

Hormones and Behavior (PSY 450/550)
University of Oregon
Winter 2014

Instructor: **Dr. Jagdeep Kaur-Bala**
207 Franklin Building
346-4953
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Classroom: **229 McKenzie Hall**
Time: **12:00pm-1:20pm TR**

Office Hours: **1:30pm – 3:00pm Tuesday/Thursday** (& by appointment)

Teaching support: *GTFs are also available to help students.*

Christina Gamache-Martin, 211 Franklin, Off. Hrs: By appointment only. gamachem@uoregon.edu

Course website: <http://blackboard.uoregon.edu> This course is managed via blackboard. This site will provide supplemental information for the course (syllabus, course schedule, grades, copies of overheads, assignments, etc.). Please be sure to check for announcements and updates often.

General Course Description: In this course, we will examine the relationships between the brain, the endocrine systems, and behavior. We will study the effects of hormones on development and differentiation of the body and the brain and interactions between hormones and behavior, especially in the context of puberty, sexuality, parenting behaviors, aggression and stress.

Required Text: ***An Introduction to Behavioral Endocrinology*** by Randy J Nelson, 4th edition is required. Please notify me immediately if you have difficulty obtaining the text from the bookstore. (A copy of the text is on reserve in the Knight Library)

Other Texts: Students interested in reading additional in depth reading may find these texts particularly interesting. Please note that **all additional reading will be posted on Bb**; you are NOT required to buy either of these books.

Behavioral Neurobiology: The Cellular Organization of Natural Behavior, Thomas J. Carew, Sinauer Publishing

Behavioral Endocrinology, Jill Becker, S. Breedloves and D. Crew, MIT Press.

Course Format: The goal of this course is to familiarize you with basic concepts in Behavioral neuroendocrinology as well as with current findings in hormone-behavior interactions. In addition, we will work to enhance scientific thinking, critical reasoning and self-study skills through frequent discussions and different assignments. The material in this course will be presented through a combination of assigned readings from the text, class lectures, in-class discussions, and demonstrations. Lecture material and readings will have some overlap, but will not be replications of each other; some lecture material will not be covered in the readings and vice versa. Each of the non-lecture parts of the course (discussions, papers, presentations, etc.) are designed to reinforce ideas and augment concepts presented in lectures. Questions are encouraged in all parts of the course and students are welcome to stop by my office for questions and/or discussions during my office hours or for additional appointments. Questions/clarifications via emails are also encouraged at all times. It is my hope that by the end of this course you will have a new appreciation for how your body physiology mediates your interactions with the world (and how the environment, in turn, influences your behavior). This is a fast paced class and you should plan on scheduling regular intervals of time for studying/assignments outside of class.

GRADING POLICY

Final grades are based on consistent performance through the term. As such, the final grade will include the weighted scores for the quizzes, the term paper, study group discussion responses and the exams. Graduate students (Psy550 class) will also undertake an additional self-study assignment and prepare a presentation for class that will also be graded. In addition, some opportunities for extra-credit will be available to all. **Letter grades will be determined as follows: A (90-105% of total possible points), B (80-89%), C (70-79%), D (60-69%), F (0-60%).** Scores in the upper and lower third of each grade range will be awarded a 'plus' or a 'minus' respectively. Typically, grades are not curved. However, the instructor reserves the right to relax (but not stiffen) this criterion for final grade assignments, depending on the actual distribution of scores.

