

OPTO 328 - Physiology of Vision I

Instructor: Shatha Algowaifly salgowaifly@ksu.edu.sa

Office hours: Sunday 10-11 / Mon 11-12 / Thur 12-1 or any time by appointment.

Lecture time: on Sunday from 8:00-10:00 pm Room # 17

Credit hours: 2

Goal: to provide material about how the eye works as a receptor organ as well as the perceptual feature of visual processing and understand the principles that underlie psychophysical assessment of a patient's vision.

Week	Day	Subject Area	Notes
1	Sun 1-9	Introduction in to the course and content	
2	Sun 8-9	The eye as a receptor organ: <ul style="list-style-type: none">• Retinal landmarks and layers	
3	Sun 15-9	The eye as a receptor organ: <ul style="list-style-type: none">• Photoreceptor structure, distribution and functional implications.• Photopigment types and absorption characteristics.	
4	Sun 22-9	Photochemical and Electrophysiological Aspects of Vision: <ul style="list-style-type: none">• Thermal reaction.• Production And Turnover Of Outer Segment Disc Lamellae	
5	Sun 29-9	Photochemical and Electrophysiological	

		Aspects of Vision: <ul style="list-style-type: none"> Bleaching and regeneration of Rhodopsin. Review 	
6	Sun 6-10	Midterm 1	
7	Sun 13-10	Eid Vacation	
8	Sun 20-10		
9	Sun 27-10	Sensory aspect of vision: <ul style="list-style-type: none"> Light Sense Color Sense Form Sense 	
10	Sun 3-11	Sensory aspect of vision: <ul style="list-style-type: none"> Light Sense Color Sense Form Sense 	
11	Sun 10-11	Concept of threshold Spatial vision Temporal vision	
12	Sun 17-11	Review	
13	Sun 24-11	Midterm 2	
14	Sun 1-12	Psychophysical methodology of Visual Assessment: Clinical electrophysiology ERG, mfERG, EOG, VEP	
15	Sun 8-12	Psychophysical methodology of Visual Assessment: Clinical electrophysiology ERG, mfERG, EOG, VEP	
16	Sun 15-12	Some Clinical implications of disruption in	

		retinal and optic nerve function	
17	Sun 22-12		
18	Sun 29-12		
19	Tue Dec 31, 2013	Final Exam from 10-12 in room BB4	

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1	10-8	103 عرب						محدد
2	12-10	101 عرب						محدد
3	4-1 مساء	107 سلم						محدد
4	12-10	495 بصر	أ. شذى التوفيلي	2	أ. شواقى موسى	أ. هند الديباسي	ب 4	
5		328 بصر	أ. شذى التوفيلي	30	أ. ريم المطيري			

Resources:

- Lectures presentation.
- Visual Perception 3rd edition by Steven Schwartz
- Clinical anatomy and physiology of the visual system by Lee Ann Remington

Exams form: Multiple choices and short answer questions.

Grading information:

Mid 1: 20 %

Mid 2: 25 %

Assignments: 15%

Final Examination: 40%

Good Luck 😊