

M: Course Objectives / Learning Outcomes

Upon successful completion, the student will be able to:

1. Apply knowledge of lens surfacing to dispensing and edging skills
2. Describe the lens surfacing procedure
3. Verify the powers of multifocal and progressive lenses
4. Calculate vertical and horizontal centration of multifocal and progressive lenses
5. Block and edge multifocal and progressive lenses
6. Choose and fit frames appropriately for multifocal wear
7. Identify and tint various plastic lens materials
8. Customize frame designs for patient needs
9. Repair various plastic frame materials
10. Perform repairs to broken frame hinges, screws and pins
11. Repair metal frames by soldering

N: Course Content

8. Soldering

- electric versus gas soldering
- flux, solder and melting temperatures
- developing the right materials
- cooling, cleaning and polishing

9. Frame Customization and Repairing**9.1 Customizing**

- frame materials acceptable to alteration
- changing lens shapes
- altering bridge designs
- altering temple length
- changing temple design

9.2 Repairing

- frame materials acceptable to repair
- screws and pins
- hinges and plaques
- rimless mountings
- bonding plastics compounds

O: Methods of Instruction

1. Laboratory Lecture
2. Application / Calculation exercises in Laboratory
3. Independent Study of Courseware
4. Completion of Proficiency Tests
5. Completion of Laboratory Assignments

P: Textbooks and Materials to be Purchased by Students

Brooks - **Essentials for Ophthalmic Lens Work**, (Latest Edition) New York, Fairchild

Douglas College Courseware**Q:** Means of Assessment

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| 1. | Completion of Proficiency Tests | 20% |
| 2. | Completion of Laboratory Assignments | 20% |
| 3. | Midterm Exams | 20% |
| 4. | Practical Exam | 20% |
| 5. | Final Exam | 20% |

Midterm and Final Exams will be Written and Practical

R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR

Yes

Course Designer(s)

Education Council / Curriculum Committee Representative

Dean / Director

Registrar