In Winter 2020, this seminar will be related to the neural regulation of sleep and waking.

Students will present seminars on subjects related to some of the following topics:
- neural basis of circadian rhythms
- role of the pineal gland and melatonin in sleep and rhythm regulation
- neurotransmitter systems regulating REM sleep, NonREM sleep, waking and dreaming
- neural mechanisms involved in sleep disorders
- role of thalamocortical mechanisms in sleep and waking
- consciousness and information processing during sleep
- sleep mechanisms involved in neural plasticity
- sleep mechanisms involved in memory consolidation

Students will make two presentations during the term and write a final paper related to their chosen topic(s).

NESC/PSYO 3264 The Science of Sleep is a prerequisite for senior undergraduates to register for this course.

Graduate students may register in a parallel 5xxx course if they have the prerequisite or have equivalent background preparation. Contact the instructor for permission: rusak@dal.ca.
Neuroscience 4070.03 (2019/2020)
Chemical Neurobiology

Instructor: Dr. Kazue Semba
Telephone: 902-494-2008
Email: semba@dal.ca
Time: Tuesday, 13:35 – 15:25 (Winter)
Room: Tupper Bldg 14B02

Requirements: Introductory neuroanatomy, neuropharmacology, neurophysiology will be helpful. The goal of this course is to acquaint the student with modern concepts and methodologies concerning neurotransmitters and neuromodulators. Topics include classical neurotransmitters (amino acids, monoamines, and acetylcholine), neuropeptides (for example, orexins), and related current topics. The course will be organized in lecture format, with student presentations of primary articles. Evaluation will be based on presentation (35%), take-home assignments (30%), and a term paper (35%).

Psychology 4090.03 (2019/2020)
Development of Social Behaviour

Instructor: Dr. Sophie Jacques
Telephone: 902-494-3551
Email: Sophie.Jacques@Dal.Ca
Time: Wednesday, 14:35 – 16:25 (W)
Room: LSC 236

This seminar will focus on topics related to the development of self-control. We will cover theory, research paradigms and findings, as well as explore potential causes and consequences of self-control. Additional specific topics will focus on students’ backgrounds and interests (e.g., adolescence and risk-taking, addictions, clinical disorders, neuroscience, etc.). There will be required weekly readings, and seminars will take the form of student-led discussions. Evaluations will be based on class presentations, in class participation, and short reflection papers based on the required readings.
Psychology 4092.03 (2019/2020)
Development Psychology Topics

Instructor: Rebecca Tucker
Telephone:
Email: Rebecca.Tucker@Dal.Ca
Time: Thursday, 11:35 – 14:25 (Fall)
Room: Mona Campbell Bldg 1108

Each year, this seminar course focuses on a selected topic in developmental psychology. This year, we will examine the adolescent developmental period and the transition into early adulthood. We will cover a series of topics affecting development during this period. Some areas of focus will be biological and cognitive development, key developmental contexts (e.g., family, school/employment, peer relationships, media), and key developmental tasks (e.g., gaining independence, building self-identity, understanding love and sexuality). In covering these areas, we will also examine both problems that can arise, and resilience, within this developmental period.

Psychology 4120.03 (2019/2020)
Topics in Clinical Psychology:
Clinical Aspects of Traumatic Stress

Instructor: Dr. Elaine Ply
Telephone: 902-494-6976
Email: Elaine.Ply@Dal.Ca
Time: Wednesday, 09:35 – 11:25 (Winter)
Room: LSC 4269

This course is designed to introduce students to the field of traumatic stress studies using a combination of lecture, group work, in-class discussion and activities, and student-led presentations. During the term, several different types of trauma will be reviewed including: child maltreatment, interpersonal violence, sexual assault, natural and man-made disasters, violent crime, and combat-related trauma. The history of the trauma field and current approaches to understanding trauma, including risk and resilience, prevention, treatment, and post-traumatic growth will also be examined. Finally, consideration will be given to the special issues confronting trauma workers.
Psychology/Neuroscience 4140.03 (2019/2020)
Topics in Animal Learning

Instructor: Dr. Simon Gadbois
Telephone: 902-494-8848
Email: Simon.Gadbois@Dal.Ca
Time: Tuesday, 14:35 – 16:25 (Fall)
Room: LSC 214

Coming Soon!

Psychology/Neuroscience 4160.03 (2019/2020)
Topics in Behavioural Biology

Instructor: Dr. Simon Gadbois
Telephone: 902-494-8848
Email: Simon.Gadbois@Dal.Ca
Time: Thursday, 11:35 – 13:25 (Winter)
Room: LSC 5257

Coming Soon!

Neuroscience 4185.03 (2019/2020)
Synaptic Function and Plasticity

Instructors: Krueger/Fine
Telephone: 902-494-1614
Email: Stefan.Krueger@Dal.Ca
Time: Thursday, 14:35 – 16:55 (Fall)
Room: Tupper 3A01

This seminar focuses on recent research in cellular neurophysiology. Topics include mechanisms of synaptic transmission and plasticity, excitability, dendritic integration, function of neuronal circuits and advances in experimental methods in the field. During class, students will present research publications and discuss arising learning issues. The evaluation will be based on presentations (65%), participation (10%), and a final exam (25%). Pre-requisites: Cellular neuroscience (NESC 2570) is helpful.
History of Neuroscience (2019/2020)
NESC 4587.03 – Dalhousie University
HSTC 4301 – University of King’s College

Instructor: Dr. Richard Brown
Telephone: 902-494-3647
Email: rebrown@dal.ca
Time: Tuesday and Thursday, 16:05 – 17:25 (Winter)
Room: LSC 214

Coming soon!

Neuroscience 4670.03 (2019/2020)
Neuro (epi)genetics & Genomic

Instructor: Dr. Ian Weaver
Telephone: 902-494-1133
Email: Ian.Weaver@Dal.CA
Time: Friday, 11:35 – 13:25 (Fall)
Room: LSC 4269

Coming soon!