



**M: Course Objectives / Learning Outcomes:**

Upon successful completion, the student will be able to:

1. Demonstrate progressive competency with the use of instruments for soft and gas permeable contact lens fitting and analysis
2. Demonstrate the steps of a typical soft or gas permeable lens pre-fit evaluation, diagnostic fitting, and post-fit evaluation
3. Demonstrate proper soft and gas permeable lens care and hygiene
4. Access online pharmaceutical information on ocular medications
5. Perform gas permeable lens parameter modifications
6. Perform an over-refraction process in a typical contact lens fitting
7. Describe and perform an automated sight-tight testing procedure
8. Describe the steps in a refraction assessment
9. Describe and perform important steps in boutique eyeglass and contact lens strategies

**N: Course Content:**

1. Introduction
  - a. Laboratory objectives
  - b. Laboratory hygiene
  - c. Office Instruments
2. Refraction, Automated Sight Testing and Over-Refraction with Contact Lenses
  - a. Phoropter and Trial lens acuity set
  - a. Mathematical calculations
  - b. Verifying spherical lens correction
  - c. Verifying toric lens correction
  - d. Verifying presbyopic corrections
  - e. Visual acuity complication
  - f. Referring to Optometrist, Ophthalmologist, or MD
3. Soft and Gas Permeable Lens Types, Materials Characteristics, and Fitting Relationship to Ocular Health
4. Soft and Gas Permeable Lens Solution Properties, Chemical Compounds, and Relationship to Ocular Health
5. Contaminants, Complications, and Contraindications Related to Ocular Health
6. Lens Damage and the Relationship to Fitting Complications
7. Soft and Gas Permeable Specialty Materials and Fitting Applications
  - a. Keratoconus lenses
  - b. Astigmatic lenses
  - c. Piggy - Back lenses
  - d. Aphakic lenses
  - e. Pediatric lenses
  - f. Orthokeratology lenses
8. Soft and Gas Permeable Lens Design Analysis and Parameter Modification
9. Boutique Dispensing Strategies

**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:**