Douglas College

EFFECTIVE: SEPTEMBER 2004
CURRICULUM GUIDELINES

A.	Division:	**HEALTH SCIENCES**	Effective Date:		**September 2004**		
B.	Department / Program Area:	**DISPENSING OPTICIAN PROGRAM**	Revision	X	New Course		
			If Revision, Section(s) Revised:		**C, H, I, J**		
			Date of Previous Revision:		**April 10, 2003**		
			Date of Current Revision:		**September 2004**		

C: **DOPT 1212** **D**: **DISPENSING OPTICIAN LAB SKILLS II** **E:** **4**

Subject & Course No. Descriptive Title Semester Credits

F: Calendar Description:
This course provides students the laboratory skills to surface lenses, layout, block and edge multifocal and progressive lenses. It provides the skills to identify and tint plastic lenses and customize a frame to suit the patient's needs, and to repair broken frames and parts of plastic and metal frame materials.

G: Allocation of Contact Hours to Type of Instruction / Learning Settings

Primary Methods of Instructional Delivery and/or Learning Settings:

Laboratory

Number of Contact Hours: (per week / semester for each descriptor)

Laboratory 150 hrs

Number of Weeks per Semester: **15**

H: Course Prerequisites:

DOPT 1100 + DOPT 1112

I: Course Corequisites:

DOPT 1200 + DOPT 1210

J: Course for which this Course is a Prerequisite

DOPT 1310

K: Maximum Class Size:

14

L: PLEASE INDICATE**:**

- [ ] Non-Credit
- [X] College Credit Non-Transfer
- [ ] College Credit Transfer:

SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bccat.bc.ca)

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

1. Introduction

-course content and requirements
-industry standard charts for multifocals
-review safety procedures in the laboratory

2. Surfacing

-Analysis of Opticians Order
-Computing Lens Surface Parameters
-Lay-Out
-Blocking
-Generating
-Fining and Polishing
-De-Blocking
-Truing Tools
-Machine Tolerances

3. Spotting of Lenses

-power verification of multifocal lenses
-power verification of progressive lenses
-identifying and marking progressive lens lay-out engravings

4. Centration of Multifocal and Progressive Lenses

-calculating optical centres and reference points with reading adds
-calculating segment placement
-calculating centration of progressive lenses
-calculating centration of vocational lenses

5. Blocking Multifocal and Progressive Lenses

-protractor scales
-vertical and horizontal centration

6. Frame Fitting

-measurements for fitting multifocals
-frame selection
-frame alignment & adjustment
-lens insertion

7. Lens Tinting

-lens materials acceptable to heat dyeing
-overview of equipment and process
-mixing and changing dye solutions
-heating fluid temperature and relation to colour activity
-colour matching plastic material differences

8. Soldering

-electric verses 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

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