

Introduction to Neuroscience

Time: 1:30-4:20 pm, every Wednesday

Room: 1F C101, Interdisciplinary Research Building, Academia Sinica

Description: This course intends to introduce the basic neuroscience. The course is designed for students without Neuroscience background, or even without Biology background. The scope of the course covers the basic structure and sensory and motor function of the nervous system, as well as the high function of the brain and related diseases. Students are expected to gain a broad perspective of how neural information is processed in the brain, and how brain activity determines individual behaviors in response to environmental stress.

Date	Topic	Lecture
9/9	Neuroscience: Past, Today, and Future (starts at 10:00)	Chih-Cheng Chen 陳志成
9/16	The Structure of the Nervous System (Chapter 7)	Li-Jen Lee 李立仁
9/23	Neurons and Glia (Chapter 2)	Yung-Feng Liao 廖永豐
9/30	The Neural Membrane and Action Potential (Chapter 3, 4)	Shi-Bing Yang 楊世斌
10/7	Neurotransmitter Systems (Chapter 6)	Chih-Cheng Chen 陳志成
10/14	Synaptic Transmission (Chapter 5)	Chi-Kuang Yao 姚季光
10/21	Midterm exam (13:30-15:00)	Vira Yang
10/28	The Eye and Visual System (Chapter 9, 10)	Shih-Kuo Chen 陳示國
11/4	The Chemical Sense (Chapter 8)	Hung-Hsiang Yu 游宏祥
11/11	The Somatic Sensory System (Chapter 12)	Bai-Chuang Shyu 徐百川
11/18	Spinal Control of Movement (Chapter 13)	Jun-An Chen 陳俊安
11/25	Chemical Control of Brain and Behavior (Chapter 15)	Cheng-Chang Lien 連正章
12/2	Language (Chapter 20)	Chia-Ying Lee 李佳穎
12/9	Diseased Brain (Chapter 22)	Chen-Jee Hong 洪成志
12/16	Interdisciplinary Neuroscience: Brain Mind Welfare	Fu-Zen Shaw 蕭富仁
12/23	Final Exam (13:30-15:30)	Vira Yang

Text book: Neuroscience: Exploring the Brain, 4TH edition, 2015, edited by Mark Bear, Barry Connors, and Michael Paradiso, Lippincott, Williams & Wilkins, Baltimore, Maryland, USA