

Course Description

OPT2422C | EYEWEAR FABRICATION III LAB | 3.00 credits

This course will evaluate and analyze eyewear for accuracy and quality, advanced techniques in operation of automatic lens analyzer and lens edgers, and maintenance of equipment. The student will fabricate eyewear for patients of the Vision Care Clinic including special lenses for various occupations and avocations.

Course Competencies

Competency 1: The student will neutralize and appraise eyewear according to A.N.S.I. tolerances dated Z 80-2010 in a specified time by:

1. Using the lensometer to neutralize sphere power
2. Using the lensometer to neutralize cylinder power
3. Identifying cylinder axis using the lensometer
4. Identifying near add power using the lensometer
5. Identifying prism power and direction using the lensometer
6. Identifying base curve using a lens clock
7. Measuring edge thickness and center thickness using calipers
8. Tinting Lenses

Learning Outcomes

- Use quantitative analytical skills to evaluate and process numerical data
- Demonstrate an appreciation for aesthetics and creative activities

Competency 2: The student will select single vision stock lenses and/or properly fill out an eyewear order form for unifocal and multifocal lenses by:

1. Pulling proper lenses from lens stock
2. Filling out an eyewear order form

Learning Outcomes

- Use quantitative analytical skills to evaluate and process numerical data
- Demonstrate an appreciation for aesthetics and creative activities

Competency 3: The student will make a pattern for any frame by hand and with an automatic pattern maker by:

1. Laying out a pattern on a pattern blank and cut that pattern by hand
2. Using the automatic pattern maker

Learning Outcomes

- Use quantitative analytical skills to evaluate and process numerical data
- Demonstrate an appreciation for aesthetics and creative activities