

**J. Sargeant Reynolds Community College
Course Content Summary**

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