



DOUGLAS COLLEGE

**EFFECTIVE: SEPTEMBER 2012
CURRICULUM GUIDELINES**

A. Division: Academic Effective Date: September 2012

B. Department / Faculty of Science & Technology / Revision New Course
 Program Area: Dispensing Optician

If Revision, Section(s) Revised: A, B, F, K, M, N, O, P, Q
 Date of Previous Revision: October 2007
 Date of Current Revision: February 2012

C: DOPT 1112 **D:** Dispensing Optician Lab Skills I **E:** 5

Subject & Course No.	Descriptive Title	Semester Credits
F: Calendar Description: This course provides students with the laboratory skills for quality control of lenses and the ability to layout and prepare lenses for edging. Students will learn how to maintain the equipment and tools associated with the edging and finishing laboratory. It provides the student with skills to insert and mount lenses into various frame materials and designs.		
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 hours Number of Weeks per Semester: 15	H: Course Prerequisites: Nil	
	I: Course Corequisites: DOPT 1100	
	J: Course for which this Course is a Prerequisite DOPT 1200, DOPT 1210, DOPT 1212	
	K: Maximum Class Size: 15	
L: PLEASE INDICATE: <input type="checkbox"/> Non-Credit <input checked="" type="checkbox"/> College Credit Non-Transfer <input type="checkbox"/> College Credit Transfer: SEE BC TRANSFER GUIDE FOR TRANSFER DETAILS (www.bctransferguide.ca)		

M: Course Objectives / Learning Outcomes

Upon successful completion, the student will be able to:

- spot check lenses for surface quality
- verify the power of a single vision lens with the lensometer
- mark the optical centre and major reference point of a single vision lens
- calculate horizontal and vertical lens centration
- calculate lens blank size requirements
- equipment for dispensing eyeglasses including the lensometer, pupilometer, distometer, lens clock ruler and thickness callipers
- perform the process of lens edging
- edge polish lenses
- perform lens insertion and mounting with various frame designs and materials
- define ophthalmic terms pertaining to frame materials, designs, fitting and adjustments
- perform frame fitting and adjustments

N: Course Content:

1. Introduction

- course content and requirements
- orientation of the equipment and tools
- an overview of the edging process
- introduction to industry standard charts
- safety procedures in the laboratory

2. Spotting of Lenses

- checking for optimal surface quality
- use of the lensometer
- power verification of single vision lenses
- optical centre versus major reference point
- single vision lenses with prism

3. Frames

- frame parts, types & materials
- frame measurements & markings
- frame selection
- frame alignment & adjustment
- frame repairs
- specialized frames
- lens insertion
- frame maintenance & cleaning

4. Centration of Single Vision Lenses

- the mechanics of lens centration
- horizontal and vertical centration
- the boxing system
- calculating lens blank sizes
- industry standards formulas

5. Blocking of Lenses

- the lens protractor
- marking a single vision lens
- double checking lens blank size
- pupil distances and accuracy
- blocking systems and their relationship to lens materials
- deblocking lenses

6. Lens Shape Formation

- pattern measurements and terminology
- mounting and datum lines
- pattern formation

7. Edging

- the edging process
- deviations from edger settings
- lens chucking
- bevel selection

<ul style="list-style-type: none"> - verification with polariscope - variations in lens materials <p>8. Hand Edging</p> <ul style="list-style-type: none"> - purpose of hand edging - developing the correct technique - correctional modifications - edge polishing <p>9. Lens Insertion and Mounting</p> <ul style="list-style-type: none"> - frame materials - mounting design variations - hand tooling - heating and cooling - drilling and notching - grooving and nylon mounts - lens alignment - frame alignment - securing screws and pins - final verification <p>10. Identification of Lens Types, Materials and Coatings</p> <p>11. Equipment Maintenance</p> <ul style="list-style-type: none"> - basic equipment maintenance
<p>O: Methods of Instruction</p> <ol style="list-style-type: none"> 1. Laboratory Lectures 2. Application / Calculation exercises in Laboratory 3. Independent Study of Courseware 4. Completion of Proficiency Tests 5. Completion of Laboratory Assignments 6. Online discussion forum
<p>P: Textbooks and Materials to be Purchased by Students</p> <p>A list of required and optional textbooks and materials is provided for students at the beginning of each semester.</p>
<p>Q: Means of Assessment</p> <p>The course evaluation is consistent with Douglas College evaluation policy. An evaluation schedule is presented at the beginning of the course.</p>
<p>R: Prior Learning Assessment and Recognition: specify whether course is open for PLAR</p> <p>Yes</p>

Course Designer(s) DOPT Faculty

Education Council / Curriculum Committee Representative

Dean / Director Dr. Thor Borgford

Registrar