

## Course Syllabus

**Course Title:** Ophthalmic Assistant | Optician Training

**Course Number:** OPTM 5565

**Course Description:** Learn the skills necessary to perform ophthalmic procedures and to begin a career in the offices of an Ophthalmologist or an Optometrist. Procedures will include: taking medical histories, ocular anatomy and physiology, taking visual acuities, color vision testing, reading patient's prescriptions on a Lensometer, glaucoma testing, clinical optics and contact lenses, principles of fitting and adjusting eyeglasses, general medical knowledge, optical instrument maintenance, and the skills to assist in minor eye care surgery. Outlines and guidance will be given to assist those who desire to become certified by JCAHPO, the National Certifying Agency. The Independent Study Examination, offered by the American Academy of Ophthalmology, will be offered at the end of the program. This exam is the prerequisite for the COA exam. The course will include 60 hours of lecture and 20 hours of clinical experience to be arranged with instructor. Students must pass an examination given by the instructor at the end of the course to receive a certificate of completion from Collin College. Students must work in the field for 6 months before they would be eligible to take the examination for certification from JCAHPO.

This class prepares the student for a rewarding career in the medical and optometric vision care industry. One of the goal of this class is to prepare the student to take for the American Board of Opticianry National Exam. The course will cover basic optics, lens form analysis, lens materials coatings, multifocal designs, ophthalmic frames, instrumentation, and regulation standards. You will also learn basic sales and frame styling techniques, and insurance billing. An Ophthalmic assistants and optician would be employed by private Ophthalmologists, hospitals, Optometrists, Optical stores or Corporate Opticals such as Pearl Vision, Sears Opticals, Target Opticals, Lenscrafters, etc. A perfect career for someone seeking a career in the visual field or the college student who needs to work odd hours.

**Hours:** 80

**Sessions:** 30

**Course Prerequisite(s):** High School diploma or GED

**Instructor Notes:** 20-hours of clinical experience to be arranged with instructor

### Student Learning Outcomes:

1. Learn the skills necessary to perform ophthalmic office procedures.
2. Learn to take medical histories, ocular anatomy and physiology.
3. Learn to take visual acuities, color vision testing and reading patient's prescription on a lensometer.
4. Learn how to examine pupils, learn basic pharmacology and drug delivery techniques.
5. Learn topical and oral glaucoma testing, clinical optics and contact lenses.
6. Learn to fit eyeglasses and adjustments.
7. Learn lens form analysis, lens materials coatings, multifocal designs
8. Learn ophthalmic frames
9. Learn instrumentation

10. Learn regulation standards
11. Learn insurance billing
12. Learn basic sales and frame styling techniques

**Textbook:** (Contact bookstore for current edition and cost)

The Ophthalmic Assistant - *A Guide for Ophthalmic Medical Personnel*; Authors: Harold A. Stein, Bernard J. Slatt, Raymond M. Stein

**Withdrawal Policy:** See the current *Career Skills Training* catalog for the tuition refund policy.

**Collin College Academic Policies:** See the current *Collin Student Handbook*.

**Americans with Disabilities Act:** Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student's responsibility to contact the ACCESS office, SCC-G200 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.

**Meeting Location:** Courtyard Center

**Attendance Policy:** Students must be in attendance for at least 90% in order to pass competencies.

**Topics covered:**

- Session 1: Introduction to ophthalmic medical terminology
  - Process of taking patient history
  - Concept of the chief complaint and "reason for the patient's visit"
  - Office triage
- Session 2: History taking continued
  - Patient's past history
  - Problems with past prescriptions for glasses and contact lenses
  - Age of current eyewear
  - Past history of injuries to the eyes and lasting effects of some injuries
  - Patient's history of past diseases, both ocular and full body (systemic)
- Session 3: Patient history taking continued
  - Patient's family history
  - Common family diseases such as glaucoma, diabetes, hypertension and muscle imbalances
  - Genetic predisposition
  - Ocular consequences of these diseases
- Session 4: Patient history taking continued
  - Patient's past and present systemic illness
  - Introduction to diseases such as heart disease, arthritis, sickle cell disease, pulmonary conditions, major infections
  - Obtaining surgical procedures patient has had
- Session 5: History taking continued
  - Patient's medications
  - Patient's current medications and ocular effects
  - Discussion of aspirin-containing pills, diuretic, blood pressure medication, birth control pills and steroids

