

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

Course Prefix and Number: OPT 152

Credits: 3

Course Title: Optical Laboratory Clinical I

Course Description (including lecture hours, lab hours, total contacts)

Provides the clinical component of Optical Laboratory Theory I. 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. Emphasize accuracy and attaining skills that meet acceptable professional standards. 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 Corequisites

OPT 150

Course Objectives

Upon completing the course, the student will be able to:

- a. trace the process flow of lenses from surfacing to final inspection.
- b. identify lens characteristics and lens materials.
- c. identify frame parameters.
- d. identify the parts of a lensometer.
- e. explain the differences between verification and neutralization.
- f. layout single vision lenses for finishing.
- g. edge and insert lenses into optical frames.
- h. bench align a pair of eyewear.
- i. define and identify ANSI standards.
- j. have a basic understanding of finishing equipment and its maintenance.
- k. understand the environmental issues facing the optical laboratories.
- l. demonstrate proper safety procedures for working in the laboratory

Major Topics to be Included

- a. Single vision lensometry
- b. Finishing layout and fabrication
- c. Metal and plastic frame mountings
- d. Equipment maintenance
- e. Standard alignment
- f. Final Inspection

Effective Date of Course Content Summary (Month, Date Year): August 1, 2008