J. Sargeant Reynolds Community College Course Content Summary

Course Prefix and Number: OPT 105

Credits: 3

Course Title: Anatomy, Physiology, and Pathology of the Eye

Course Description: Considers the fundamentals of various body systems and principles of human physiology; methods of drug delivery, including the advantages and disadvantages of drops, ointments, and sustained release systems; systemic use of medications; basic characteristics of common external and internal diseases of the eye; and ocular emergencies. Lecture 3 hours per week.

General Course Purpose: This course is designed to provide students with a knowledge base of ocular anatomy, diseases, conditions, treatments, and medications used to enable them to function as effective opticians.

Course Prerequisites and Co-requisites:

None

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Identify structures of the eye;
- b. Describe the basic functioning of each body system;
- c. Describe common external and internal eye diseases and ocular emergencies;
- d. Discuss the systemic use of medications; and
- e. Articulate the methods of drug delivery, including the advantages and disadvantages of drops, ointments, and sustained release systems.

Major Topics to Be Included:

- a. General and ocular anatomy and physiology
- b. Basic ophthalmic pharmacology
- c. Introduction to diseases of eye
- d. Ocular emergencies and their treatment
- e. Basic functioning of each body system

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