

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

Course Prefix and Number: OPT 152

Credits: 3

Course Title: Optical Laboratory Clinical I

Course Description: Provides the clinical component of OPT 150. Provides students the opportunity to learn clinical skills in fundamental optical laboratory tasks at the entry level under the direction and supervision of a preceptor. Emphasizes accuracy and attaining skills that meet acceptable professional standards. Co-requisite: OPT 150. 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:

Co-requisite: OPT 150

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Identify basic lens materials and their characteristics;
- b. Demonstrate proper lensometer techniques for neutralization and verification;
- c. Identify frame materials and characteristics;
- d. Calculate decentration and lay out single vision lenses for finishing;
- e. Edge and insert lenses into optical frames;
- f. Bench align and final inspection of eyewear using ANSI standards; and
- g. Demonstrate a basic understanding of finishing equipment maintenance, proper disposal of waste, and safety procedures for laboratory work.

Major Topics to Be Included:

- a. Introduction to lab, lens materials, and lens clock
- b. Lensometry and spherical lenses
- c. Sphero-cylinder lenses, Rx forms and thickness calipers
- d. Introduction to frame measurements, decentration, and edging
- e.