

Term Information

Effective Term Autumn 2015

General Information

Course Bulletin Listing/Subject Area Psychology
Fiscal Unit/Academic Org Psychology - D0766
College/Academic Group Arts and Sciences
Level/Career Graduate
Course Number/Catalog 6808
Course Title Sex Differences in the Brain and Behavior
Transcript Abbreviation Sex Diff Seminar
Course Description This seminar will explore sex differences in both normal and abnormal brain function and behavior and will address the genetic, hormonal and neural bases of these differences.
Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 14 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites
Exclusions

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 42.0101
Subsidy Level Doctoral Course
Intended Rank Masters, Doctoral

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- Students will learn the importance of studying both males and females in neuroscience research
- Students will learn critical research and methodological issues in the study of sex differences
- Students will learn sex differences in a range of cognitive, emotional and social behaviors
- Students will learn sex differences in the neurobiology of disease and mental disorders
- Students will learn the genetic and hormonal pathways by which sex differences are established

Content Topic List

- Sex determination
- Research and methodological issues in the study of sex differences
- Sex differences in HPA axis regulation
- Sex differences in social bonding
- Sex differences in neuroplasticity

Attachments

- Psych 6808 syllabus.docx: syllabus

(Syllabus. Owner: Paulsen, Alisa Marie)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Paulsen, Alisa Marie	08/22/2014 10:49 AM	Submitted for Approval
Approved	Opfer, John Erich	08/22/2014 11:44 AM	Unit Approval
Approved	Haddad, Deborah Moore	08/22/2014 12:31 PM	College Approval
Pending Approval	Hogle, Danielle Nicole Jenkins, Mary Ellen Bigler Hanlin, Deborah Kay Vankeerbergen, Bernadette Chantal Nolen, Dawn	08/22/2014 12:31 PM	ASCCAO Approval

Sex Differences in the Brain and Behavior
Psychology 6808
Autumn/Spring, 20XX

Time: XXX

Place: XXX

Instructor: Dr. Benedetta Leuner

Assistant Professor, Departments of Psychology and
Neuroscience

Psychology Building, Rm. 51

Phone: 614-292-5218

Email: leuner.1@osu.edu

Course Overview: This course explores sex differences in the brain and behavior. Specifically, students will learn the importance of studying both males and females in neuroscience research as well as critical research and methodological issues in the study of sex differences. We will cover sex differences in a range of cognitive, emotional and social behaviors as well as sex differences in the neurobiology of disease and mental disorders. The genetic and hormonal pathways by which sex differences are established will be emphasized.

Attendance: There are no exams in this course so attendance is a must. If you expect to be absent you must obtain permission from the instructor prior to the start of the class. Acceptable excuses are a death in the family, personal illness or the illness of your child or spouse, and unforeseen accidents. Please obtain documented proof of these events should they occur. If no notification is received, the absence will be counted as unexcused. Attendance will count for 20 points of your final grade and will be computed as follows:

20 points = up to 2 excused absences

15 points = 3 excused or 1 unexcused absence

10 points = 4 excused or 2 unexcused absences

5 points = 5 excused or 3 unexcused absences

0 points = 6 or more excused or 4 or more unexcused absences

Participation: All students are expected to actively participate in class. The entire course revolves around our ability to read and then discuss a given topic, which means everyone must contribute. In order to facilitate discussion, each student must prepare 2-3 discussion topics/questions. This is not meant to be an essay, but rather a few bulleted sentences outlining thoughts, criticisms, methodological concerns, etc. about the assigned article(s). Class participation will account for 20 points of your final grade. In order to get your participation points, discussion topics should be handed to me in class or emailed to me no later than the class day the journal article is scheduled to be discussed.

Readings: Each week (Tuesday and Thursday) you must be prepared to discuss 2-4 pre-assigned journal articles, uploaded to Carmen, on a particular topic. The articles were chosen to present a reasonably coherent, though not complete, view on a particular theme. There is no required textbook for this course. However, I recommend Sex Differences in the Brain: from Genes to Behavior (Eds. Becker, Berkley, Geary, Hampson, Herman and Young) for those students that would like a resource with background information relevant to the topics that will be discussed.

Discussion Leaders: Beginning in week 3, two students will coordinate and lead the discussion based on that week's articles. NOTE: you may have to look up some background information or results from other studies to fully prepare. While I am always available to assist, my preference is each team work independently.

At the beginning of each class, discussion leaders should plan to spend about 20 min elaborating on: (i) the big-picture theme that ties the readings together; (ii) what information from each article informs the theme; and (iii) the paper's methodology and results (research paper) or summary of results (review paper). This is not an exhaustive list and there is no set format. Students are encouraged to be creative in their approach, provided we don't go too far off topic—e.g., you may use PP slides, hand-outs, extra media (e.g., film clips), etc. Following the 20 min introduction you will then lead the remainder of the discussion. Your role as discussion leader will account for 20 points of the final grade. *Note, depending on the total number of students enrolled some students may be required to act as discussion leader twice.*

Student Presentations: The final two weeks will consist of student presentations on something related to the topic of sex differences not discussed in class. Your presentation should run about 15 min, with an

additional 5 min for questions. Although you can choose a topic of interest, it should be a high-quality research article within the last 3 years. The goal is to expand upon and apply what you've learned in the course. I am happy to provide feedback and guidance as you decide on what topic to present. Your presentation will be worth up to 20 points.

Final Paper: The final paper should be written in a review article format and will expand upon the topic of your student presentation. It should be 20 typed, double-spaced pages not including references.

Grade: Final grades will be based on standard breakdown percentages, out of 100 points (e.g., 90 for an A-).

Class attendance: 20 points
Class participation: 20 points
Discussion leader: 20 points
Class presentation: 20 points
Final Paper: 20 points

Course Schedule: This schedule is *preliminary and subject to change*. A revised syllabus will be handed out the first day of class containing a listing of all reading material. Any other changes will be announced in class and posted on Carmen.

Week 1: Introduction/Historical Perspectives
Week 2: Methodological Issues in the Study of Sex Differences
Week 3: Sexual Differentiation of the Brain
Week 4: Sexual Differentiation of the Brain
Week 5: Sex Differences in Affiliative Behavior and Social Bonding
Week 6: Sex Differences in HPA axis Regulation
Week 7: Sex Differences in Neuroplasticity
Week 8: Sex Differences in Cognitive Function
Week 9: Sex Differences in Neuroimmunology
Week 10: Sex Differences in Pain
Week 11: Sex Differences in Affective Disorders
Week 12: Sex Differences in Aging and Alzheimer's
Week 13: Student Presentations
Week 14: Student Presentations

Statement on Academic Misconduct: It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/pdfs/csc_12-31-07.pdf

Accommodations for Students with Special Needs: Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.