# Hormones and Behavior (PSY 450/550) <br> University of Oregon <br> Winter 2007 

Instructor: Dr. Jagdeep Kaur-Bala
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Office Hours: 11:00 - noon Tuesday/Thursday
(\& by appointment)

Classroom: 176 Education
Time: 2:00-3:20 pm TR

Course website: http://blackboard.uoregon.edu PSY 450/550 (Winter 2007; 24415, 24428), Hormones \& Behavior Please notify me if you have difficulty logging into the site. This site will provide supplemental information for the course (course outline, grades, copies of overheads, assignments, etc.).

General Course Description: In this course, we will examine the relationships among the brain, endocrine systems, and behavior. We will study the effects of hormones on development and differentiation of the brain and on puberty, sexuality, aggression, and stress.

Required Text: An Introduction to Behavioral Endocrinology by Randy J Nelson, 3rd edition is required. Please notify me immediately if you have difficulty obtaining the text from the bookstore. (2 copies of the text are on reserve in the Knight Library)
Recommended Texts: 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 discussion, 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 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).

Grading: Final grades will be based on the quizzes, the midterm and final exams, the discussion group and reading assignment grades (as well as the class presentation for graduate students). In addition, some extra credit opportunities will be offered. 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\%). However, the instructor reserves the right to relax (but not stiffen) this criterion, depending on the actual distribution of grades (graduate students will be curved differently, or not at all).

- Quizzes - Off the 7 quizzes (4 MCQs each), scores from the your highestscoring 5 quizzes form 15\% of final grade (10\% for graduate students)
- Midterm exams - 24\% each of final grade (22\% each for graduate students)
- Final exam - 30\% of final grade (30\% each for graduate students)
- Study group responses - 7\% (6\% for graduate students)
- Extra-credit assignment - up to 5 points added to the final grade
- Term Paper - P- / P / P+ (a grade of "P" will not affect your final letter grade, while a P-/P+ will decrease or increase, respectively, the final grade by a 1/3; e.g. if your final grade is a " $B+$ ", then a ' $P+$ ' for your paper will result in an "A-", while a 'P-' for your paper will give you a "B" )
- Class presentation - 10\% of final grade (Graduate students only)

Quizzes: Short quizzes will be given in the first 5 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 help you keep up with the reading assignments. Of the 7 quizzes, the 2 with the lowest scores will be dropped, with the score of the remaining four yielding $15 \%$ ( $10 \%$ for psy550) 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: 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. Make-up exams may be essay-type.

Study group discussion responses: 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 4 discussion reports will be due during the term (see outline for due dates). For each report, I will give you specific things to get done and will be looking for those things for the evaluation or grading. All members of the group will receive the same grade for the assignment.

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: Graduate students will be required to create a 15 min presentation related to the course materials on a topic of their choosing. 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 on Thursday, Feb $1^{\text {st }}$. If two or more students have the same idea for a presentation, the one that informs me first (in person, by phone, or by email) will have exclusive rights to the idea. Final topics for the presentations will be assigned by Tuesday, Feb $6^{\text {th }}$. You are encouraged to confer with me about the choice of topics, the research involved and the preparation of the presentation. Presentations will be worth 10\% of the final grade. The instructor reserves the right to keep copies of the presentations for use in future courses.

Term Paper: Students will be required to write a $4-6$ 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 source for selecting a general topic, followed by library, PsychINFO, and Medline searches for the selection of the two articles (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).

You must turn in four different items pertaining to the paper:

1) A topic name, brief description of the topic (one paragraph describing why the topic is appropriate and interesting, and how the references you pick will help you investigate the topic; this will account for 10\% of the term paper grade), and a list of references. If you supply more than 3 references I will let you know which I think will be most important for your paper. This is due by Thursday, Jan $18^{\text {th }}$.
2) Xeroxed copies of the articles chosen for your paper are due by Tuesday, Jan $23^{\text {rd }}$. After this date, you may not change your chosen topic and articles without my consent.
3) Peer editing (optional): A draft of the paper that will be given to other students in the class to review and be returned to you. If you chose to do the peer review, you must bring a draft of your paper to class on Thursday, Feb $15^{\text {th }}$. 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.
4) The final version of the paper, due on Thursday, March $8^{\text {th }}$.

