

# **EFFECTIVE: SEPTEMBER 2012 CURRICULUM GUIDELINES**

### M: Course Objectives / Learning Outcomes:

Upon successful completion, the student will be able to:

- 1. Obtain a general history from the patient
- 2. Determine what diagnostic activities must be conducted to complete an evaluation
- 3. Use instrumentation and other provisional methods to determine appropriate gas permeable contact lens types and designs
- 4. Interpret patient refractive error, keratometry readings, and automated corneal topography
- 5. Discuss contact lens options with the patient
- 6. Conduct a diagnostic evaluation of a contact lens using reality and simulation software
- 7. Educate the patient on lens insertion, removal, and care
- 8. Conduct a contact lens follow up examination
- 9. Make necessary modifications to improve contact lens fitting characteristics
- 10. Verify visual acuity by over-refraction
- 11. Perform the automated sight testing procedure
- 12. Describe and record tonometry measurements and intraocular pressure

#### **N:** Course Content:

- 1. Introduction
  - a. Clinical Objectives
  - b. Clinical and personal hygiene
- 2. Traditional and Computerized Diagnostic Technologies

Slit Lamp Biomicroscope Keratometry Lensometer
Profile Analyzer Hand Loop Diameter Gauge

Vertex Conversion Chart
Snellen Chart
Dioptric Conversion Chart
Acuity Trial Lens Set

Phoroptor Automated Corneal Topography

Autorefractor Tonometry
Ophthalmoscopy Retinoscopy

- 3. Pre-fit Evaluation / Gas Permeable Contact Lenses
  - a. Advanced Ocular Anatomy and Physiology
  - b. Recognition of Advanced Ocular Pathology
  - c. Abnormalities Affecting Gas Permeable Lens Wear
  - d. Lifestyle Considerations for Hard and Gas Permeable Lens Wear
  - e. Interpreting Refractive Errors for Hard and Gas Permeable Lenses
  - f. Advanced Corneal Defects / Deformities / Injuries
- 4. Lens Parameter Determination
- 5. Lens Care
  - a. Chemical Disinfection Systems
  - b. Ultrasonic Disinfection Systems
  - c. Surfactant Cleaners
  - d. Enzyme Cleaners
  - e. Rewetting Agents
- 6. Fitting Procedure / Gas Permeable Lenses
- 7. Patient Compliance, Instruction and Dispensing Procedure
- 8. Boutique Dispensing Concepts
- 9. Patient Follow-up Care and Evaluation
  - a. Instrumentation and Differential Diagnosis
    - i. Keratometry and Biomicroscopy
    - Post-fit assessment
    - Corneal health assessment
    - Differential Diagnosis and Troubleshooting

- ii. Phoropter / Trial Lens Set
- Visual Acuity Verification
- Over-refraction

#### b. Follow-up Protocol - Gas Permeable Lens Designs

Aspheric Front Toric Back Toric
Bi-Toric Prism Ballast Keratoconus
Presbyopic Aphakic Cosmetic

### c. Follow-up Protocol Difficult Patients

### **O:** Methods of Instruction:

- 1. Lectures
- 2. Independent study of courseware
- 3. Independent completion of online self-assessment quizzes
- 4. Completion of field assignments
- 5. Participation in online Discussion Forums

## **P:** Textbooks and Materials to be Purchased by Students:

A list of required and optional textbooks and materials is provided for students at the beginning of each semester.

### **Q:** Means of Assessment:

The course evaluation is consistent with Douglas College evaluation policy. An evaluation schedule is presented at the beginning of the course.

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

Yes.