

Syllabus for Introductory Neuroscience, Fall 2003

Readings in the FIRST EDITION of the Purves required text

Syllabus adapted from the course's original by Jonathan Landsman

Usage note: This syllabus is designed to help people using the older, free, first edition of Purves find the right pages to read for each class's assignment. To make this, I have scanned through the chapters and tables of contents of each text to find the corresponding sections, and to try to make sure not too much new material is added in the 2nd ed. I feel pretty confident about these results. How confident? Confident enough that I will not buy the new text, and will use the first edition scheme on this syllabus. If you aren't determined to be on the cutting edge of Neuroscience and you don't mind running the risk of bad luck on a few multiple choice questions, you probably can too, and save 85 bucks doing it. When I feel less certain that the first edition is sufficient, I say "or use 2nd."

NOTE: WSB will not accept returns after Friday, Sep 12, so if you bought a 2nd edition, return it now! Also, remember Schow has two copies of the new edition on reserve, one of which, in fact, I used to make this syllabus.

Date	Lecture Subject	Instructor	Reading (text)
9/4	Introduction to the course and material	Williams & Zimmerberg	
9/9	Neuroanatomy I Building the brain	Zimmerberg	NOT DONE p 378 & ?
9/11	Neuroanatomy II Cortical Connections	Zimmerberg	ch 25
9/16	Neurophysiology I: The resting potential and its ionic basis	Williams	ch. 2
9/18	Neurophysiology II: The action potential	Williams	ch. 3
9/23	Neurophysiology III: Channels	Williams	ch. 4
9/25	Neurophysiology IV: Signaling with action potentials	Williams	ch. 17 or 2nd 19
9/30	Hour exam I		

10/2	Neurochemistry I Synthesis and Release of Neurotransmitters	Zimmerberg	ch. 5,6
10/7	Neurochemistry II Receptor Activation	Zimmerberg	ch. 7
10/9	Neurochemistry III Inactivation and Neuromodulators	Zimmerberg	ch. 8 MUST use 2nd
10/16	Sensory systems I: Chemosensation	Zimmerberg	ch. 14
10/21	Sensory systems II: Audition	Williams	ch. 12
10/23	Motor systems: Reflexes and Regulation	Williams	ch. 15
10/28	Hour Exam II		
10/30	Sensorimotor Integration I: Pain	Zimmerberg	p.147-148 ch. 9
11/4	Sensorimotor Integration II: Bird Song	Williams	ch. 16 or use 2nd
11/6	Development and Plasticity I Critical Periods and Vision	Williams	ch. 11, p. 203-218, MISSED recoding other readings here; will go back to finish later
11/11	Development and Plasticity II Stress across the Lifespan	Zimmerberg	ch. 27 maybe use 2nd
11/13	Development and Plasticity III Plasticity in Adults: Regeneration	Zottoli	ch. 25, p. 556-61 MUST use 2nd
11/18	Development and Plasticity IV	Hutson	ch. 21
11/20	Learning and Memory	Zimmerberg	ch. 23 or use 2nd
11/25	Alzheimer's Disease	Solomon	ch. 29
12/2	Hormones and Behavior	Sandstrom	ch. 28
12/4	Concluding words: Consciousness	Williams, Zimmerberg	