- **Midterm Exams** – 20% of final grade each
- **Final Exam** – 25% of final grade
- **Quizzes** – Of the 6 quizzes (4 MCQs each), scores from the your highest- scoring 4 quizzes form 12.5% of final grade (10% for graduate students)
- **Term Paper** – 12.5% of final grade (15% for graduate students)
- **Class presentation** (graduate students only) – 10% of final grade
- **Study group discussion responses** – 10% of final grade (0% for graduate students)
- **Extra-credit** (optional) - up to 4 points added to final grade

Quizzes (12.5%; 10% for PSY550): Short quizzes will be given in the first 10 minutes of several scheduled classes (see course outline). Quizzes will contain 4 multiple choice questions that pertain to the most recently presented lecture materials and related readings from the text. The quizzes are designed to serve as quick reviews of recently covered materials as well as to help you keep up with the reading assignments. Of the 6 quizzes, the 2 with the lowest scores will be dropped, with the score of the remaining four yielding 12.5% of the final grade. No make-up quizzes will be offered; if you miss a quiz, that grade will be one of the two that will be dropped.

Exams (Midterms – 20% each; Final 25%): The midterm and final exams will be part multiple choice, part fill-in-the-blank, match-the-following and part essay type. All exams are comprehensive i.e. each exam will contain questions drawn from the entire course. However, a greater focus on material covered after the previous exam is typical. ***No make-up exams will be given without evidence of a valid excuse, and the final cannot be taken earlier or later than the time listed in the University final exam schedule – if you know in advance that you cannot take all exams on the appointed dates (see the course schedule below), do not take this course!*** If unforeseen circumstances during the term prevent you from taking an exam, notify the instructor immediately. Allowable excused absences are medical emergencies, athletic events such as away games for student athletes and executive orders/court orders. All such occasions must be accompanied by official documentation. Student athletes should notify me of their away schedule early in the term and make arrangements for taking missed tests on the road, when possible. Format of make-up exams may be different in type of questions and/or choices.

Study group Reading responses and discussion assignments (10%): We will form 5-6 member study groups in order to have some contact time outside the class in which course work maybe discussed and small assignments completed as a group. The study groups will be expected to meet once a week and 5 discussion reports will be due during the term (see outline for due dates). For each report, I will give you assignments and will be looking for timely responses (via Blackboard). Only one response is required from each group for each of the assignments. All members of the group will receive the same grade for the assignment.

Note: Sometimes, group members feel that not everyone in the group is working to their best and so it is not fair for everyone in the group to receive the same grade for an assignment. If such is the case for your group, you can choose (as a group) to award individual grades for the report. *If the group decides that it is not fair that every person receives the same grade for a particular report, I will let the*

group decide on grades for each member. For example, if the group grade on a particular assignment is 85 and there are 5 members in the group, the group will have a total of 425 points (85 times 5) to spread among its members. The group can then negotiate with all members and spread out the total points to all members in any way the group sees fits, as long as all members agree to the point spread. *The only requirement is that the group negotiates who gets what grade and that all members of the group give me a written agreement to the point spread. It will be the responsibility of the group to notify me of the point spread if they wish to use this alternative.*

Class Presentations: (10% - graduate students only) Psy550 students will be required to create a 15 min presentation related to the course materials on a topic of **their** interest. Presentations should be designed to share in depth study on an area related to behavioral neuroendocrinology not directly covered in the lectures. Topics for presentations are due **beginning of the first class of week 3**. Students are expected to set up an appointment for a one-on-one meeting with the instructor at least once before this date and once before the date of your presentation. This ensures that the effort you put into this assignment is focused and fruitful!

If two or more students have the same idea for a presentation, the one that informs me first (by email) will have exclusive rights to the idea. You are encouraged to confer with me about the choice of topics, the research involved and the preparation of the presentation. Accompanying write-up and copies of slides, overheads, etc. are **due on the day of your presentation**. *The instructor reserves the right to keep copies of the presentations for use in future courses.* Of necessity, the class presentations will be spread out through the latter part of the term; some presentations will have to take place earlier in the term than others. Dates of individual presentations will be decided by the instructor. As such, while assessing/grading the presentations, I will be sure to keep in mind the amount of time (into the term) each student got for preparation of this assignment.

