

OPT-2940: OPTICAL FIELD EXPERIENCE I

Cuyahoga Community College

Viewing: OPT-2940 : Optical Field Experience I

Board of Trustees:

December 2021

Academic Term:

Fall 2022

Subject Code

OPT - Optical Technology

Course Number:

2940

Title:

Optical Field Experience I

Catalog Description:

Supervised field experience in an ophthalmic health care setting designed to emphasize role of dispensing optician. Students gain exposure to professional practice through direct supervision by a licensed optician. Expect students to demonstrate advancing assessment skills and assume more individual responsibility as member of an ophthalmic department.

Credit Hour(s):

2

Other Hour(s):

384

Other Hour Details:

Field Experience: 24 hours per week for 16 Weeks (384 hours per semester)

Requisites

Prerequisite and Corequisite

Concurrent enrollment in OPT-2971 Optical Field Experience Seminar I.

Outcomes

Course Outcome(s):

Design well-fitting eyewear, taking into consideration spectacle prescription, facial structure, and physiognomic measurements.

Objective(s):

1. Analyze and interpret prescriptions and make appropriate lens recommendations.
2. Determine patient wants and needs.
3. Determine physiognomic measurements necessary to fabricate spectacles.
4. Prepare ophthalmic laboratory work orders.
5. Determine the prescription of spectacle lenses using the lensometer.
6. Verify that lenses are within American National Standards Institute Z80 or Z87 standards.

Course Outcome(s):

Modify eyewear to ensure optical performance.

Objective(s):

1. Verify that lenses are within American National Standards Institute Z80 or Z87 standards.
 2. Properly adjust spectacle frames for optimal comfort and performance.
 3. Repair eyewear to ensure optimal performance.
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Course Outcome(s):

Work within Federal and State guidelines that govern opticianry.

Objective(s):

1. Maintain patient records adhering to the Health Information Protection and Portability Act (HIPAA).
 2. Determine the prescription of spectacle lenses using the lensometer.
 3. Verify that lenses are within American National Standards Institute Z80 or Z87 standards.
 4. Work within the safety standards that govern opticianry.
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Course Outcome(s):

Conduct him/herself in a professional manner at all times.

Objective(s):

1. Maintain patient records adhering to the Health Information Protection and Portability Act (HIPAA).
 2. Demonstrate professional behavior including punctuality, accepting feedback, willingness to complete tasks, collaborating with others.
 3. Determine the prescription of spectacle lenses using the lensometer.
 4. Verify that lenses are within American National Standards Institute Z80 or Z87 standards.
 5. Properly adjust spectacle frames for optimal comfort and performance.
 6. Repair eyewear to ensure optimal performance.
 7. Work within the safety standards that govern opticianry.
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Methods of Evaluation:

1. Written assignments
2. Supervisor evaluation
3. Instructor evaluation

Course Content Outline:

1. Phone etiquette
2. Customer service
3. Maintains patient records
 - a. Accuracy
 - b. Adhere to Health Information Portability and Accountability Act (HIPAA) regulations
4. Emergency procedures
5. Prescription analysis
 - a. Refractive error
 - i. Myopia
 - ii. Hyperopia
 - iii. Astigmatism
 - b. Presbyopia
6. Lens recommendation
 - a. Lens material
 - i. CR 39
 - ii. Polycarbonate
 - iii. Mid-index
 - iv. High Index
 - b. Lens design
 - i. Spherical
 - ii. Aspheric
 - iii. Atoric
 - iv. Multifocal
 1. Bifocal
 2. Trifocal
 3. Progressive
 - c. Lens options
 - i. Tints
 - ii. Photochromic

- iii. Polarized
 - iv. Non-glare lenses
- 7. Frame adjusting skills
 - a. Tool selection
 - b. Standard alignment
 - c. Realignment of eyewear
- 8. Dispensing skills
 - a. Accurate physiognomic measurements
 - i. Interpupillary (PD) measurement
 - 1. Pupillometer
 - 2. PD rule
 - ii. Major reference point
 - iii. Segment height
 - b. Ordering eyewear
 - i. Single Vision
 - ii. Bifocal
 - iii. Trifocal
 - c. Resolve patient concerns
- 9. Laboratory skills
 - a. Lensometry
 - i. Neutralization of single vision lenses
 - ii. Verification of single vision eyewear
 - b. Lens finishing
 - c. Eyeglass repair
 - i. Temple
 - ii. Nosepad
 - d. Application of American National Standards Institute (ANSI) standards
- 10. Professional development
 - a. Professional behavior
 - i. Punctuality
 - ii. Positive attitude
 - iii. Demonstrates flexibility
 - iv. Utilizes unscheduled time in a constructive way
 - b. Life long learning
 - i. Remain current in field through professional literature, conferences and continuing education
 - ii. Pertinent and appropriate questions

Resources

Brooks, Clifford W. and Irvin M. Borish. *System for Ophthalmic Dispensing*. 3rd ed. Boston: Butterworth-Heinemann, 2006.

First Vision Media Group. *Anti-Reflective Lenses and Treatments*. 1st ed. Maywood, NJ: First Media Vision Group, 2009.

First Vision Media Group. *Modern Eyewear Dispensing*. 1st ed. Maywood, NJ: First Media Vision Group, 2008.

First Vision Media Group. *Progressive Addition Lenses*. 1st ed. Maywood, NJ: First Media Vision Group, 2007.

First Vision Media Group. *Photochromic Lenses*. 1st ed. Maywood, NJ: First Media Vision Group, 2008.

First Vision Media Group. *What's in an Optical Frame*. 1st ed. Maywood, NJ: First Media Group, 2016.

National Academy of Opticianry. *Ophthalmic Dispensing Review Book*. 2007 ed. Landover, MD: National Academy of Opticianry, 2014.

Stoner, Ellen, Patricia Perkins and Roy Ferguson. *Optical Formulas Tutorial*. 2nd ed. St. Louis, MO: Elsevier, 2005.

Resources Other

1. American Optometric Association. <https://www.aoa.org/patients-and-public/caring-for-your-vision/contact-lenses?sso=y> (<https://www.aoa.org/patients-and-public/caring-for-your-vision/contact-lenses/?sso=y>) 2019.
2. <https://www.myalcon.com/tools-resources/patient-education/index.shtml> (<https://www.myalcon.com/tools-resources/patient-education/index.shtml>)
3. Centers for Disease Control and Prevention. "Healthy Contact Lens Wear and Care." <https://www.cdc.gov/contactlenses/index.html> 2019.
4. Contact Lens Spectrum. <https://www.clspectrum.com/> Pentavision, Inc, 2019.
5. GP Lens Institute, The Educational Resource for Custom Manufactured Contact Lenses. <http://www.gpli.info/online-curriculum/> Contact Lens Manufacturers Association, 2020.
6. Khan Academy. <https://www.khanacademy.org/> 2019.
7. OptiBoard Forums. <http://www.optiboard.com/forums/> 2019
8. Quantum Optical. <http://www.quantumoptical.com/> 2019.
9. Review of Optometry. <https://www.reviewofoptometry.com/> Jobson Medical, Inc. 2019
10. <https://timroot.com/videos/>
11. <https://www.visioncareproducts.com/>

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