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# Introduction to Ophthalmology Mini-Elective Spring 2017

|                             |                                                                                                                   |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------|
| <u>Course Dates:</u>        | April 5, 12, 19, 26<br>Wednesdays, 6:00-8:00 PM                                                                   |
| <u>Maximum Students:</u>    | 20                                                                                                                |
| <u>Class Year:</u>          | MS1                                                                                                               |
| <u>Course Director:</u>     | Evan Waxman, MD, PhD<br>Associate Professor of Ophthalmology                                                      |
| <u>Contact Information:</u> | Evan Waxman, MD, PhD<br><a href="mailto:waxmane@upmc.edu">waxmane@upmc.edu</a>                                    |
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## Description:

Ophthalmology is a unique medical field in which students receive little exposure during the course of medical school. However, eye complaints are prevalent in many clinical settings, and it is highly beneficial to have some knowledge about the most common eye problems regardless of your future specialty. In this elective, we will teach students about the ophthalmic history and physical examination as well as a basic introduction to the techniques of slit lamp, refraction, and retinoscopy. Students will also discuss common ocular pathology such as cataracts, glaucoma, conjunctivitis, and retinopathies in a case-based format. Additionally, students will have the opportunity to gain exposure to ophthalmic surgery by spending time in the operating room. At the end of the mini-elective, we hope that students will have gained a strong foundation in basic ophthalmology.

## Course Objectives:

- To review the basic components of an ophthalmic history, including the chief complaint, history of present illness, past ocular history, and a pertinent review of systems
- To teach and practice proper eye examination techniques
- To teach and practice the appropriate format of ophthalmic patient presentations
- To give students a general overview of slit lamp, refraction, and retinoscopy techniques and their uses in clinical practice
- To discuss common ocular pathology cases
- To give students actual clinical exposure in the operating room

## Requirements:

- Attendance and active participation in all four classroom sessions
- Student initiative to schedule time in the OR based on provided list of available surgeries
- Review all assigned readings in Ophthobook, a free eye book and lecture series resource available online at <http://www.opthobook.com>

## Prerequisites:

None

## **COURSE OUTLINE**

### **Introduction to Ophthalmology**

April 5, 12, 19, 26  
Wednesdays, 6:00-8:00 PM

#### **Course Director:**

Evan Waxman, MD, PhD  
Associate Professor of Ophthalmology

#### **Faculty:**

Evan Waxman, MD, PhD  
Joseph Vojtko, MD  
Jennifer Lee, MD  
Leonid Zlotcavitch, MD  
Sameera Nadimpalli, MS-4  
Ryan Williamson, MD/PhD Candidate

#### **Location:**

Eye and Ear Institute, 9th Floor Conference Room

#### **Session 1:**

##### **Introduction to the Ophthalmic History and Physical Examination**

- Students will be taught the basics of the ophthalmic H&P and practice examining each other. Proper format of ophtho presentations will also be discussed.
- Recommended reading: Ophthobook chapters 1 & 2

#### **Session 2:**

##### **Anterior Eye Pathologies Case Discussion**

- Students will discuss cases related to the anterior segment of the eye, such as glaucoma and cataracts. Students will be taken to the Eye & Ear clinic to learn how to perform a slit lamp examination to evaluate for anterior eye pathologies. Time permitting, students will also learn about refraction.
- Recommended reading: Ophthobook chapters 3, 9, & 10

#### **Session 3:**

##### **Posterior Eye Pathologies Case Discussion**

- Students will discuss cases related to the posterior segment of the eye, such as retinal pathologies. Students will practice fundus examinations on each other, and the retinal camera will also be available for use. Please be prepared to have one eye dilated.
- Recommended reading: Ophthobook chapter 4

#### **Session 4:**

##### **Infections and Trauma Case Discussion**

- Students will discuss the evaluation of traumatic eye injuries and simple eye infections. There will be a hands-on activity to help students "put it all together" by practicing complete eye history and physical examinations.
- Recommended reading: Ophthobook chapters 5 & 8

#### **Session 5:**

##### **Operating Room Experience (TBD)**

- Students will be paired with a current ophthalmology resident to shadow in the operating room. Alternatively, students can opt to be provided with a list of available attending surgeons whom they can contact and arrange a time to observe surgeries on their own.
- Recommended readings: Review material related to the case(s) you are scheduled to observe.