

BROWARD COLLEGE COURSE OUTLINE

LAST REVIEW: 2011-2012

NEXT REVIEW: 2015-2016

STATUS: A

COURSE TITLE: CONTACT LENS LAB

COMMON COURSE NUMBER: OPT 2500L

CREDIT HOURS: 2

CONTACT HOUR BREAKDOWN 4

Lecture: Lab: 64

Clinic: Other:

PREREQUISITE(S): OPT 1150L

COREQUISITE(S): OPT 1450L

PRE or COREQUISITE: OPT 2500

COURSE DESCRIPTION:

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.

UNIT TITLES

1. PRELIMINARY EXAMINATION AND CONSULTATION
2. CONTACT LENS FITTING PROCEDURES
3. INSPECTION AND VERIFICATION
4. MODIFICATION OF CONTACT LENSES
5. SOLUTIONS AND ACCESSORIES
6. PATIENT EDUCATION
7. FOLLOW-UP EXAMINATION
8. SPECIAL CASES
9. OFFICE PROCEDURES
10. CASE STUDIES AND PRESENTATIONS

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Unit 1: PRELIMINARY EXAMINATION AND CONSULTATION

General Outcome:

- 1.0 The student will be able to demonstrate the importance of the pre-fitting exam and the recording of information. Determination of a good candidate, baseline visual status, and record keeping will be discussed.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 1.1 Demonstrate the procedures for taking a visual acuity.
- 1.2 Demonstrate the procedures for using a Keratometer.
- 1.3 Describe the procedure for extending the range of the Keratometer.
- 1.4 Explain the use of peripheral Keratometry.
- 1.5 Describe the use of a Photokeratocope.
- 1.6 Demonstrate the procedure used in taking a “K” reading with an automated Keratometer.
- 1.7 Use the Slit-Lamp Biomicroscope in an examination for contact lenses.
- 1.8 Demonstrate the use of stains to examine the eye.
- 1.9 Perform lid eversion.
- 1.10 Compare two (2) methods of determining the quality of the tear film.
- 1.11 Measure the various ocular dimensions.

Unit 2: CONTACT LENS FITTING PROCEDURES

General Outcome:

- 2.0 The student will be able to demonstrate the procedure for fitting contact lenses using the trial lens method based on specific fitting criteria.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 2.1 Perform rigid lens placement and removal.
- 2.2 Discuss fluorescein pattern evaluation.
- 2.3 Describe the interaction of base and peripheral cures on rigid contact lenses.
- 2.4 Perform the procedure for fitting hydrogel contact lenses.

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Unit 3: INSPECTION AND VERIFICATION

General Outcome:

- 3.0 The student will be able to determine if the specific parameters ordered have been followed by the laboratory.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 3.1 Verify a rigid contact lens.
- 3.2 Use the instruments and tools used to inspect and verify rigid contact lenses.
- 3.3 Recognize the acceptable tolerances according to ANSI standards and patient acceptance.
- 3.4 Verify a contact lens's base curve.
- 3.5 Use the Optical Microspherometer (Radiuscope).
- 3.6 Determine the power of contact lenses.
- 3.7 Verify the optical quality of contact lenses.
- 3.8 Determine the center thickness of rigid contact lenses.
- 3.9 Verify the edges of rigid contact lenses.
- 3.10 Demonstrate the instruments and tools used to inspect and verify hydrogel contact lenses.
- 3.11 Demonstrate the template bar method to determine the radius of hydrogel contact lenses.
- 3.12 Demonstrate the use of a wet cell to determine the power of hydrogel contact lenses.

Unit 4: MODIFICATION OF CONTACT LENSES

General Outcome:

- 4.0 The student will be able to perform in-office modifications to rigid contact lenses.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 4.1 Demonstrate the modification unit.
- 4.2 Demonstrate peripheral curve fabrication and modification.
- 4.3 Demonstrate how to blend a rigid lens.
- 4.4 Demonstrate in-office modification of the edge of a rigid lens.

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Unit 5: SOLUTIONS AND ACCESSORIES

General Outcome:

- 5.0 The student will demonstrate an in-depth knowledge of contact lens cleaning and conditioning solutions and other accessories.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 5.1 Demonstrate the use of solutions for PMMA and other rigid contact lenses.
- 5.2 Discuss solutions and sterilization for hydrogel lenses.
- 5.3 Use the three (3) types of sterilization procedures for hydrogel contact lenses.
- 5.4 Explain the use of artificial tears.

Unit 6: PATIENT EDUCATION

General Outcome:

- 6.0 The student will be able to communicate to a patient the proper placement, removal and care of contact lenses as well as educating the patient to signs, symptoms, and proper follow-up care.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 6.1 Describe the general principles of educational aids in contact lens education.
- 6.2 Demonstrate emergency procedures to a new contact lens wearer.
- 6.3 Describe the use of cosmetics and proper hygiene with contact lenses.
- 6.4 Describe normal adaptation sensations.
- 6.5 Explain proper wearing schedules.
- 6.6 Explain the techniques of lens wear for hydrogel contact lenses.
- 6.7 Demonstrate proper lens handling by the patient.

Unit 7: FOLLOW-UP EXAMINATION

General Outcome:

- 7.0 The student will be able to demonstrate the procedure for the follow-up examination.

Specific Measurable Learning Outcomes:

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Upon successful completion of this unit, the student shall be able to:

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Unit 7: FOLLOW-UP EXAMINATION continued

- 7.1 Perform a follow-up examination.
- 7.2 Record the history and symptoms.
- 7.3 Perform an overrefraction.
- 7.4 Evaluate the fit of a contact lens.
- 7.5 Describe various fluorescein patterns.

Unit 8: SPECIAL CASES

General Outcome:

- 8.0 The student will be able to determine the needs of special patients and how to fit them with contact lenses.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 8.1 Explain the use of extended wear lenses.
- 8.2 Discuss high myopia and contact lenses.
- 8.3 Compare visual acuity of a patient with high amounts of astigmatism with contact lenses and with glasses.
- 8.4 Explain the use of contact lenses with the aphakic patient.
- 8.5 Discuss keratoconus and contact lenses.
- 8.6 Describe several methods to achieve useable vision at all ages with the presbyopic contact lens wearer.
- 8.7 Explain orthokeratology.
- 8.8 Describe the use of haptic lenses.

Unit 9: OFFICE PROCEDURES

General Outcome:

- 9.0 The student will demonstrate a basic knowledge of the office procedures common in a contact lens practice.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

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Unit 9: OFFICE PROCEDURES continued

- 9.1 Explain proper scheduling techniques.
- 9.2 Describe patient handling.
- 9.3 Discuss fees and 3rd party payments.
- 9.4 Explain the use of warranties, service contracts, and insurance party payments.
- 9.5 Describe recall systems.
- 9.6 Discuss various methods of inventory maintenance.
- 9.7 Perform basic equipment maintenance.

Unit 10: CASE STUDIES AND PRESENTATIONS

General Outcome:

10.0 The student will be able to present case studies and patient histories to other students and professionals during Grand Rounds.

Specific Measurable Learning Outcomes:

Upon successful completion of this unit, the student shall be able to:

- 10.1 Demonstrate the ability to communicate with other professionals.
- 10.2 Answer questions regarding specific cases posed by other students and clinical supervisors.