Douglas College

EFFECTIVE: JANUARY 2010
CURRICULUM GUIDELINES

A.	Division:	**EDUCATION**	Effective Date:	**January 2010**	
B.	Department / Program Area:	**HEALTH SCIENCES/ DISPENSING OPTICIAN**	Revision	**X**	New Course
			If Revision, Section(s) Revised:	**C, D, F, G, H, I, J, M, N, O**	
			Date of Previous Revision:	**JANUARY 2008**	
			Date of Current Revision:	**JUNE 2009**	

C:	**D:**	**E:**
DOPT 2211	**CLINICAL IN CONTACT LENSES AND OPTICAL TECHNOLOGIES II**	**3**
Subject & Course No.	Descriptive Title	Semester Credits

F: Calendar Description:

This course provides learning opportunities in contact lenses and optical technologies at an advanced level. Students will apply knowledge and skills from related theory and laboratory courses to the clinical dispensary. Students will continue their clinical practice in a retail contact lens practice or the on campus clinic. They will complete their clinical skills under the direct supervision of a course instructor, Optician / Contact Lens fitter, Optometrist, or Ophthalmologist. A one-week on-campus (laboratory and clinical) instruction component will take place near the end of the semester to complete the course.

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

Primary Methods of Instructional Delivery and/or Learning Settings:

Lecture / Distance / Clinical Experience

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

Lecture / Distance / Clinical Experience **120**

Number of Weeks per Semester:

15

H: Course Prerequisites:

DOPT 2101 and DOPT 2111

I: Course Corequisites:

DOPT 2213

J: Course for which this Course is a Prerequisite:

DOPT 2311

K: Maximum Class Size:

25

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. Obtain a general history from the patient
2. Determine what diagnostic activities must be conducted to complete an evaluation
3. Use instrumentation and other provisional methods to determine appropriate gas permeable contact lens types and designs
4. Interpret patient refractive error, keratometry readings, and automated corneal topography
5. Discuss contact lens options with the patient
6. Conduct a diagnostic evaluation of a contact lens using reality and simulation software
7. Educate the patient on lens insertion, removal, and care
8. Conduct a contact lens follow up examination
9. Make necessary modifications to improve contact lens fitting characteristics
10. Verify visual acuity by over-refraction
11. Perform the automated sight testing procedure
12. Describe and record tonometry measurements and intraocular pressure

N: Course Content:

1. Introduction
   a. Clinical Objectives
   b. Clinical and personal hygiene

2. Traditional and Computerized Diagnostic Technologies

Slit Lamp Biomicroscope	Keratometry	Lensometer
Profile Analyzer	Hand Loop	Diameter Gauge
Vertex Conversion Chart	Dioptric Conversion Chart	
Snellen Chart	Acuity Trial Lens Set	
Phoroptor	Auotmated Corneal Topography	
Autorefractor	Tonometry	
Ophthalmoscopy	Retinoscopy	

3. Pre-fit Evaluation / Gas Permeable Contact Lenses
   a. <u>Advanced Ocular Anatomy and Physiology</u>

Cornea Structure	Conjunctiva	Lid Structure
Tear Film	Lashes	Crystalline Lens
Iris	Pupil	Sclera

   b. <u>Advanced Ocular Pathology</u>

Conjunctivitis	GPC	Blepharitis
Exophthalmos	Keratoconus	Keratitis sicca
Neovascularization	Pterygium	Pinguecula
Aniridia	Corneal Edema	Corneal Ulcers
Bullous Keratopathy	Corneal Dystrophies	

   c. <u>Abnormalities Affecting Gas Permeable Lens Wear</u>

Alcohol	Drugs	Diabetes
Arthritis	Herpes	Thyroid
Ocular Medication	Systemic Disease	Allergies

   d. <u>Lifestyle Considerations for Hard and Gas Permeable Lens Wear</u>

Athletics	Work Environment	Climate
Cosmetic	Social	Age

   e. <u>Interpreting Refractive Errors for Hard and Gas Permeable Lenses</u>

Myopia	Hyperopia	Presbyopia
Aphakia	Amblyopia	Strabismus
Astigmatism	Aniseikonia	Exotropia
Esotropia	Pseudophakia	Anisometropia

f. Advanced Corneal Defects / Deformities / Injuries

Keratoplasty	Albinism	Nystagmus
Coloboma	Retinopathy	Radial Keratometry
Laser Surgery		

4. Lens Parameter Determination

5. Lens Care
   a. Chemical Disinfection Systems
   b. Ultrasonic Disinfection Systems
   c. Surfactant Cleaners
   d. Enzyme Cleaners
   e. Rewetting Agents

6. Fitting Procedure / Gas Permeable Lenses

7. Patient Compliance, Instruction and Dispensing Procedure

8. Boutique Dispensing Concepts

9. Patient Follow-up Care and Evaluation
   a. Instrumentation and Differential Diagnosis
      i. Keratometry and Biomicroscopy
         - Post-fit assessment
         - Corneal health assessment
         - Differential Diagnosis and Troubleshooting

      ii. Phoropter / Trial Lens Set
         - Visual Acuity Verification
         - Over-refraction

   b. Follow-up Protocol - Gas Permeable Lens Designs

Aspheric	Front Toric	Back Toric
Bi-Toric	Prism Ballast	Keratoconus
Presbyopic	Aphakic	Cosmetic

Follow-up Protocol – Difficult Patients

O: Methods of Instruction:

1. Lectures
2. Independent study of courseware
3. Independent completion of online self-assessment quizzes
4. Completion of field assignments
5. Participation in online Discussion Forums

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)

Education Council / Curriculum Committee Representative

Dean / Director: Dr. Mike Tarko

Acting Registrar: Brenda Walton