11120LS 374300 行為神經科學 (Behavioral Neuroscience)

Lecture:
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Time: F3F4
Classroom: LSII-206

Textbook: "Neuroscience: Exploring the Brain 4th edition" (2016) by Mark F. Bear, Barry W. Connors, and Michael A. Paradiso (藝軒圖書 02-2918-2288)

Reference: "Behavioral Neuroscience 9th edition" (2020) by S. Marc Breedlove & Neil V. Watson (易利圖書 02-28485568 or 02-28479525)

Grading policy:
Take Home Essay Midterm (33%)
Take Home Essay Final (33%)
Group Presentation on Topics of Neuroethology (34%)

Materials:
Course materials can be found on the NTHU's E-learning website, https://eeclass.nthu.edu.tw/

Schedule:

Week	Date	Topic	chapters
1	2/17	Functional Neuroanatomy (mini review) *"Behavioral Neuroscience, chapter 2"*	2, 7
2	2/24	Neurophysiology (mini review) *"Behavioral Neuroscience, chapter 3"*	3, 4, 5, 6
3	3/3	Wiring the Brain	23
4	3/10	Chemical Control of the Brain and Behavior	15
5	3/17	Motivation	16
6	3/24	Sex and Brain **Take Home Essay Midterm** (due 4/7)	17
7	3/31	**Group Discussion Day**	
8	4/7	Brain Mechanisms of Emotion	18
9	4/14	Brain Rhythms and Sleep	19
10	4/21	Language	20
11	4/28	The Resting Brain, Attention, and Consciousness	21
12	5/5	Mental Illness	22
13	5/12	Learning and Memory *"Behavioral Neuroscience, chapter 17"* **Take Home Essay Final** (due 5/26)	24, 25
14	5/19		
15	5/26	Group Presentation	
16	6/2	Group Presentation	
17	6/9	Group Presentation	
18	6/16	Group Presentation	

Guidelines for Group Presentation on Topics of Neuroethology

- **What is Neuroethology?**
  According to International Society for Neuroethology:
  "**Neuro**-" refers to neurons, and "**ethology**" is the study of animal behavior, so "**neuroethology**" is a branch of science that seeks to understand the neural basis of "**natural**" animal behavior.

- Where to find your topics?
  o Journal of Comparative Physiology A
  o Journal of Experimental Biology | Subject Collection: Neuroethology
  o Proceedings of the Royal Society B

- Find your group members by week 5 (3/17), 2-3 people per group
  ** I will random assign groups if you do not come up a group yourself by then**
- Group assignment announced by week 6 (3/24)
- Group discussion day on week 7 (3/31)
  o Declare your topics
    ** NO overlap in topics among groups **
  o Decide presentation schedules on week 15 (5/26) – week 18 (6/16), two groups per week

Date	Group	Members	Topic
Week15 (5/26)			
Week16 (6/2)			
Week17 (6/9)			
Week18 (6/16)			

- For presentation
  o One essential review paper + one original research paper (within 3 years, aka after 02/2020)
  o EVERY group MUST upload the references to eeclass website by week 13 (5/12)
    ** 討論區→發表討論→標題 "Group X - your topic"→attach your two pdf files→確定**
  o On the day of presentation,
    ▪ 15-20 min background introduction (the major review paper + other references if needed)
    ▪ 20-25 min (original research paper)
    ▪ 5-10 min Q&A

- Grading policy
  o Within group evaluation (5%)
  o Between group evaluation (15%)
  o Evaluation by the lecture (9%)
  o Summary and commentary of the presentation of ONE other group (5%)
    ** 2 page A4, 1.5 line space, in English, due 6/19 (Mon) 10am, upload to eeclass **