

WINTER 2010 PHC 7010 Introduction to Graduate Pharmacology (4 credits)
Tues and Thurs 11:00 - 1:00 pm at 3125 Scott Hall
TEXTBOOK: Principles of Pharmacology 2nd Edition by Golan et al. LIPP/W+W. ISBN:9780781783552
A. Wakade and H.-Y. Wu, course directors

Day	Date	Lecture title	Hr	Lecturer
A. GENERAL PRINCIPLES				
Tues	12-Jan	Introduction/Receptors, dose-response curves	1	Wakade, Wu/Yamazaki
		Receptor kinetics	1	Yamazaki
Thur	14-Jan	Absorption, distribution, elimination, drug safety	1	Yamazaki
		Drug metabolism	1	Lash
Tues	19-Jan	Pharmacokinetics I	1	Yamazaki
		Pharmacokinetics II	1	Yamazaki

Total Block A 6

B. AUTONOMIC PHARMACOLOGY				
Thur	21-Jan	Review of physiology of the autonomic nervous system	1	Mattingly
		Cholinergics: characterization of receptor signaling	1	Mattingly
Tues	26-Jan	Muscarinic receptors and G proteins	1	Mattingly
		Nicotinic receptors; anticholinesterases	1	Mattingly
Thur	28-Jan	Introduction to adrenergics	1	Wakade
		NE synthesis, storage, release	1	Wakade
Tues	2-Feb	Adrenergic agonists	1	Wakade
		Adrenergic antagonists	1	Wakade

Total Block B 8

Thur 4-Feb **Examination 1** for Blocks A and B (14 hr total)

Tues 9-Feb PHARMACOGENOMICS 1 Lash

C. CENTRAL NERVOUS SYSTEM				
Tues	9-Feb	Nociception and opiates	1	Schoener
Thur	11-Feb	Drug abuse 1	1	Schoener
		Drug abuse 2	1	Schoener
Tues	16-Feb	CNS Principles	1	Kapatos
		Glutamate	1	Andrade
Thur	18-Feb	GABA (Sedative hypnotics)	1	Kapatos
		Serotonin	1	Andrade
Tues	23-Feb	Antidepressants/Mood disorders	1	Artalejo
		Local and general anesthetic agents	1	Tisdale
Thur	25-Feb	Abnormal electrical transmission (Epilepsy)	1	Bannon
		Dopamine (schizophrenia and parkinsons)	1	Bannon

Total Block C 11

Tues 2-Mar **Examination 2** for Pharmacogenomics and Block C (12 hr total)

Totals for Pharmacogenomics and Blocks A-C 26

IBS System Biology 2 credit course: Biomedical Neuropharmacology (IBS7100) ends here

D. CARDIOVASCULAR/RENAL PHARMACOLOGY				
Thur	4-Mar	Toxicology I	1	Lash
		Toxicology II	1	Lash
Tues	9-Mar	ACE and calcium channel blockers	1	Wakade
		Antihypertensive agents	1	Wakade
Thur	11-Mar	Renal function	1	McCauley
		Cardiac agents I	1	McCauley
Tues	16-Mar			<i>Spring Break</i>
Thur	18-Mar			<i>Spring Break</i>
Tues	23-Mar	Cardiac agents II	1	McCauley
		Cardiac agents III	1	McCauley
Thur	25-Mar	Coagulation, thrombolytics	1	List
		Lipid lowering agents	1	Yamazaki

Total Block D 10

Tues 30-Mar **Examination 3** for Block D (10 hr total)

E. INFLAMMATION AND ENDOCRINE PHARMACOLOGY				
Thur	1-Apr	Antiinflammatory agents I	1	McCauley
		Antiinflammatory agents II	1	McCauley
Tues	6-Apr	Adrenal steroids	1	Wu
		Gonadal steroids	1	Wu
Thur	8-Apr	Thyroid	1	Davis
		Diabetes	1	Davis
Tues	13-Apr	Histamine/antihistamines	1	Terlecky

Total Block E 7

F. CHEMOTHERAPY				
Tues	13-Apr	Introduction to chemotherapy: Anticancer agents I	1	Matherly
Thur	15-Apr	Anticancer agents II	1	Matherly
		Anticancer agents III	1	Matherly
Tues	20-Apr	Antimicrobials, beta-lactams	1	Wu
		Inhibitors of protein synthesis and DNA function	1	Wu
Thur	22-Apr	Antifolates, antifungals, and antiviral agents	1	Wu
		HIV drugs and Immunosuppressives	1	Terlecky

Total Block F 7

Thur 29-Apr **Examination 4** for Blocks E and F (14 hrs)

Totals for course

50