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	Dioptric Conversion Chart	
Snellen Chart	Acuity Trial Lens Set	
Phoroptor	Auotmated Corneal Topography	
Autorefractor	Tonometry	
Ophthalmoscopy	Retinoscopy	

3. Pre-fit Evaluation / Gas Permeable Contact Lenses
   a. <u>Advanced Ocular Anatomy and Physiology</u>

Cornea Structure	Conjunctiva	Lid Structure
Tear Film	Lashes	Crystalline Lens
Iris	Pupil	Sclera

   b. <u>Advanced Ocular Pathology</u>

Conjunctivitis	GPC	Blepharitis
Exophthalmos	Keratoconus	Keratitis sicca
Neovascularization	Pterygium	Pinguecula
Aniridia	Corneal Edema	Corneal Ulcers
Bullous Keratopathy	Corneal Dystrophies	

   c. <u>Abnormalities Affecting Gas Permeable Lens Wear</u>

Alcohol	Drugs	Diabetes
Arthritis	Herpes	Thyroid
Ocular Medication	Systemic Disease	Allergies

   d. <u>Lifestyle Considerations for Hard and Gas Permeable Lens Wear</u>

Athletics	Work Environment	Climate
Cosmetic	Social	Age

   e. <u>Interpreting Refractive Errors for Hard and Gas Permeable Lenses</u>

Myopia	Hyperopia	Presbyopia
Aphakia	Amblyopia	Strabismus
Astigmatism	Aniseikonia	Exotropia
Esotropia	Pseudophakia	Anisometropia

f. Advanced Corneal Defects / Deformities / Injuries

Keratoplasty	Albinism	Nystagmus
Coloboma	Retinopathy	Radial Keratometry
Laser Surgery		

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 CTq6M6(c)]TJETQq103.58 260.93 458.71 483.07 reW*nBT1 0 0 6 503.45 493.51 Tm0 g