Psychology 3525A - Hormones and Behaviour Department of Psychology The University of Lethbridge Fall 2010

Location:

MWF, 12:00-12:50, PE261

Instructor:

Dr. Margaret Forgie Phone: 403-329-2437 (department: 403-329-2235) Office: D850 email: <u>forgie@uleth.ca</u> (preferred contact) Office Hours: By individual appointment at a mutually convenient time.

Undergraduate Student Assistant:

Ms. Melissa Reimchen (BSc. Honours Candidate) Phone: 403-329-2409 Lab: C810 email: <u>melissa.reimchen@uleth.ca</u> (preferred contact)

Course Description:

This course is designed to expand on the material covered at the second year level by providing an in-depth analysis of current theories and research in the field of behavioural endocrinology - the study of the relationship between hormones and behaviour. We will explore the proximate mechanisms via which hormones, and the endocrine organs that produce them, exert actions on the structure and function of the **mammalian** central nervous system and, thus, on behaviour. A wide range of topics will be covered including development, reproduction, parental behaviour, aggression and mood, feeding and drinking, biological rhythms, and stress to name a few. In each case, both the basic biology and physiology of each of the neural/hormonal systems, as well as the patterns of behaviour exhibited by the whole animal, will be addressed.

Course Prerequisites:

The prerequisites for this course are two, 2000-level courses (3.0 credit hours each) in Psychology or Neuroscience. The recommended prerequisite is Psychology 2700. Neuroscience 2600 would be an asset to understanding the material in this course. Regardless of specific background, all students are expected to have a solid foundation in the scientific approach to understanding behaviour, and a willingness to learn about physiological psychology.

Required Texts:

Nelson, R. J. (2005). An Introduction to Behavioral Endocrinology, Third Edition. Sinauer: New York, NY.

Northey, M., and Timney, B. (2007). Making Sense in Psychology and the Life Sciences. A student's guide to research and writing, Fourth Edition. Oxford University Press: Don Mills, ON.

Course Schedule:

A preliminary course schedule of lecture topics and deadlines for tests and assignments is given on the last two pages of this syllabus. Updates will be announced in class and by email. **NB: I will neither post my powerpoint slides to Blackboard, nor distribute them in any other way to the class.** It is your responsibility to ensure that your notes are complete.

Course Requirements:

- (1) Tests. There will be three short tests, approximately every 4 to 5 weeks during the semester, and these will account for a total of 45% of your final grade (15% each). Tests will consist of short-answer, definition, and multiple-choice questions. Test 3 will take place on the last day of classes. <u>There is no final exam in this course</u>. (see attached Course Schedule).
- (2) Presentation. Students will be responsible for giving a short, conference length presentation (= total of 10 minutes for presentation; 3 minutes for question period, with length of time strictly enforced by the instructor). Students will present in groups of three. This presentation will be worth 20% of your final grade with 10% accorded to the group, and 10% to each individual's contribution. All students will be required to submit a oneparagraph statement of interest and then groups will be assigned based on matched interests (see attached Course Schedule).
- (3) Abstract Assignment. As a companion to your presentation material, each student will submit a written assignment that is adapted from several standard annotated formats. The assignment will consist of writing a one-page, critical abstract/annotation of five primary research articles. This assignment is due on the day that you give your presentation (by 4:00 pm in the dropbox located adjacent to D-866). This assignment is graded on a pass/fail basis. Students that fail the assignment on first submission will be required to submit a revision. A handout for this assignment will be distributed and discussed during the introductory classes (see attached Course Schedule).
- (4) Journal Assignment. This written assignment consists of an essay explaining a single, original research article concerning any topic in the area of behavioural endocrinology. Approaches from all levels of psychological analysis are encouraged (e.g., depending on your interests, you might choose to focus on the molecular processes of hormonal actions, or you might choose a topic in clinical endocrinology). The only caveat is that your target article MUST be a primary research paper that was published in a peer-reviewed (refereed) journal and it must have been published within the last 6 years (i.e., 2004 or later). Your submission will be worth 20% of your final grade. Following initial grading, all students will be given an opportunity to revise their paper for a higher grade. A handout for this assignment will be distributed and discussed during the introductory classes (see attached Course Schedule).

NB.

