

Introduction to Behavioral Neuroscience B (ILAS)

GUIDELINES, FALL 2020

Place: **ONLINE (due to COVID-19)**

Time: Friday, 16:30-18:00 (5th period)

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1. Objectives

Behavioral Neuroscience investigates the neural basis of behavior. Part B of this course will provide an introduction to higher brain functions, such as motivation, learning, memory, communication and language. The course will employ an integrative approach by discussing both research results obtained with brain imaging in humans and experiments in animal models.

2. Course structure

Unit	Date	Content
1	2020/10/02	Introduction to higher brain functions
2	2020/10/09	Motivation
3	2020/10/16	Learning
4	2020/10/23	Memory
5	2020/10/30	Spatial memory and navigation LIVE SESSION
6	2020/11/06	Executive functions and planning
7	2020/11/13	Emotions
8	2020/11/27	Reproductive behavior
9	2020/12/04	Communication and language LIVE SESSION
10	2020/12/11	Human language and language disorders
11	2020/12/18	Social interaction
12	2020/12/25	Evolution and development of behavior
13	2020/01/08	Neurological and psychiatric disorders LIVE SESSION
14	2020/01/22	Feedback (personal)
15	2020/01/29	Feedback (optional LIVE SESSION)

3. Attendance and grading

Due to the course being ONLINE course, evaluation is different from normal years.

Evaluation will be based on:

- (a) 40% : 10 short tests on PANDA (closed 2 weeks after each lecture)
- (b) 30% : Live Zoom Session (Attendance and Preparation)
- (c) 30% : Final Project (1-2 pages on a Neuroscience B topic) – due **22 Jan 2021**

4. Course Structure

This course is ONLINE due to COVID-19.

a) Lectures & Quizzes (40% of final grade)

Each week (usually on FRIDAY, sometimes on SATURDAY), I will post a video lecture on YOUTUBE of about 30 minutes to 60 minutes length. You can find the link for the lecture in the slides for the lecture, which will be available on PANDA (under RESOURCES). I will also post a short quiz of 10 questions about the lecture on PANDA. They will be true/false or multiple choice type questions. The short tests will have a deadline of about 2 weeks after I post the lecture on YOUTUBE.

b) Live Sessions (30% of final grade)

Three times during the semester, I will host **mandatory** live zoom sessions (“LIVE SESSION” above). 1 week before the session, I will post a list of **questions** related to the last few lectures. You should prepare your thoughts and notes on these questions (or do some research on the topics). I will randomly select several students in each session to get your answer about this question. The important thing here is to (a) show that you thought about the question and (b) understood its relation to the lecture materials.

Each student will be questioned by me **1 time** during the semester, however, during the zoom sessions, there will be opportunities for additional discussion, which can give you extra points (for example, if you were absent for your question, you may be able to make up for some of it by giving good ideas on other open discussion). Being present for the zoom session will reward you 5% of the final grade (whether or not you are called on) – total 15%. Answering your question will reward you maximum 10% of your final grade. Participating in

discussions and giving good ideas will give you the opportunity to receive the other (final) 5% - i.e. the difference between an maximum of an A and an A+.

c) Final Essay (30% of final grade)

You will select a topic related to the subject matter covered in the course (i.e. related somehow to Neuroscience B). If you are not sure, ask me via email (or during a live session). You will write a 1-2 page A4 report/essay in English about the subject. The purpose of this is to get you to learn something that we did not cover in class, but which you are curious about. Often, your essay topic idea may arise organically from questions that arise during our sessions.

The final essay will be due on the first feedback class day, 22 January, 2021 (2021/01/22)

Essay details:

a) Choose one topic from the essay topic list or pick one of your own (will be distributed in class and put on PandA). You don't have to tell me the topic before you submit the essay. Several students can choose the same topic. If the topic appears too broad for you, it is fine to focus on one aspect of the topic. **DO NOT COPY ONE ANOTHER OR COPY DIRECTLY FROM ANY BOOK OR ONLINE SOURCE.**

b) Write 1-2 A4 pages on this topic. The *minimum* is a single A4 page of text (Arial 11pt, line spacing 1.5). Images are not counted for the fulfillment of this minimum. If you include images, you should start a second page. Do not forget to cite your sources (even if it is wikipedia)! Two lines of references are counted as part of the text to fulfill the minimum. If you need more citations, you should start a second page. Again: Do not copy and paste or plagiarize! Feel free to contact me for reference literature or questions.

c) Submit your essay **as a PDF file** on PANDA by 2359 PM on 22 January, 2021. Do not forget to put your name and the title of the topic on it. I look forward to seeing your essays!

5. Resources

Lecture slides will be provided on PANDA (under RESOURCES)

1) Bear, Connors, Paradiso, 2012. Neuroscience: Exploring the brain. Lippincott. ISBN: 1451109547 (textbook not mandatory, lecture notes will be provided).

2) Kandel, Schwartz, et al., 2012. Principles of Neural Science. McGraw-Hill.

ISBN: 0071390111 (textbook with more detailed information, not mandatory).