The paper 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 human performance and the specific topic addressed.
6) Xeroxed copies of the two articles.

The paper should be written in APA style (reference copies of the APA Publication Manual are available in many of the University Libraries).

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 peer 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 4 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 (5\% points), in order to prevent people from turning in sloppy first drafts. Your editing will also be evaluated ( $5 \%$ points), and you will receive points toward your final grade for it. Guidelines for editing will be distributed in class (see also the Blackboard web site).

Important note: ALWAYS keep a copy of your paper, 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), 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 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 peer 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.

The term paper grade will be determined by the quality of 1) the paragraph describing the term paper topic (10\%), 2) the final paper (90\%) [or paper(70\%) and draft(10\%) with the peer edit that you provide another student (10\%)]; in total, the paper grade is worth a third of the final letter grade in the course.

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? You can earn up to 5 points in extra credit in various ways (see below). 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 do 4 points of extra credit, your final score will be 84\%. You may:

- Students can write a 2-3 page report on a recent news item (i.e., one reported during this term or the last) related to the topics discussed in the course. For optimal success in this type of presentation, you must do more than simply relate the information that was presented in the newspaper article or news program - this may involve a web search or a dig in the scientific literature to find relevant details and hard data, etc. These reports should also include a description of the phenomenon and its relation to the information presented in the lecture and reading materials [2-4 points].
- Attendance is taken in a small, random subset of the classes and is awarded extracredit. [1-3 points].

Due Dates: All due dates 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. Also, please request that the Counselor for Students with Disabilities (Hillary Gerdes, hgerdes@oregon.uoregon.edu, tel. 346-3211, TTY 346-1083) send a letter verifying your disability.

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.

Academic Honesty: All work submitted in this course must be your own. For the consequences of academic dishonesty, refer to the Schedule of Classes published quarterly. 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 instructor 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: 1/8/2007 9:56 AM

| Date | Topic | Readings | Assignments/Due dates/Quizzes |
| :---: | :---: | :---: | :---: |
| 9-Jan | Syllabus and Overview | Ch. 1 |  |
| 11-Jan | Study of behavioral endocrinology | Ch. 1 |  |
| 16-Jan | Endocrine systems | Ch. 2 | Quiz 1, SGR 1 due |
| 18-Jan | Regulation of endocrine systems | Ch. 2 | Term Paper topic due |
| 23-Jan | Sex determination and differentiation | Ch. 3 | Quiz 2, Term paper topic finalized |
| 25-Jan | Sex differences in behavior | Ch. 4 | SGR 2 due |
| 30-Jan | First Midterm Exam |  |  |
| 1-Feb | Male reproductive behavior | Ch. 5 | Presentation topics due |
| 6-Feb | Female reproductive behavior | Ch. 6 | Quiz 3 |
| 8-Feb | Parental behavior | Ch. 7 | SGR 3 due |
| 13-Feb | Social behavior | Ch. 8 | Quiz 4 |
| 15-Feb | Aggression | Ch. 8 | Term paper draft due |
| 20-Feb | Homeostasis and behavior | Ch. 9 | Quiz 5, Peer edits for papers due |
| 22-Feb | Biological rhythms | Ch. 10 | SGR 4 due |
| 27-Feb | Second Midterm Exam |  |  |
| 1-Mar | Stress | Ch. 11 |  |
| 6-Mar | Learning | Ch. 12 | Quiz 6 |
| 8-Mar | Memory | Ch. 12 | Final term paper due; SGR 5 due |
| 13-Mar | Class Presentations |  | Quiz7 |
| 15-Mar | Affective Disorders | Ch. 13 | Extra credit report due |
| 19-Mar | FINAL EXAM |  | MONDAY, 1:00 pm - 3:00 pm |

