

10810LS 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 8th edition” (2017) 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, <http://lms.nthu.edu.tw/>

Schedule:

Week	Date	Topic	chapters
1	9/13	No class (中秋節)	
2	9/20	Functional Neuroanatomy (mini review) “ <i>Behavioral Neuroscience, chapter 2</i> ”	2, 7
3	9/27	Wiring the Brain	23
4	10/4	Neurophysiology (mini review) “ <i>Behavioral Neuroscience, chapter 3</i> ”	3, 4, 5, 6
5	10/11	No class (國慶日彈性放假)	
6	10/18	Chemical Control of the Brain and Behavior	15
7	10/25	Group Meeting (sfm week)	
8	11/1	Motivation	16
9	11/8	Sex and Brain Take Home Essay Midterm (due 11/22)	17
10	11/15	Brain Mechanisms of Emotion	18
11	11/22	Brain Rhythms and Sleep	19
12	11/29	Language	20
13	12/6	The Resting Brain, Attention, and Consciousness	21
14	12/13	Mental Illness	22
15	12/20	Learning and Memory “ <i>Behavioral Neuroscience, chapter 17</i> ” Take Home Essay Final (due 1/3)	24, 25
16	12/27	Group Presentation	
17	1/3	Group Presentation	
18	1/10	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?

- Journal of Comparative Physiology A
- Journal of Experimental Biology | Subject Collection: Neuroethology
- Proceedings of the Royal Society B

- Find your group members by week 4 (10/4), 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 5 (10/11)

- Group meeting day on week 7 (10/25)

- Declare your topics
** NO overlap in topics among groups **
- Decide presentation schedules on week 16 (12/27) – week 18 (1/10), two groups per week

Date	Group	Members	Topic
Week16 (12/27)			
Week17 (1/3)			
Week18 (1/10)			

- For presentation

- One essential review paper + one original research paper (within 3 years, aka after 09/2016)
- EVERY group MUST upload the references to iLMS website by week 15 (12/20)
** 討論區 → 發表討論 → 標題 "Group X - your topic" → attach your two pdf files → 確定**
- 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

- Within group evaluation (5%)
- Between group evaluation (15%)
- Evaluation by the lecture (9%)
- Summary and commentary of the presentation of ONE other group (5%)
** 2 page A4, 1.5 line space, in English, due 1/13 (Mon) 10am, hardcopy, to my office **