Late submissions of the Journal Assignment or the Abstract Assignment will result in a 25% penalty per day. Failure to deliver your part of the in-class presentation will result in a grade of zero for both portions of the mark. Your group will be graded without your result. Students that contribute little to the group presentation will have their mark adjusted accordingly. All assignments will be graded under the assumption that all students have read, and understood, the contents of the second required text by Northey and Timney

(2007). In particular, all written assignments must be in your own words. Paraphrasing someone else's words, even if you reference those words, is plagiarism. Plagiarism is a serious academic offense and any case of suspected plagiarism will be dealt with severely, including the imposition of the maximum penalties allowable for such an offense. For information on what constitutes plagiarism - see Northey and Timney (2007), Chapter 4. This information is also available from the library.

Students with Special Needs:

If you have a documented condition that prevents you from fully participating in this course, including evaluation procedures, it is your responsibility to contact me if special arrangements are necessary to accommodate your individual situation. Please note that you must contact Counselling Services to acquire an official letter concerning your situation. No accommodations will be given without official notification from that office.

Grading:

Letter grades will be assigned to final percentages according to the following scale:

| A+ (90+) | B+ (77-79) | C+ (67-69) | D+ (56-59) |
|------------|------------|------------|------------|
| A (85-89) | B (73-76) | C (63-66) | D (50-55) |
| A- (80-84) | B- (70-72) | C- (60-62) | F (< 50) |

Web Sites and Email:

(1) <u>Course Information</u>. All students have a U of L computer account. Your account name is equivalent to your username and your password is the same as you use for email. You will need this to access Blackboard (<u>https://courseware.uleth.ca/webct</u>) in order to obtain course information, handouts, and to view the online grade book. Although all tests will be written during class time, I will use this utility so that you can keep track of all your graded work. If you require assistance with anything related to using computers at the U of L, please contact the Student Help Desk. Should you have a problem accessing Blackboard, please contact the CRDC (11th floor - Library).

(2) <u>E-mail Accounts</u>. My primary method of communicating with you for general notices and points of interest to supplement course information, will be via email and in-class announcements. Please be sure you check your U of L email account on a regular basis, or have that account forwarded to your usual email provider. Please do your best to remember to do regular housekeeping so that you do not miss important notices that relate to this class due to a full mailbox. PLEASE DO NOT ABUSE THE CLASS LISTSERV by sending communications to the list that are not relevant to class material.

Preliminary Course Schedule - 08-09-10

Week I: Sept. 8, 10

Lecture Topics: Introductory Classes Explanation of Assignments, Exams and Presentation Requirements (all students are expected to attend these classes).

Weeks 2 and 3: Sept. 13, 15, 17*, 20**, 22, 24

*Paragraph of Interests Due for Presentations **Groups assigned/dates Scheduled for Presentations/Workshop on Topics (all students are expected to attend these classes).

Lecture Topics: Introduction to Behavioral Endocrinology – Chapter I Hormones, The Endocrine System, and Brain – Chapter 2

Weeks 4 and 5: Sept. 27, 29, Oct. 1, 4, 6, 8*

*Friday, Oct. 8 – In-class Test 1

Lecture Topics: Sex Differences in Behavior – Foundations – Chapters 3 and 4

Weeks 6 through 8: Oct. 11*, 13, 15, 18, 20, 22, 25, 27, 29

*Monday, Oct. II-Statutory Holiday (Thanksgiving) - No Class

Lecture Topics: Reproductive, Parental, and Social Behavior – Chapters 5 through 8

Student Presentations (exact dates TBA): Oct. 13, **15** - Student Presentations 1 Oct. 18, **20**, 22 - Student Presentations 2 Oct. **25**, 27, 29 - Student Presentations 3

Weeks 9 through 11: Nov. 1, 3, 5, 8* 10, 12**, 15***, 17, 19

*Monday, Nov. 8 – In-class Test 2 **Friday, Nov. 12 - Withdrawal Deadline - Fall 2010 Semester ***Monday, Nov. 15 - Journal Assignments are due by 4:00 pm in the dropbox (adjacent to D-866). Forgie

Lecture Topics: Regulatory Behaviours and Biological Rhythms – Chapters 9 and 10 Stress – Chapter 11

Student Presentations (exact dates TBA): Nov. 1, 3, 5 - Student Presentations 4 Nov. 15, 17, 19 - Student Presentations 5

Weeks 12 through 14: Nov. 22, 24, 26, 29, Dec. 1, 3, 6, 8*

*Wednesday, Dec. 8 – In-class Test 3

Lecture Topics: Hormones, Mood and Cognition Psychopathology of Endocrine Disorders

Nov. 22, **24**, 26 - Student Presentations 6 Nov. **29**, Dec. I, 3 - Student Presentations 7

Wednesday, December 15 - Journal Assignment Revisions are Due by 4:00 pm in the drop box located outside the Psychology Department Office (D866).