Term Paper (12.5%; 15% for PSY550): Students will be required to write a 7 – 9 page (double-spaced, 1 inch margins, 10-12 point font) term paper that describes compares and contrasts two journal articles that address a topic relevant to hormones and behavior. I suggest that you use the textbook and course outline as a first source for selecting a general topic, followed by library, PsychINFO, and Medline searches for the selection of the two related articles on the topic of your interest (for online assistance in your search, see <http://libweb.uoregon.edu/guides/psychology/>). The referenced articles must be **empirical** in nature, with data collected to investigate a specific question related to the topic of interest (*i.e., no review or summary articles*). The due dates for this assignment have been designed to help you get an early start on your assignment and enable you to distribute the work on the paper throughout the term. You must turn in four different items pertaining to the paper:

- 1) A topic name, citations of the 2 related articles chosen and a brief description of the topic (one paragraph describing why the topic is appropriate and interesting, and how the 2 research articles that you have chosen will help you investigate the topic should be **submitted to the "Term Paper" section of Blackboard**. Submissions via email will not be accepted. This will account for **10% of the term paper grade**).
- 2) The term paper topic and articles chosen will be finalized after feedback from the instructor/GTF. Electronic versions of the complete articles should be submitted on Blackboard. *After the due date, you may not change your chosen topic and articles without my consent.*
- 3) **Peer review (optional)** - A draft of the paper that will be given to other students in the class to review. If you chose to do the peer review, you must bring a hardcopy draft of your paper to class on the date it is due. If you choose to do this, it will account for **20% of the term paper grade (10 for your editing ability of your peer's paper and 10 for the draft)**. *If you choose NOT to go through this process your final paper will be graded with this 20% included in the assessment.* Edited papers are due back in the following class.
- 4) **Safe Assign check**– I strongly encourage you to upload your paper to SafeAssign on Blackboard and check for originality of writing for yourself before submitting your paper for grading. Students who are asked to upload after submission are REQUIRED to upload their papers. In these cases,

failure to do so in a timely fashion will adversely affect your grade. At that time, if your writing is found lacking in originality, you may be penalized (see academic honesty section below)!

- 5) The final version of the paper is due on **Tuesday, Mar. 11th**. The paper as well as the peer edited draft (for those who took the option) should be submitted in **hardcopy** at the beginning of class. The paper should include a title page, abstract and citations written in APA style ([reference copies of the APA Publication Manual](#) are available in many of the University Libraries).

Each paper should include (*with equal emphasis on #2 through #6 below!*):

- 1) A brief introduction to the general topic.
- 2) A summary of the articles in your own words, including the question under investigation, the hypothesis being tested, the methods used, the findings, and the conclusions drawn by the authors.
- 3) A comparison of the two articles, describing how the findings of one either support, conflict, or extend the findings of the other.
- 4) A discussion of the merits and deficits of the articles, including suggested ways that the deficits could have been avoided. *For example, questions such as these should be addressed: Is the question an interesting one, and is it framed properly? Is the hypothesis valid and defensible? Are the methods appropriate to address the question? Are the findings clear and interpreted appropriately? Are the authors' conclusions warranted, given the findings?*
- 5) An overall assessment of the significance and quality of the contribution of the articles to the field of Hormone and Behaviors.
- 6) Future directions for the research should be discussed. Suggest a research study you would conduct if you were to take this research further. (*This should include a clear well defined hypothesis and discussion of expected findings, but need not detail methods or analysis*)

In order to improve the quality of papers, and to provide you with experience editing, papers will be **peer edited** (optional). On the day that the paper is "due for editing", you will turn your paper in hardcopy at the beginning of class. At the end of class, you will be given someone else's paper to edit. You will have 2-5 days to edit the other student's paper, and then you will bring the paper to the next class and return it to the student. Your paper, meanwhile, will have been edited by someone else. You will then have a few more days to consider the corrections, incorporate those you think are good, revise the paper, and then turn in your "final version" of the paper **AND** the corrected original. Your grade on the paper will be based mainly on the final version, but your original will be considered too (10% points), in order to prevent sloppy first drafts. Your editing will also be evaluated (10% points), and you will receive points toward your final grade for it. Guidelines for editing will be available on Blackboard.

