

**RARITAN VALLEY COMMUNITY COLLEGE
ACADEMIC COURSE OUTLINE**

OPTH-115 OPHTHALMIC DISPENSING I LAB

I. Basic Course Information

A. Course Number and Title: OPTH-115 OPHTHALMIC DISPENSING I LAB

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Fall Year: 2025

D. Effective Term: Fall 2026

E. Sponsoring Department: Health Science Education

F. Semester Credit Hours: 2

G. Weekly Contact Hours: 4

Laboratory: 4

Out of class student work per week: 2

H. Prerequisite (s): grade of C or higher in OPTH-101 Ophthalmic Materials II
Lecture and OPTH 106 Ophthalmic Materials II Lab

Corequisite (s): OPTH-111- Ophthalmic Dispensing I Lecture

I. Additional Fees: No

II. Catalog Description

Prerequisite: grade of C or higher in OPTH-101 Ophthalmic Materials II Lecture and
OPTH 106 Ophthalmic Materials II Lab

Corequisite: OPTH-111- Ophthalmic Dispensing I Lecture

This lab covers the theory and application of ocular measurements and the use of the corneal reflection pupillometer and other instruments. Attention is also given to frame materials and parts; cosmetic and anatomical consideration of the fitting triangle; fitting and adjustment techniques for various frames and mountings; neutralization and verification of ophthalmic prescriptions in single vision and bifocals through use of the vertometer/lensometer; use and application of various hand tools, pliers and gauges, and

minor frame and temple repairs. A portion of the student's laboratory time will be spent with direct patient contact in the on-campus optical clinic. (Students will be required to supply their own tools and instruments.) Minimum grade of C required.

III. Statement of Course Need

- A. This is a required course for the Ophthalmic Science (Opticianry) AAS degree and Ophthalmic Science (Opticianry) Certificate-Apprenticeship Option.
- B. This course is not designed for transfer.

IV. Place of Course in College Curriculum

- A. Free Elective
- B. This is a required course for the Ophthalmic Science (Opticianry) AAS degree and Ophthalmic Science (Opticianry) Certificate-Apprenticeship Option.
- C. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; b) for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

- A. Lensometer review, neutralization process and grading, neutralizations, bench alignment, project requirements. Discussion of the Optical Clinic procedures, dress code, scheduling and assessment.
- B. Bench alignment of severely misaligned frames, review of process and terminology, grading procedure, laboratory practice, neutralizations.
- C. Semi-rimless re-stringing demonstration, laboratory practice and project completion, neutralizations.
- D. The fitting triangle, fitting parameters and guidelines, adjustable techniques, hand tool demonstration, nosepad angles and adjustments, neutralizations.
- E. Eyeplanes and interocular measurements, X, Y, and Z axes, visual axis alignment, Listing's plane, Olsho's baseline, pupillary measurements with a mm ruler, mm ruler and penlight and pupilometer, neutralizations.
- F. Frame categories and parts, frame materials: optyl, propionate, copolyamide, titanium, etc.; bridge designs, saddle, modified saddle, keyhole, adjustable pads, etc.; temple designs, library, skull, comfort cable, riding bow, paddle.
- G. Laboratory practice project completion and neutralizations.
- H. Frame shapes and facial shapes, cosmetics, blending cosmetic, mechanical and optical requirements, special fitting considerations, bridge modifications, rhinoplasty aids, mastoidectomy adjustments; laboratory practice, project completion and neutralizations.

VI. A. Course Learning Outcomes:

At the completion of the course, students will be able to:

1. Demonstrate verbal skills to interact appropriately with patients.
2. Neutralize any single vision or bifocal Rx according to N.J. minimum standards and tolerances.
3. Competently bench align any frame or mounting, regardless of its original condition, according to the parameters identified in the text.
4. Apply the knowledge of the Fitting Triangle, correct frame placement and anatomical knowledge of basic eyewear fitting and adjustment techniques.
5. Apply knowledge of frame selection to blend cosmetics with the anatomical and optical requirements of the patient.
6. Demonstrate a thorough understanding of frame and mountings parts, construction, characteristics, materials, and function
7. Demonstrate the knowledge and skill required to perform minor frame repairs.
8. Demonstrate the knowledge and clinical skills to accurately measure the patient's interocular distance with at least two different techniques.
9. Understand frame modifications and their correct application to the patient.
10. Develop patient communication and customer service skills through direct patient contact in the on-campus optical clinic.

B. Assessment Instruments

1. laboratory projects
2. essays
3. written examinations
4. practical examinations

VII. Grade Determinants

- A. Examinations
- B. laboratory projects

Given the goals and outcomes described above, LIST the primary formats, modes, and methods for teaching and learning that may be used in the course:

- A. lecture/discussion
- C. small group work
- D. computer assisted instruction
- E. laboratory

VIII. Texts and Materials

- A. Brooks, Clifford and Borisch, Irving. Systems for Ophthalmic Dispensing, Fourth Ed Stoneham, MA.: Butterworth, 2024.
- B. Supplemental handouts

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

IX. Resources

- A. RVCC Library
- B. Ophthalmic Dispensing Lab – Room C-12

X. Check One: Honors Course N/A