- Common medications that have known ocular side effects
- Session 6: Patient history taking concluded  
Allergies  
Drug interactions and reactions  
Environmental allergies, especially those found in the eye care office such as latex allergies  
Drugs that have common reactions: penicillin, sulfa, anesthesia, fluorescein and others  
Treatments of above
- Session 7: Partially sighted and visually handicapped patients  
Introduction to low vision aids  
Problems associated with low vision  
Dept. of motor vehicle vision requirements
- Session 8: Concepts of color vision testing – tests that are available  
Physiology of color vision in the rod/cone system  
Macular/retinal function testing with the Amsler Grid
- Session 9: Lensometer Basic Optics  
Refraction  
Lens design  
Refractive index  
Lens curvature  
Prescription
- Session 10: Lensometry continued with basic concepts of ophthalmic optics  
Optical prescriptions – theory behind optical prescriptions Refraction  
Lens design  
Refractive index  
Lens curvature  
Prescription Lens Materials and coatings  
Designs  
Materials
- Session 11: Treatment  
Ophthalmic Frames: Instrumentation  
Regulations and Standards: Boxing System  
Optical center heights  
Decentration
- Session 12: Ophthalmic optics continued  
Continued lectures in optical prescription analysis and measurement
- Session 13: Conclusion of ophthalmic optics  
Writing optical prescriptions and their theory
- Session 14: Optics applied to eyeglasses and contact lenses  
Introduction to existing lens parameters
- Session 15: Neurology of the human pupil  
Pupil testing and process behind pupil action  
Medication effects on pupils
- Session 16: Tear film evaluation  
Taking A-scan measurements of the human eye
- Session 17: Ocular bandages and dressings  
Concepts of “pressure patching”
- Session 18: Concepts of delivery of ocular medications: drops, ointments and injections  
Complications associated with drug delivery
- Session 19: Surgical assisting in minor surgery

- Office surgical procedures
- Assisting and preparing the patient in surgical settings
- Sterilization techniques covered
- Session 20: Opticianry is covered
  - The fitting of spectacle eyeglasses and facial measurements
- Session 21: Opticianry concepts
  - Adjusting and fitting eyeglasses continued
- Session 22: Various types of lens systems: single vision vs. multifocal
  - Measuring for progressive lenses
  - Taking interpupillary measurements to avoid induced prism effects in glasses
- Session 23: Opticianry completed
  - Correlate the optical prescription to lensometry readings
- Session 24: Common complaints related to eyeglasses: fitting problems vs. prescription problems
  - Solutions to common complaints
- Session 25: Concepts of Intraocular pressure
  - Various techniques of taking pressure measurements
- Session 26: Concepts of glaucoma
  - Tonometry
- Session 27: Glaucoma and other diseases related to intraocular pressure
- Session 28: Ophthalmic instrument use and maintenance in the eye care office
  - Minor repairs and bulb replacements
- Session 29: Continuation of repair and maintenance of ophthalmic instruments
  - Equipment found in the eye care office not previously discussed
  - Hand tools and cards
- Session 30: Review
  - Handouts dissecting the examination given by the Joint Commission on Allied Health Professions in Ophthalmology (JCAHPO)

Sessions listed are a guideline to indicate all topics that will be covered during your course. Do not plan your personal calendar based on these sessions. Your instructor will give you a calendar for your class that will indicate specific topics, labs, and days.

**Method of Evaluation:** Students must achieve a minimum of 75% final average and must be in attendance 90% of the class time in order to pass competencies.