Course Prefix and Number: OPT 153  
Credits: 3

Course Title: Optical Laboratory Clinical II

Course Description: Provides the clinical component of OPT 151. Presents students with an opportunity to learn clinical skills for optical laboratory tasks at the advanced level under the direction and supervision of a preceptor. Emphasizes accuracy and the attainment of skills that meet acceptable professional standards. Prerequisites: OPT 150 and OPT 152 or equivalent. Co-requisite: OPT 151. Laboratory 6 hours per week.

General Course Purpose: This course is designed to provide students with the practical, hands-on applications of an optical laboratory to enable them to function as effective opticians.

Course Prerequisites and Co-requisites:
Prerequisites: OPT 150 and OPT 152 or equivalent  
Co-requisite: OPT 151

Student Learning Outcomes:
Upon completing the course, the student will be able to
a. Perform calculations for multifocal and progressive lenses for finish layout;

b. Fabricate and verify multifocal and progressive lenses in full, semi-rimless, and half-eye eyewear;

c. Fabricate and verify lenses that contain prism;

d. Perform minor frame repairs;

e. Perform roll and polish treatment on lenses; and

f. Apply bench alignment and ANSI tolerances to multifocal and progressive lenses.

Major Topics to Be Included:

a. Review of single vision and introduction to multifocal lensometry
b. Edging of segmented bifocal lenses
c. Trifocal lensometry and lens grooving
d. Edging lenses to nylon cord frames
e. Progressive addition lenses lensometry, blocking, and edging
f. Roll and polishing
g. Drill mount frames and lens treatments
h. Final inspection and standard alignment of groove and drill mounts
i. Lens tinting and lab equipment maintenance
j. Occupational lenses

Date Created/Updated (Month, Day, and Year): January 30, 2019