

CAPS 426 Physiological Basis of Central Nervous System Functions

2021 Schedule

Course will be held on-line via Zoom (through Canvas)

Time: Tuesdays and Thursdays, 8:00am-10:00am

Course Director: Dr. Kurt Haas (kurt.haas@ubc.ca)

Course Lecturers: Drs. Tim O'Connor, Eric Accili, Chris Loewen, Shernaz Bamji, Doug Allan, Kurt Haas

Grading: There will be 4 in-class exams, each covering the 4 or 5 preceding lectures. There will be no additional Midterm or Final. Each exam will be worth 25% of the final grade.

1. Jan. 12, 2020 (Tues): Introduction to the Neuron (Dr. O'Connor)
2. Jan. 14, 2020 (Thurs): General Neuroanatomy (Dr. O'Connor)
3. Jan. 19, 2020 (Tues): Cell Biology of the Neuron (Dr. Loewen)
4. Jan. 21, 2020 (Thurs): Membrane Potential and Action potentials (Dr. Accili)
- 5. Jan. 26, 2020 (Tues): EXAM 1 (covers classes 1-4)**
6. Jan. 28, 2020 (Thurs): Neuronal Electrophysiology (Dr. Accili)
7. Feb. 2, 2020 (Tues): Development – Neurogenesis, Migration and Patterning (Dr. Allan)
8. Feb. 4, 2020 (Thurs): Development – Differentiation (Dr. Allan)
9. Feb. 9, 2020 (Tues): Neurogenetics (Dr. Allan)

Reading Week Feb. 15 - 19

- 10. Feb. 23, 2020 (Tues): EXAM 2 (covers classes 6-9)**
11. Feb. 25, 2020 (Thurs): Receptors and Neurotransmitters (Dr. Haas)
12. Mar. 2, 2020 (Tues): Axonal pathfinding (Dr. O'Connor)
13. Mar. 4, 2020 (Thurs): Cell death in neuronal development (Dr. Bamji)
14. Mar. 9, 2020 (Tues): Sensory and Motor Systems (Dr. Bamji)
15. Mar. 11, 2020 (Thurs): Synaptic plasticity – LTP/LTD (Dr. Bamji)
- 16. Mar. 16, 2020 (Tues): EXAM 3 (covers classes 11-15)**
17. Mar. 18, 2020 (Thurs): Synaptogenesis and Circuit formation (Dr. Haas)
18. Mar. 23, 2020 (Tues): Learning and Memory (Dr. Haas)
19. Mar. 25, 2020 (Thurs): Neural Encoding (Dr. Haas)
20. Mar. 30, 2020 (Tues): Sleep and Consciousness (Dr. Haas)
21. Apr. 1, 2020 (Thurs): Disease Modeling, Regeneration (Drs. Bamji/O'Connor)
- 22. Apr. 6, 2020 (Tues): EXAM 4 (covers classes 17-21)**