

Physiological Psychology

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Course information: Physiological psychology (830:313), 2016 summer.

Time & location: 6:00 - 9:40 pm, Tuesday & Thursday, SEC-117, Busch.

Textbook (required): Biological Psychology, Kalat, 12th edition.

Office hours: Tuesday 4:00 - 5:00 pm (or by appointment), room 332, Psychology building.

Course description:

This course aims to give a biological explanation of animal perception, behavior, & cognition. Materials are organized into three parts. The 1st part introduces the cellular and molecular basis of the nervous system: neurons, action potentials, & synapses. The 2nd part covers how we perceive and interact with the environment: sensory and motor systems. The 3rd part explores the neural mechanisms of sleep, motivation, and learning & memory.

Assessment:

- Midterm: 35%.
- Final: 45%, cumulative.
- Quiz: 20%, each 5%.
- Extra credit: 1, participation in Psychology study OR a 2-page essay of interest (need my pre-approval).

Exam: Midterm and final exam will consist of multiple-choice questions and one essay question. Exam is closed book, but several possible candidate **essay** questions will be released one week in advance for you to prepare.

Quiz: There're 4 quizzes to check your understanding of the materials covered in the previous lecture. In case your grade on a quiz is not satisfactory, we'll meet and figure out the problems to help you keep up with the class.

Makeup exam/quiz will only be given if written, verifiable document is provided in advance. You're responsible to anticipate the possible conflicts and contact me in advance.

Letter grade:

$A : \geq 90$ $B+ : \geq 85$ $B : \geq 80$ $C+ : \geq 75$ $C : \geq 70$ \dots *etc*

Schedule:

The course schedule roughly follows the textbook and reading materials listed should be read **before** the class. The attendance is expected and extra materials will be covered in the lectures.

Week	Date	Topic	Quiz & Required Reading
1	05-31	Intro & Neuron dogma	Chapter 1
1	06-02	Action potential	Chapter 1
2	06-07	Synapse	Quiz , Chapter 2
2	06-09	Neuro-anatomy & Research method	Quiz , Chapter 3
3	06-14	Visual system	Chapter 5
3	06-16	Auditory & olfactory systems	Quiz , Chapter 6, 13*
4	06-21	Midterm	
4	06-23	Movement	Chapter 7
5	06-28	Learning & memory	Chapter 12
5	06-30	Motivation, sleep, & psychological disorders	Quiz , Chapter 8, 14
6	07-05	Neural plasticity & neurogenesis	Reserved**
6	07-07	Final	

Chapter 13*: only the part about language is required.

Reserved**: reading materials will provided on the Sakai site.