Important note: ALWAYS keep a copy of your paper and reference articles either on disk, or a hard copy! Your peer editors are no more reliable than you, perhaps less so, and they may misplace or forget your paper. If your peer editor does not return your edited paper to you, you will not be penalized (except that your paper will not have the benefit of having been edited – you may wish to ask a friend in the class to edit your paper for you), but you will still be responsible for turning in an original and final version of the paper when it is due. Also, please keep in mind that just as the quality of students in this course varies so does the quality of editing. Taking bad advice from a peer editor is no excuse for errors in a paper. Papers (drafts) are due at the beginning of class on the day they are due. If you don't turn your paper in before the start of class, it will not be eligible for peer editing, and you will not be given a paper to edit (so you will lose your peer editing points). If you cannot be in class the day a paper is due for peer editing, you may turn in the paper early so that you will be eligible for the peer editing system, but it is your responsibility to arrange to pick up the paper you are to edit from me. If you cannot be in class the day peer edited papers are to be returned to their authors, you can also return the edited paper early.

Peer-edited draft (if option taken) should be attached to your final paper; both submitted in hardcopy before class on the due date. The term paper grade will be determined by 1) the timely submission of your topic and citation and the paragraph describing the **term paper topic (10%)**, 2) the quality of the final **paper (90%)** [**or paper(70%)** and **draft(10%)** with the peer editing that you provide another student **(10%)**]; in

total, the paper grade is worth 10% of the final grade in the course. Please note: At no point will email submissions be accepted for this assignment. Please be sure to submit the topic, citations, and articles on Blackboard and the draft and final paper for grading as hardcopies!

Finally, plagiarism will not be tolerated, and will be dealt with according to official University policy (see section on Academic Honesty below).

What about extra credit? Extra-credit will be awarded for class participation and occasional in-class assignments/group work/discussions. You can earn **up to 4 points** in extra credit for **Class Participation**. These points will be **added to your final grade** at the end of the class. So, if you score an 80% with tests and assignments, and you earn 3 points of extra credit, your final score will be 83%.

Participation is based on **attendance and discussion**. Attendance will be taken during some (random!) class periods and after specific class activities. This can be at any point during the class period. All students who participate in the activity and sign attendance at that time will be awarded EC points. It is important that you come to class. Many of the exam questions are derived from lecture content that is not in the assigned readings. If you miss a class, please try to get a copy of the lecture notes from a classmate.

Due Dates Due dates for the term paper are contained in the course outline. **Assignments are due by the start of lecture on the appropriate date. While some assignments are required in hardcopy, others should be submitted via Blackboard.** Please follow all instructions carefully. Email submissions are not acceptable and will not be graded. **An assignment turned in after its deadline will be marked down 10% for each day late.** If you do not expect to be in class on the day an assignment is due, you may turn it in to me or your GTF during office hours before the due date.

Students with Disabilities: If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with the instructor as soon as possible. *The University of Oregon is working to create inclusive learning environments. Please notify me if there are aspects of the instruction or design of this course that result in disability related barriers to your participation. You are also encouraged to contact the Accessible Education Center (formerly Disability Services) in 164 Oregon Hall at 346-1155 or uoaec@uoregon.edu.* Also, please request that an AEC adviser to send a letter verifying your disability and accommodation needs. For a list of resources provided by the Accessible Education Center, please see <http://aec.uoregon.edu/about/index.html>

Students for whom English is a Second Language: If you are a non-native English speaker and think you may have trouble in this course due of language difficulties, please see the instructor as soon as possible to make special arrangements. Please note that you may NOT use electronic dictionaries/translators during exams/quizzes. However, if necessary, please discuss the need for a paper dictionary with the instructor at the beginning of the term and appropriate arrangements will be made.

