

**OPH 282**  
**OPTICAL EXTERNSHIP I**

**COURSE DESCRIPTION:**

Prerequisites: OPH 112, OPH 142 and OPH 233

Corequisites: None

This course provides practical experience in assigned businesses, with emphasis on observation and practical application. Emphasis is on working conditions in different production settings and on time demands. Upon completion, students should be able to complete eyewear in a safe and timely manner to proper specifications and in collaboration with other employees. Course Hours Per Week: Clinical, 6. Semester Hours Credit, 2.

**COURSE OBJECTIVES:**

Upon completion of this course, the student will demonstrate basic competencies in each of the following areas:

- a. Demonstrate knowledge of ANSI standards
- b. Practice lab/OSHA safety procedures in the laboratory
- c. Laying-out and marking-up single vision and multifocal lenses for surfacing
- d. Generating spherical and sphero-cylindrical lenses
- e. Selecting and trueing laps for spherical and sphero-cylindrical lenses
- f. Operating fining and polishing equipment
- g. Generating multifocal lenses
- h. Laying-out and marking-up prismatic lenses for surfacing
- i. Deblocking and inspection of lenses
- j. Troubleshooting surfacing tasks
- k. Care and maintenance of surfacing equipment
- l. Laying-out and marking-up of single-vision and multifocal lenses for edging
- m. Operating and maintaining edging equipment
- n. Computer use in edging and surfacing procedures
- o. Mounting and aligning lenses in frames
- p. Inspection and verification of finished eyewear
- q. Prescription interpretation for eyewear
- r. Facial measurements for eyewear
- s. Frame and lens selection for eyewear
- t. Adjustment and repair of eyeglasses
- u. Office and retail dispensary procedures for eyewear
- v. Evaluating consumer success
- w. Computer usage in dispensing
- x. Dispensing rules and regulations

**OUTLINE OF INSTRUCTION:**

- I. Lab safety/OSHA standards
  - A. Clothing safety
  - B. Eye safety
  - C.

- II. Laboratory rules and regulations
  - A. OSHA regulations
  - B. Hazardous waste
  - C. Record keeping
  - D. ANSI standards
  
- III. Generating single-vision lenses
  - A. Laying-out and marking-up single vision lenses
  - B. Blocking procedures for single vision lenses
  - C. Selection and trueing of laps for single vision lenses
  - D. Generating single vision lenses
  
- IV. Generating multifocal lenses
  - A. Laying-out and marking-up multifocal lenses
  - B. Blocking procedures for multifocal lenses
  - C. Selection and trueing of laps for multifocal lenses

- D. Lens selection
  - 1.) Single-vision lenses
  - 2.) Multifocal lenses
  - 3.) Absorptive lenses
- E. Frame adjustment and repair
- F. Special eyewear
  - 1.) High-plus patients
  - 2.) High-minus patients
  - 3.) Children
  - 4.) Low-vision patients

X.F.