DOUGLAS COLLEGE

EFFECTIVE: JANUARY 2013
CURRICULUM GUIDELINES

A.	Division:	Academic	Effective Date:		January 2013		
B.	Department / Program Area:	Faculty of Science & Technology / Dispensing Optician	Revision	X	New Course		
			If Revision, Section(s) Revised:		E, G		
			Date of Previous Revision:		February 2012		
			Date of Current Revision:		May 2012		

C: DOPT 1200 **D:** Dispensing Optician Theory II **E:** 5

Subject & Course No. | Descriptive Title | Semester Credits

F: Calendar Description:

This course provides theory related to eyeglass dispensing at an advanced level. The following content areas are presented: detailed information regarding various instruments used in Optometry and Ophthalmology, specific aspects of optics, detailed information related to lenses for various eye conditions as well as for vocational and specialty lenses, surgical alternatives, analysis and interpretation of selected properties, business practices and professional standards of practice.

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

Primary Methods of Instructional Delivery and/or Learning Settings:

Lecture

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

Lecture 90 hours

Number of Weeks per Semester:

15

H: Course Prerequisites:

DOPT 1100 + DOPT 1112

I: Course Corequisites:

DOPT 1210 + DOPT 1212

J: Course for which this Course is a Prerequisite

DOPT 1310

K: Maximum Class Size:

30

L: PLEASE INDICATE:

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

1. Apply knowledge of multifocal lenses, application of multifocal lenses
2. Be able to give an in depth analysis of the optics of ophthalmic prisms
3. Discuss advanced principles of optics and ophthalmic lens design
4. Discuss, in depth, prescription analysis as it relates to dispensing and ordering eyewear for advanced prescription types
5. Discuss advanced measurement taking and frame selection for advanced prescription types
6. Perform an analysis of and calculations on absorptive lenses, vertical imbalance, vertex distance
7. Perform advanced evaluation of patient needs
8. Discuss in depth the theories of light, refracting surfaces, effects of refracting mediums on rays of light and an in depth study of magnification
9. Retain knowledge of intermediate and advanced theory and formulae
10. Perform intermediate and advanced optical assessments and optical calculations
11. Describe the visual process in detail as well as label and describe the function of each part of the eye
12. Describe appropriate patient care – ocular pathology and treatment
13. Discuss basic optical business management, current eye care trends and practices

N: Course Content:

Geometric Optics II

1. The refractive power of lenses - advanced including aberrations and distortions
2. Base curves, lens materials and coatings
3. Calculate the vertex powers of a lens
4. Effective & compensated powers due to vertex distance changes
5. Image jump in bifocals
6. Prismatic effects in bifocals
7. Prismatic effects at NVP of multifocal lenses
8. Vertical prismatic imbalance & correction in any prescription
9. Prism (wanted and unwanted) with bifocals
10. Adding prisms together from different meridians
11. Separating prism into different meridians
12. Adding two prescriptions together

Visual Optics II

1. Visual fields and visual pathways
2. Conditions requiring high powered lenses
3. Designs of high powered lenses
4. Lens materials & frames for special prescriptions
5. Presbyopic corrections - dispensing; lens design/construction
6. Vocational lenses and Low Vision Aids
7. Dispensing lenses by solving problems
8. Refractive surgery - advanced including ALK and Lasik
9. The refracting process
10. Ultrasonic scans, cataract surgery and IOLs

Practical Optics II

1. Terminology related to optical instruments and ophthalmic lenses - advanced
2. Functions of instruments used in Ophthalmology, Optometry and Contact Lens Fitting including the keratometer, biomicroscope, Radiuscope, phoropter, ophthalmoscope, retinoscope, tonometer, autorefractor and corneal topographer
3. Neutralization of multifocal and specialty lenses
4. Interpretation of complex prescriptions
5. Lens information by manufacturer
6. Standards of practice review
7. Professional ethics
8. Supervision and responsibility
9. Client management
10. Professional selling techniques
11. Records management

O: Methods of Instruction

1. Lecture
2. Application / Calculation exercises in classroom
3. Independent study of courseware
4. Independent completion of post tests
5. Completion of field assignments

P: Textbooks and Materials to be Purchased by Students

A list of required and optional textbooks and materials is provided for students at the beginning of each semester.

Q: Means of Assessment

The course evaluation is consistent with Douglas College evaluation policy. An evaluation schedule is presented at the beginning of the course.

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

Yes

Course Designer(s) DOPT Faculty

Education Council / Curriculum Committee Representative

Dean / Director Dr. Thor Borgford

Registrar