANCED AND AUTOMATED PERIMETRY

General Outcomes:

- 3       The student will be able to describe the methods and the reasons for advanced and automated visual fields.

#### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 3.1    Differentiate between threshold static and suprathreshold static perimetry
- 3.2    Describe automated screening and threshold techniques
- 3.3    List four (4) advantages to automated perimetry

- 3.4 Identify which size stimulus on a Goldman perimeter is equivalent to the usual test stimulus on a Humphry Field Analyzer

#### UNIT 4: FLUORESCHEIN ANGIOGRAPHY

##### General Outcomes:

- 4 The student will be able to describe the methods and the reasons for fluorescein angiography.

##### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 4.1 List the steps in angiography
- 4.2 Explain the set-up and administration procedure for angiography
- 4.3 Describe the preparation of the fluorescein
- 4.4 Discuss the contraindications for this test

#### UNIT 5: PHOTOGRAPHIC ANGIOGRAPHIC PROCESSING

##### General Outcomes:

- 5 The student will be able to describe the methods used to process angiography photographs.

##### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 5.1 Discuss why a color processing darkroom is unnecessary
- 5.2 Describe an instant darkroom for black-and-white processing

#### UNIT 6: ADVANCED EXTERNAL AND SLIT LAMP PHOTOGRAPHY

##### General Outcomes:

- 6 The student will be able to describe the methods and the reasons for external and slit lamp photography.

##### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

Common Course No: OPT 2351

- 6.1 Discuss which structures can be photographed with the external camera and which can structures can be photographed with a slit lamp
- 6.2 Discuss the legal importance of photo-documentation
- 6.3 Compare the proper protocol to be used in an emergency situation or research

**UNIT 7:       ADVANCED CHAIRSIDE ASSISTING: GONIOSCOPY AND  
OPHTHALMOSCOPY**

General Outcomes:

- 7       The student will be able to describe the methods and the reasons for gonioscopy and ophthalmoscopy.

**SPECIFIC LEARNING OBJECTIVES:**

To successfully complete this module the student will:

- 7.1     Discuss the process of preparing a patient for gonioscopy
- 7.2     Describe the structures that can be viewed with a gonioscope
- 7.3     Describe the pathological conditions that would require gonioscopy
- 7.4     Compare the three (3) types of ophthalmoscopes
- 7.5     Discuss the structures that can be viewed with each type of ophthalmoscope

**UNIT 8:       PREOPERATIVE AND POSTOPERATIVE PROCEDURES**

General Outcomes:

- 8       The student will be able to discuss the technicians' role in preoperative and postoperative procedures.

**SPECIFIC LEARNING OBJECTIVES:**

To successfully complete this module the student will:

- 8.1     List the members of the surgical team and explain the duties of each
- 8.2     Discuss aseptic technique
- 8.3     Describe "Informed Consent"
- 8.4     Explain how to assist a patient before surgery
- 8.5     Describe how to apply an eye patch
- 8.6     Name six (6) common ophthalmic surgical procedures

## UNIT 9: SURGICAL ASSISTING

### General Outcomes:

- 9 The student will be able to discuss basic surgical assisting techniques.

### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 9.1 Explain the reason for and technique of the surgical scrub
- 9.2 Explain gowning and gloving procedures
- 9.3 Define a sterile field
- 9.4 Explain the use of a Fox shield
- 9.5 Discuss the administration of anesthetics
- 9.6 Describe typical tasks that a technician performs during surgery

## UNIT 10: SURGICAL MATERIALS AND INSTRUMENTS

### General Outcomes:

- 10 The student will be able to describe surgical materials and instruments.

### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 10.1 Describe the care of ophthalmic surgical instruments
- 10.2 Explain the differences between the three methods of sterilization
- 10.3 Identify twelve (12) common instruments for ophthalmic surgery

## UNIT 11: OCULAR LABORATORY PROCEDURES

### General Outcomes:

- 11 The student will be able to describe the methods and the reasons for the collection ocular laboratory specimens.

### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 11.1 Describe the indications for taking ocular cultures
- 11.2 Explain the technique for the collection of ocular cultures
- 11.3 Discuss the complications and contraindications of collecting ocular cultures
- 11.4 Describe the indications for taking cytology scrapings of ocular tissue
- 11.5 Explain the technique for taking scrapings and smears of ocular tissue

## UNIT 12: ADVANCED PHYSICAL EXAMINATION PROCEDURES

### General Outcomes:

- 12 The student will be able to describe the methods and the reasons for a non-ocular physical exam.

### SPECIFIC LEARNING OBJECTIVES:

To successfully complete this module the student will:

- 12.1 Discuss the reasons for periauricular lymph node palpation
- 12.2 Explain the methods and reasons for exophthalmometry
- 12.3 Determine the need for sphygmomanometry