

BILD 12: Neurobiology and Behavior (Winter 2018)
Prof. Takaki Komiyama
Mon & Wed 18:00 - 19:20, Pepper Canyon 109
Course website on TritonEd
e-mail: tkomiyama@ucsd.edu
Office hours: F 4-5pm in CNCB Rm304

Course description: This is an introductory course on how the nervous system interacts with the environment. We will cover the basics of cellular organizations of the nervous system, how it processes sensory information, how it generates motor output and behaviors, and how one learns from experience. This class assumes little science background beyond high school biology and is recommended for non-science majors who are interested in the brain.

Textbook:

“Neuroscience- Exploring the Brain” by Bear, Connors and Paradiso.

- Strongly recommended. The course follows the textbook fairly closely.

Instructional assistants:

- Chi Ren (c3ren@ucsd.edu)
- Emily Yan (e6yan@ucsd.edu)
- Joseph Ayoub (jgayoub@ucsd.edu)

Review sections and office hours start in the second week (week of 1/14).

- Section (optional):
 - o M 1:00p-1:50p HSS 2150 (JA)
 - o M 8:00p-8:50p CENTR 207 (CR)
 - o W 5:00p-5:50p HSS 2150 (JA)
 - o Th 7:00p-7:50p CENTR 207 (EY)
 - o Th 8:00p-8:50p CENTR 207 (EY)
 - o F 8:00a-8:50a CENTR 207 (CR)
- Office hours:
 - o CR: Tu 1-2 pm in BLB (Biomedical Library Building) Room 107
 - o EY: Th 11 am-12 pm in PC (Price Center) Theater
 - o JA: F 3-4 pm at Perks Coffee Shop

Grading: In-class assignments (15%), Midterm (35%) and Final (50%)

1. In-class assignments (15%)
 - a. Given at the end of each lecture. Fill it out and hand to one of the assistants.
 - b. You get one point for each completed assignment, up to 15 points.
2. Midterms (35%, in class on 2/1 and 2/27, the better score from the two midterms counts) and Final (50%)
 - a. Mostly multiple choice and short answer questions.

- b. Please do not take the class if you know you cannot take at least one midterm and the final. Final make up is oral exam; only with a Biology-department approved documented excuse. No makeup given for midterms.
 - c. If you are late by more than 30 minutes for an exam, you will not be able to take it.
 - d. Each exam is curved.
3. Grades:
- >82 A (A-, A, A+)
 - >71 B (B-, B, B+)
 - >60 C (C-, C, C+)
 - >44 D

General outline (subject to change):

- 1/8 Lecture 1: Introduction, Neuron
- 1/10 Lecture 2: Membrane potential and action potential
- (1/15 Holiday)
- 1/17 Lecture 3: Synaptic transmission
- 1/22 Lecture 4: Anatomy, methods
- 1/24 Lecture 5: Taste
- 1/29 Lecture 6: Olfaction
- 1/31 Lecture 7: Vision 1
- 2/5 Lecture 8: Vision 2
- 2/7 Midterm-1
- 2/12 Lecture 9: Audition, Somatosensation
- 2/14 Lecture 10: Attention
- (2/19 Holiday)
- 2/21 Lecture 11: Motor
- 2/26 Lecture 12: Motivation, Emotions
- 2/28 Lecture 13: Sleep, Language
- 3/5 Midterm-2
- 3/7 Lecture 14: Development
- 3/12 Lecture 15: Learning and memory 1
- 3/14 Lecture 16: Learning and memory 2
- 3/21 FINAL (7PM)

Academic dishonesty:

Please don't cheat. If you are uncertain about what academic integrity means, please read the Policy on Integrity of Scholarship (academicintegrity.ucsd.edu).

In this class the following are considered cheating:

- 1. Taking an exam or assignment on someone else's behalf.

2. Copying someone else's exam or assignment.
 3. Using your phone or other electronic device during an exam.
 4. Smuggling course related information into an exam.
 5. Hiding cheat-sheets in the bathroom.
 6. Sending an email that contains fabricated statements (e.g. "I'm sick" when you're not)
- This is not a comprehensive list. Use your best judgment or ask.

No tolerance policy:

Under federal law, UC San Diego students have the right to an educational environment that is free from harassment and discrimination. The Office for the Prevention of Harassment & Discrimination (OPHD) provides assistance to students, faculty, and staff regarding reports of bias, harassment, and discrimination. This includes the classroom setting.

Students have options for reporting incidents of sexual violence and sexual harassment. Sexual violence includes sexual assault, dating violence, domestic violence, and stalking. Information about reporting options may be obtained at OPHD at [\(858\)534-8298](tel:8585348298), ophd@ucsd.edu or <http://ophd.ucsd.edu>. Students may receive confidential assistance at CARE at the Sexual Assault Resource Center at (858) 534-5793, sarc@ucsd.edu or <http://care.ucsd.edu> or Counseling and Psychological Services (CAPS) at [\(858\) 534-3755](tel:8585343755) or <http://caps.ucsd.edu>.