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 JCAPHO.

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 Optical, 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.