



January 8, 2001

Division HEALTH SERVICES

Date

Program Area PROGRAM

New Course

DISPENSING OPTICIAN

Date Last Revised

March 1, 1995

C DOPT 100

D

DISPENSING OPTICIAN THEORY

No.

Descriptive Title

Semester Credits

Subject & Course

Calendar Description

This course provides the introductory theory related to eye glass dispensing. The following content areas are presented: basic... of refraction, lenses and analysis and interpretation of prescriptions, surgical alternatives, professional standards of practice...

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

H: Course Prerequisites
NIL

Primary Methods of Instructional Delivery and/or Learning Settings

I: Course Co-requisites

Lecture and Student Directed Learning

DOPT 112

semester for each

J: Course for which this Course is a Prerequisite.

Number of Contact Hours: (per descriptor)

90 hrs.
90 hrs.

DOPT 200 + DOPT 210 + DOPT 212

Lecture
Student Directed Learning

K: Maximum Class Size

ives/Learning Outcomes

MI Course Object

successful completion, the student will be able to:-

Upon

Calculate basic mathematical formulas relating to the theory of optics.

2. -Define medical and ophthalmic terms pertaining to the anatomy and physiology of the eye.

3. 3.1 -Define scientific and ophthalmic terms pertaining to optics.

5.2 Calculate the angle or deviation of a prism, the power of a prism lens

surface curvature and focal power.

3.3 -Apply information pertaining to vergencies.

4. 4.1 -Define scientific and ophthalmic terms pertaining to lenses.

4.2 -Apply knowledge of lens materials, tinting and coatings, and safety aspects of lenses.

4.3 -Apply knowledge of lens materials, tinting and coatings, and safety aspects of lenses.

4.4 -Determine unknown values with power processes.

4.5 -Determine optimum lens blank size.

4.6 -Apply knowledge of lens materials, tinting and coatings, and safety aspects of lenses.

N: Course Content

age to code of ethics and practice standards

signs and
orienta

Responsibilities to the consumer of Vision Health Care providers
Review of pre-required optical facility requirements

2. Anatomy & Physiology

terminology
structure of the eye
physiology of the eye

conditions of the eye
pathologies & abnormalities
refractive errors
strabismus

3. Applied Math & Math Review

trigonometric operations

rounding numbers
metric conversions
scientific notation
right angle triangles
how to solve equations

4. Properties of Light

power of prisms
deviations of light by calculation

Snell's Law
surface curvature

focal power & calculation

lens wear including the following:

- refractive keratoplasty
- keratomileusis
- keratophakia
- keratoprosthesis

Medical and ophthalmic terms bearing

radial keratotomy

intraocular lens implants

N: Course Content cont'd

- 6. **Standards of Practice**
 - client management
 - records management

Supervision and responsibility
 Professional ethics
 Preparation for dispensing eyeglasses

-tolerance for dispensing eyeglasses

-supervision
 -professionalism
 -equipment

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

Materials to be Purchased by Students

Books, Textbooks and Materials

Brooks, System for Ophthalmic Dispensing, 4th Edition, New York, Churchill Livingstone

Brooks

Johnson, Dispensing of Contact Lenses, 3rd Edition, St. Louis, C.V. Mosby

Johnson

Dowlaty, Practical Aspects of Ophthalmic Optics, 3rd Edition, New York, Elsevier

Brooks, Essentials for Ophthalmic Lens Work, 4th Edition, New York, Churchill Livingstone

Douglas College Courseware

Q: Means of Assessment

Evaluation of the course will be based on the course objectives in accordance with Douglas College policies. Evaluation methods will include written tests and assignments.

ent and Recognition specify whether course is open for PLAR

R: Prior Learning Assessment

No

Curriculum Committee Representative

Course Designer(s)

Educational Council

Registrar

Date

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