Academic Honesty: **Cheating will NOT be tolerated in any form in this class.** All work submitted in this course must be your own. You may be required to submit writing assignments to **SafeAssign**. SafeAssign is a software tool designed to help students avoid plagiarism and improper citation. For more information on SafeAssign refer to guidelines on Blackboard. By enrolling in this course you grant the instructor permission to submit your work to SafeAssign or some other plagiarism program analysis and detection program. For the consequences of academic dishonesty, refer to the Schedule of Classes published quarterly. If your responses on assignments are suspected of plagiarism or if a proctor has any reason to be uncomfortable about your conduct during a test, they may ask you to move seats, confiscate your test and/or mark an "F" for that test/assignment. All violations will be taken seriously and are noted on student disciplinary records. If you are in doubt regarding any aspect of these issues as they pertain to this course, please consult with the instructors before you complete any relevant requirements of the course. (For more information, see the UO web site regarding academic honesty at: <http://uodos.uoregon.edu/StudentConductandCommunityStandards/AcademicMisconduct/tabid/248/Default.aspx>).

Course Outline: This is only a working draft of the course outline; it will be revised as the term progresses. **Dates on which particular topics are to be presented in lecture are subject to change, as are reading assignment due dates; however, I will not change the dates of quizzes, exams or term paper deadlines unless absolutely necessary.** The official updated version of the outline will reside on the Blackboard web site. Updated print versions can also be obtained from the instructor during normal office hours. **Version Updated: 12/19/2013 2:48 PM**

Date	Topic	Readings (focus pages)	Assignments/Due dates/Quizzes
7-Jan	Syllabus and Overview		
9-Jan	Study of Behavioral Endocrinology	Ch. 1(7-18)	
14-Jan	Techniques in Behavioral Neuroendocrinology	Ch. 1(19-34)	SGR 1 due
16-Jan	Endocrine systems	Ch. 2(38-43,56-58) <i>Class Notes**</i>	Quiz 1
21-Jan	Endocrine systems: Regulation	Ch. 2(66-85) <i>Class Notes**</i>	Term Paper topic due PSY550 Presentation topics due
23-Jan	Sex determination and differentiation	Ch. 3(95-109,118-137) <i>Class Notes**</i>	Quiz 2
28-Jan	Sexual Dimorphism	Ch. 4(170-195)	Articles for paper due on Bb
30-Jan	First Midterm Exam		
4-Feb	Male reproductive behaviors	Ch. 5 (204-211)	
6-Feb	Male and Female reproductive behaviors	Ch. 5 (242-261) <i>Class Notes**</i>	
11-Feb	Female reproductive behaviors	Ch. 6 (289-299)	Quiz 3
13-Feb	Parental behaviors	Ch. 6 (304-312, 328-330)	SGR 2 due
18-Feb	Parental and other social bonds	Ch. 7(371-387) Ch. 8(393-402)	Quiz 4
20-Feb	Second Midterm Exam		
25-Feb	Aggression	Ch. 8 (434-443)	Term paper draft due for peer editing
27-Feb	Stress	Ch.11 for ref.- <i>Class Notes**</i>	Peer edits due back SGR 3 due
4-Mar	Homeostasis <i>Psy550 Class Presentation</i>	Ch. 9 (511-527, 544-551)	Quiz 5
6-Mar	Biological Rhythms <i>Psy550 Class Presentation</i>	<i>Class Notes**</i> (Ch. 10 for ref.)	SGR 4 due
11-Mar	Learning & Memory <i>Psy550 Class Presentation</i>	<i>Class Notes**</i> (Ch. 12 for ref.)	Quiz 6, Final term paper due
13-Mar	Affective Disorders	<i>Class Notes**</i>	
TBA	Review session for Final (Time and location, TBD)		
19-Mar	FINAL EXAM	Wednesday, 8:00am – 10:00am SGR 5 due	

Class Notes** While lectures and readings are NOT replications of each other, readings are generally included in class discussions. Classes marked as such have additional materials associated with class discussion available only in lecture slides and/or on Blackboard.