OPMT 2520: Ophthalmic Imaging Techniques

A. COURSE DESCRIPTION

Credits: 2
Lecture Hours/Week: 2
Lab Hours/Week: 0
OJT Hours/Week: *

Prerequisites:
This course requires all four of these prerequisites
  OPMT 1540 - Ocular Anatomy and Physiology (Number of Years Valid: 5)
  OPMT 1550 - Physical and Clinical Optics (Number of Years Valid: 5)
  OPMT 1560 - Ocular Motility (Number of Years Valid: 5)
  OPMT 1570 - Ophthalmic Pharmacology (Number of Years Valid: 5)

Corequisites: None
MnTC Goals: None

This course familiarizes the student with methods of fundus and external photography, fluorescein angiography (FA), slit lamp biomicroscopy, and digital imaging techniques commonly used in ophthalmology.

B. COURSE EFFECTIVE DATES:  12/17/2021 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Describe types of slit lamp illumination.
2. Obtain external and anterior-segment photographs.
3. Sketch the landmarks of the fundus.
4. Obtain stereo photographs.
5. Demonstrate setting up and obtaining FA photographs.
6. Interpret FA photographs.
7. Explain principles and uses of digital imaging techniques: Computed Corneal Topography (CCT) and Optical Coherence Tomography (OCT).
8. Describe other digital imaging techniques: Heidelberg Retina Tomograph (HRT) and GDx used for imaging glaucoma pathology.
9. Use emerging technologies as they develop.

D. LEARNING OUTCOMES (General)

1. Obtain external and fundus photographs.
2. Obtain images using digital technology.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted