

## **COURSE SCHEDULE: NEU 401 (Summer 2023) with Dr. Cameron Prigge**

Important Note: Refer to the course calendar (below) for a schedule of topic dates and due dates. Activity and assignment details will be explained in detail within each week's corresponding learning module in D2L. If you have any questions, please contact your instructor.

For Summer 2023, this course is offered online in a synchronous or asynchronous format. Lectures will be recorded and posting following the synchronous class for asynchronous students. Weekly quizzes, homework, and exams must be completed by the deadlines on the schedule.

Required Reading: Principles of Neurobiology (2<sup>nd</sup> ed). Liqun Luo. 2020. Online or hard copy. Please note this schedule is subject to change.

<b>Week</b>	<b>Dates</b>	<b>Topic(s)</b>	<b>Assigned Reading</b>	<b>Homework</b>	<b>Quizzes/Exams</b>
1	May 16 & 18	Neural micronetwork motifs; Cell biological properties of neurons  Electrical properties of neurons: RMP and neurons as electrical circuits	Syllabus and Course Schedule; Luo: p. 28-36  Luo: p. 37-49	Week 1 Worksheet DUE 5/23 by 11:59PM	<i>Week 1 Intro Survey</i> <i>Due 5/19 by 11:59PM</i>
2	May 23 & 25	Electrical properties of neurons: APs and AP propagation  Neurotransmission	Luo: p. 49-61  Luo: p. 69-75	Week 2 Worksheet DUE 5/30 by 11:59PM	Week 2 Quiz Due 5/23 by 12PM
3	May 30 & Jun 1	Organization of cell types: Neurons and Glia  TBD	---  TBD	Week 3 Worksheet DUE 6/6 by 11:59PM	<i>Week 3 Quiz</i> <i>Due 6/2 by 12PM</i>  <b>Unit 1 exam open 6/1</b>
4	Jun 6 & 8	Axon guidance  Synaptogenesis	TBD  TBD	Week 4 Worksheet DUE 6/13 by 11:59PM	Week 4 Quiz Due 6/6 by 12PM
5	Jun 13 & 15	Synaptic specificity  Synaptic pruning	Sanes & Zipurksy 2020  Sakai et al. 2020	Week 5 Worksheet DUE 6/20 by 11:59PM	Week 5 Quiz Due 6/13 by 12PM

<b>Week</b>	<b>Dates</b>	<b>Topic(s)</b>	<b>Assigned Reading</b>	<b>Homework</b>	<b>Quizzes/Exams</b>
	Jun 20 & 22	Synaptic plasticity  Olfaction	Luo: p. 450-464  Luo: p. 213-237	Week 6 Worksheet DUE 6/27 by 11:59PM	<i>Week 6 Quiz</i> <i>Due 6/23 by 12PM</i>  <b>Unit 2 exam open 7/22</b>
7	Jun 27 & 29	Visual System: Retina  Visual System: Higher order visual processing	Luo: p. 136-150  Luo: p. 151-170	Week 7 Worksheet DUE 7/6 by 11:59PM	Week 7 Quiz Due 6/27 by 12PM
8	July 4 & 6	NO CLASS – Independence Day 😊  Wiring the visual system	---  Luo: p. 173-186; 187-198	Week 8 Worksheet DUE 7/11 by 11:59PM	Week 8 Quiz Due 7/6 by 12PM
9	July 11 & 13	Developmental wiring specificity  Development of axons and dendrites	Luo: p. 281-296  Luo: p. 296-313	Week 9 Worksheet DUE 7/18 by 11:59PM	<i>Week 9 Quiz</i> <i>Due 7/14 by 12PM</i>  <b>Unit 3 exam open 7/13</b>
10	July 18 & 20	Development of neural maps  Neurogenetics	Luo: p. 313-325  Luo: p. 326-332; 411-423	Week 10 Worksheet DUE 7/25 by 11:59PM	Week 10 Quiz Due 7/18 by 12PM
11	July 25 & 27	Regulation of eating and drinking  Regulation of sleep and circadian rhythm	Luo: p. 375-383  Luo: p. 394-409	Week 11 Worksheet DUE 8/1 by 11:59PM	Week 11 Quiz Due 7/25 by 12PM
12	Aug 1 & 3	Neurodegenerative disease  Neurodevelopmental disorders	Luo: p. 499-520  Luo: p. 533-543	---	<i>Week 12 Quiz</i> <i>Due 8/1 by 12PM</i>  <b>Unit 4 exam open 8/3</b>