

PHOL 402 Syllabus
Physiological Basis for Disease
Director: Jeffrey Garvin

4 credits, MWF 2:00 – 3:00 p.m., E-504

Grading: 5 short exams (50%); class participation (30%) and presentation (20%)

Date (Fall 2014)	Organ System	Topic	Instructor
25-Aug	Endocrine	Hypothalamic-Pituitary-Axes & Nature of Hormones	Romani
27-Aug		Growth Hormone	
29-Aug		Insulin and glucose metabolism	
1-Sept		NO CLASS LABOR DAY	
3-Sept		Glucose Metabolism and counter regulatory hormones	
5-Sept		GH/IGF1/IGF2/IGF-BP Paper Discussion	
8-Sept		GH/IGF1/IGF2/IGF-BP Paper Discussion	
10-Sept		Insulin/Diabetes Paper Discussion	
12-Sept		Insulin/Diabetes Paper Discussion	
15-Sept		Endocrine Exam	
17-Sept	Nervous	Synaptic Transmission, Receptors and Mechanisms	Ford
19-Sept		Synaptic Transmission Paper Discussion	
22-Sept		Sensory Systems	
24-Sept		Sensory Systems Paper Discussion	
26-Sept		Synaptic Plasticity	
29-Sept		Synaptic Plasticity Paper Discussion	
1-Oct		Current Topics in Neurosciences Paper Discussion	
3-Oct		Nervous Exam	
6-Oct	Pulmonary	Central & Peripheral Control of Respiration	Cotton
8-Oct		Lung Physiology/Pulmonology	
10-Oct		Central Control Paper Discussion I	
13-Oct		Central Control Paper Discussion II	
15-Oct		Cystic Fibrosis: A Multiple System Disease Paper Discussion	
17-Oct		Cystic Fibrosis: Cellular Dysfunction Paper Discussion	
20-Oct		Cystic Fibrosis: Treatments Paper Discussion	
22-Oct		Pulmonary Exam	
24-Oct	Cardiac	Introduction to Cardiac Physiology	Stelzer
27-Oct		Contractile Dysfunction in Heart Failure	
29-Oct		Inherited Cardiomyopathies	
31-Oct		Systolic Dysfunction – Cause and Treatment	
3-Nov		Diastolic Dysfunction – Cause and Treatment	
5-Nov		Cardiac Gene Therapy	
7-Nov		Cardiac Mechanics and Synchrony	
10-Nov		Cardiac Regeneration	
12-Nov		Cardiac Exam	
14-Nov	Renal	Renal Hemodynamics I	Garvin
17-Nov		Renal Hemodynamics II	

19-Nov		Nephron Transport I	
21-Nov		Nephron Transport II	
24-Nov		Renal Vascular Disease Paper Discussion I	
26-Nov		Renal Vascular Disease Paper Discussion II	
28-Nov		NO CLASS THANKSGIVING	
1-Dec		Diseases of Nephron Transport Paper Discussion I	
3-Dec		Diseases of Nephron Transport Paper Discussion II	
5-Dec		Renal Exam	
8-16 Dec		Presentation Dates as Needed	

Presentation: 30 minutes on a topic from a list provided by instructors. Two or more organ systems must be included.

Exams: Short answer or essay designed to be 30-45 minutes in duration.