

Introduction to Neuroscience

Fall 2021: 21 112 200 01 28369. Mon & Wed. 10am-11:20am. Friday at 10am register also for “*Neuroscience Career Seminar*”

Course Director: Mark A. Gluck

Other Instructors: Vince McGinty, April Benasich, Sue Peters TAs: Anya Stetsenko, Jaleesa Stringfellow

Date	Topic (V) : Indicates the lecture is a “flipped” class where you watch an assigned Video Lecture prior to the class and the in-class session is for discussion and other classroom activities.	Readings to be done <u>prior</u> to the class time meeting: X: {Sections excluded: “not assigned”} Kolb et al. <i>Intro to Brain & Behavior</i>	Lecturer
9/1 (Wed.)	An Introduction to Neuroscience: <i>Course Overview, Logistics</i>		Gluck & TAs
9/8 (Wed.)	A Brief History of Neuroscience	CHAPTER 1. What Are the Origins of Brain and Behavior X: 1-3, 1-4	Gluck
Part I: Neural Structures and Mechanisms			
9/13	The Functional Anatomy of the Brain (V)	CHAPTER 2. What Is the Nervous System’s Functional Anatomy? X: 2-4, 2-5, 2-6	McGinty
9/15	Quiz #1 & Recitation:		TAs
9/20	The Fundamental Building Blocks of Brain Function (V)	CHAPTER 3. What Are the Nervous System’s Functional Units? X: 3-3	McGinty
9/22	Quiz #2 & Recitation:		TAs
9/27	The Electrical Brain: <i>Fundamentals of Neurophysiology</i> (V)	CHAPTER 4. How Do Neurons Use Electrical Signals to Transmit Information?	McGinty
9/29	Quiz #3 & Recitation:		TAs
10/4	The Chemical Brain: <i>Fundamentals of Neuropharmacology</i> (V)	CHAPTER 5. How Do Neurons Communicate and Adapt? X: 5-4	McGinty
10/6	Quiz #4 & Recitation:		TAs
10/11	REVIEW SESSION FOR EXAM # 1		TAs
10/13	EXAM # 1		TAs

Part II: Neural Systems for Behavior

10/18	Methods in Behavioral and Cognitive Neuroscience	CHAPTER 7. How Do We Study the Brain's Structures and Functions? X: 7-1, 7-5, 7-7	Benasich
10/20	Quiz #5 & Recitation:		TAs
10/25	Childhood Disorders & the Developing Brain (V)	CHAPTER 8. How Does the Nervous System Develop and Adapt? X: p.247-251, 265 (Box 3), 275-276	Peters (Benasich Lab)
10/27	Quiz #6 & Recitation:		TAs
11/1	Sensation and Perception	CHAPTER 9. How Do We Sense, Perceive, and See the World? X: 9-1, 9-3, 9-4	Benasich
11/3	Quiz #7 & Recitation:		TAs
11/8	Thinking and Planning	CHAPTER 15. How Does the Brain Think? X: 15-4, 15-5	Benasich
11/10	Quiz #8 & Recitation:		TAs
11/15	REVIEW SESSION FOR EXAM # 2		TAs
11/17	EXAM # 2		TAs

Part III: Thinking and Disorders of the Brain

11/22	Memory	CHAPTER 14. How Do We Learn and Remember? X: 14-4, 14-5	Gluck
11/24	Quiz #9 & Recitation:		TAs
11/29	Emotion, Stress, & Psychiatric Disorders	CHAPTER 12. What Causes Emotional and Motivated Behavior? X: 12-2, 12-3, 12-4	Gluck
12/1	Quiz #10 & Recitation:		
12/6	Alzheimer's Disease & the Aging Brain	Gluck et al. Chapter 12 Development and Aging Read only the last part of each subsection (i.e., those on aging and AD)	Gluck
12/8	Quiz #11 & Recitation:		TAs
12/13	REVIEW SESSION FOR EXAM # 3		TAs
12/14-15		Rutgers READING Days	
12/16-23	Final Exam Date: TBD	RUTGERS FINALS PERIOD	TAs