Zoology 962: Behavioral Neuroscience (seminar)
1 credit
https://canvas.wisc.edu/courses/89383

Course Designations: Counts toward 50% graduate coursework requirement

Meeting time and location: Determined each semester

Instructional Mode: all face-to-face

Course structure: This graduate seminar follows a format that emphasizes the development of graduate student scientific communication skills and critical thinking. Most class meetings entail student-led research presentations and discussion.

Credit hours: Traditional. Direct classroom 50 minutes per week (50 min x 1 = 1 credit). At least two hours per week of out of class work is expected for each student.

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Seminar course description:
This seminar is designed to develop graduate student professional scientific communication skills in the area of Behavioral Neuroscience. Individual students lead the seminar each week. Typically students prepare and present ongoing research, ideas for future research, give practice conference or job talks, or lead discussion of a grant proposal, a paper in preparation or primary literature. When not presenting students discuss, critique, and provide oral and written feedback.

Requisites:
Graduate or professional standing

Learning outcomes:
In this course:

- Students will be able to prepare and present scientific research to peers in formats used at conferences or at job interviews (i.e., orally, in posters, in writing)
- Students will be able to identify strengths and weaknesses of original, ongoing studies in the field of behavioral neuroscience
- Students will be able to research a topic using original scientific articles and to identify directions for future research

Grading:
Grades will be based on leading (25%) and participating (75%) in class discussion
Numerical grades are assigned as follows: 93-100 (A), 88-92 (AB), 82-87 (B), 78-81 (BC). Attendance is required, and coming to class having read the assignments and being prepared to discuss is expected.
Attendance: 5% points are subtracted for each missed class; however, in rare cases an absence may be excused: Contact instructors before class if you believe you have such a case. You are still responsible for reading assignments. You will not lose points for such an absence.

Possible Topics:
Topics are selected by graduate students and relate to the ongoing research interests of individual students. Recent topics include:

- Epigenetic, endocrine, and neural bases of sexual differentiation
- Neuropeptide regulation of parental behavior
- Agonistic behavior and testosterone
- Neural control of dominance interactions
- Neural regulation of courtship / mate attraction, mate choice
- Neuroendocrine mechanisms regulating seasonal behavior
- Neural and immune system regulation of behavior
- Effects of early developmental stress on brain and behavior
- The neural and endocrine control of communication in mice and birds
- Environmental factors influencing hormones, brain, and behavior
- The role of the vagus nerve in behavior
The role of smiles in human behavior

**Required textbooks, software & other course materials:**

No formal textbook will be used.

Excellent background textbook sources:
- An Introduction to Behavioral Endocrinology by R. J. Nelson
- Behavioral Endocrinology edited by Becker, Breedlove, Crews, and McCarthy
- Hormones and Animal Social Behavior by E. Adkins-Regan

**Exams, Quizzes, Papers, & other major graded work:**
Topics are selected by students. Most weeks 1 student will prepare a presentation in the format used in job interviews or at scientific conferences and receive peer review from classmates. Other possibilities include practice poster presentations, discussion of research methods, and presentation of ideas for future research. Students may also use the seminar to improve and develop papers in progress or grant proposals or to discuss published peer-reviewed articles related to ongoing research interests. These are sent to the class one week prior to the seminar in which they are to be discussed. For the remainder of the class all students are expected to discuss the strengths, weaknesses, and insights of the papers or research and offer suggestions for improvement. All members of the seminar are expected to come to class prepared. The role of the instructors is to facilitate discussion and each student is expected to play an active role in each weekly seminar. The goal of the seminar is to improve professional scientific communication skills, to write strong grant proposals and to understand and critically critique primary literature and research in the field of behavioral neuroscience.

**RULES, RIGHTS & RESPONSIBILITIES**

- See the Guide’s to [Rules, Rights and Responsibilities](#).

**ACADEMIC INTEGRITY**

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison’s community of scholars in which everyone’s academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to [studentconduct.wiscweb.wisc.edu/academic-integrity/](http://studentconduct.wiscweb.wisc.edu/academic-integrity/).

**ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES**

McBurry Disability Resource Center syllabus statement: “The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational
opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.” http://mcburney.wisc.edu/facstaffother/faculty/syllabus.php

DIVERSITY & INCLUSION

Institutional statement on diversity: “Diversity is a source of strength, creativity, and innovation for UW-Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals.

The University of Wisconsin-Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background – people who as students, faculty, and staff serve Wisconsin and the world.” https://diversity.wisc.edu/