

**Hormones and Behavior (PSY 450/550)**  
**University of Oregon**  
**Fall 2012**

Instructor: **Dr. Jagdeep Kaur-Bala**  
307 Straub Hall  
346-4953  
[jagdeep@uoregon.edu](mailto:jagdeep@uoregon.edu)

Classroom: **146 Straub Hall**  
Time: **12:00-1:20 pm TR**

Office Hours: **1:30pm – 11:30am Tuesday/Thursday** (& by appointment)

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

**Kate Gilliam:** 497 Straub Hall, [kgilliam@uoregon.edu](mailto:kgilliam@uoregon.edu)

Off. Hrs: Wednesdays 1:00pm – 2:00PM, Fridays 10:00 – 11:00am & by appt.

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

*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 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 throughout the term. As such, the final grade will include the weighted scores for the quizzes, the term papers, 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 Exam** – 25% of final grade
- **Final Exam** – 35% of final grade
- **Quizzes** – Of the 6 quizzes (4 MCQs each), scores from the your highest-scoring 4 quizzes form 15% of final grade
- **Term Paper** – 15% of final grade
- **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:** 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 the 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 15% (10% for PSY550 students) 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 (Midterm - 25% each; Final 35%):** 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. 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 fit, 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:** 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 as a first source for selecting a general topic, followed by library, PsycINFO, 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. This will account for **10% of the term paper grade**. This is due by **Tuesday, Oct 9<sup>th</sup>**.
- 2) The term paper topic and articles chosen should be finalized after feedback from the instructor/GTF. Electronic versions of the complete articles should be submitted on Blackboard by **Thursday, Oct 25<sup>th</sup>**. *After this 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 choose to do the peer review, you must bring a hardcopy draft of your paper to class on **Thursday, Nov 15<sup>th</sup>**. 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 class on **Tuesday, Nov 20<sup>th</sup>**.
- 4) The final version of the paper is due on **Tuesday, Nov 27<sup>th</sup>**. 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).

In writing your paper you should include:

- 1) An 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 hormones and behavior and the specific topic addressed. Future directions for the research should be discussed.

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 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 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 get an 80% with all of your work, and you earn 4 points of extra credit, your final score will be 84%.

**Participation** is based on **attendance and discussion**. Attendance will be taken during some (random!) class periods. All students who sign attendance during that class and ones with excused absences will be awarded EC points. In addition, the instructor will, at other times, award extra-credit for participation in class activities / discussions. It is important that you come to class. Many of the exam questions come 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**, and can be turned in to me during class or during office hours *the day before it is due*. An assignment turned in after its deadline will be marked down 10% for each day late.

**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](mailto: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/translator 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://darkwing.uoregon.edu/~conduct/>).



**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: 9/20/2012 12:41 PM**

<b>Date</b>	<b>Topic</b>	<b>Readings (focus pages)</b>	<b>Assignments/Due dates/Quizzes</b>
25-Sep	Syllabus and Overview		
27-Sep	Study of Behavioral Endocrinology	Ch. 1(7-18)	
2-Oct	Techniques in Behavioral Neuroendocrinology	Ch. 1(19-34)	
4-Oct	Endocrine systems	Ch. 2(38-43,56-58) <i>Class Notes**</i>	<b>SGR 1 due</b>
9-Oct	Endocrine systems: Regulation	Ch. 2(66-85) <i>Class Notes**</i>	<b>Quiz 1,</b> Term Paper topics due
11-Oct	Sex determination	Ch. 3(95-109)	Presentation topic due
16-Oct	Sexual differentiation	Ch. 3(118-137) <i>Class Notes**</i>	<b>Quiz 2</b>
18-Oct	Sex Differences in development and Behavior	Ch. 4(170-195)	<b>SGR 2 due</b>
23-Oct	Male reproductive behavior	Ch. 5 (204-211)	<b>Quiz 3</b>
25-Oct	Male and female behaviors	Ch. 5 (242-261) <i>Class Notes**</i>	Term paper topics finalized
30-Oct	Female reproductive behavior	Ch. 6 (289-299, 304-312, 328-330)	
1-Nov	<b>Midterm Exam</b>		
6-Nov	Parental behaviors <i>Psy550 Class Presentation</i>	Ch. 7 (371-387)	
8-Nov	Other Social bonds <i>Psy550 Class Presentation</i>	Ch. 8(393-414)	<b>SGR 3 due</b>
13-Nov	Social Behaviors -Aggression <i>Psy550 Class Presentation</i>	Ch. 8(434-443)	<b>Quiz 4</b>
15-Nov	Stress <i>Psy550 Class Presentation</i>	<i>Class Notes**</i> (Ch.11 for ref.)	Term paper draft due for peer editing ( <i>optional</i> )
20-Nov	Homeostasis and Biological Rhythms <i>Psy550 Class Presentation</i>	Ch. 9,10 (focus on human 511-527, 544-551)	<b>Quiz 5,</b> Peer edits due back
22-Nov	<b>No class: Thanksgiving Day!</b>		<b>SGR 4 due</b>
27-Nov	Learning & Memory <i>Psy550 Class Presentation</i>	(Ch. 12 for reference)	<b>Quiz 6,</b> Final term paper due
29-Nov	Affective Disorders	<i>Class Notes**</i> (Ch. 13 for reference)	
<b>TBA</b>	<b>Review session for Final</b>		
3-Dec	<b>FINAL EXAM</b>	<b>MONDAY, 8:00am – 10:00am</b>	<b>SGR 5 due</b>

**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 discussions available in lecture slides and/or on Blackboard.