

Syllabus

THE UNIVERSITY OF TEXAS AT ARLINGTON

Course Title: Behavioral Endocrinology

Professor:

Dr. Martha Mann

Email:

mann@uta.edu (But please use WebCt email)

You may email me any time using my WebCT course email address. I will check my email 3-4 times a week and attempt to respond to emails within 48 hours. If your question or comment requires a longer response, please expect that to occur on the weekends (Friday through Sunday). Before you email me, please consult the syllabus. If the information can be found in the syllabus, I will not answer your email. Also, please do not use text messaging abbreviations. (Each email that you send to a faculty member is a writing opportunity and should reflect your best writing efforts!)

Office:

UT Arlington, Box 19528, Arlington, TX 76019

Office Phone:

(817) 272-3239

Office hours:

Virtual Office Hours: T 10-11 am TH 2-3 pm and by appointment (in 303LS)

Texts and Materials:

- **Text: Nelson, R. J.** (2005). An introduction to behavioral endocrinology, 3rd edition. Sinauer Associates, Inc., Sunderland, Massachusetts. (ISBN: 0-87893-617-3)
- **Please note:** If you purchased a used copy of this text and did not receive the accompanying CD, you will need review assignments by borrowing a CD (in order to “launch” the CD in some browsers) and then by bookmarking the relevant sites. You may also purchase the CD as a standalone for \$24.95 (ISBN 978-0-87893-618-2). Students can only order this by calling the order department at Sinauer at 413-549-4300.
- **Journal articles:** If need be, selected articles will be placed on electronic reserve through the library and linked through WebCt.

Course Description:

BIOL/PSYC 3329. BEHAVIORAL ENDOCRINOLOGY (3-0) 3 hours credit. The effects of hormones on behavior and the physiological mechanisms which mediate these effects. Principles of brain-hormone interaction, sexual and aggressive behavior, parental care, ingestion, activity, motivation, learning and memory, behavioral disorders, environmental, and experiential influences on hormone production. Also listed as BIOL 3329. **Prerequisite:** PSYC 1315, or BIOL 4315.

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A note on prerequisites: A course in introductory psychology (PSYC 1315) or general endocrinology (BIOL 4315) is a prerequisite for this course. This is because of the interdisciplinary nature of the course; if you have one strength in psychology or biology (endocrinology), you will do well to focus your efforts on that area that is not a strength for you. Some background in research methods and statistics (PSYC 2443 and 2444) or Biostatistics is suggested. Please consult with the instructor if you have concerns about your preparation for this course.

Getting started:

First, please review the link which asks, IS distance education right for me?

http://distance.uta.edu/Prospective_Students/Is_DE_For_Me/

Next, please review the frequently asked questions (FAQ) from the Center for Distance Education:

<http://distance.uta.edu/FAQ/Tech-list/>

Finally, please visit the UTA library to find out what additional resources are available to you as online learners:

<http://library.uta.edu/users/distanceEducation/>

Course Structure and Notes:

To succeed in this class, read the chapter assigned in the text, review the PowerPoint (PPT) lecture on WebCT, review materials provided on the companion CD, and then take the quiz. PPT lecture slides will contain additional links to Web pages and videos (videos not listed in the companion CD) and you are strongly advised to study those materials as well. To view the videos, you may need to install and/or update QuickTime and Micromedia Flash player. The PPT lectures are intended to supplement and reinforce text material and you are responsible for studying both. Each PPT lecture is titled much in the same way as the text chapter is titled and all lectures are posted by the beginning of each week (7 am Monday) under Course Content on the WebCT homepage. (You may have to disable your pop-up blocker in order to open and download the lecture.) Please be aware that I can and do track your progress on WebCt—in fact, I can see each and every page you visited and the time when that occurred. Finally, note that there is no midterm and there is no comprehensive final exam.

Student Learning Outcomes:

After completing this course, the student will be able to:

- Identify the principles of behavioral endocrinology research
- Demonstrate knowledge of modern methodologies
- Discuss the contributions of leading behavioral endocrinology researchers
- Relate recent discoveries in behavioral endocrinology to the underlying physiology of sex, aggression, parental care, feeding and drinking, learning, memory and motivation

Assignments and Grade Calculation:

The course schedule (below) indicates the week that a specific on-line quiz will be available. The quiz will be available from Friday at 7 am through Sunday at 7 pm. Although you may take the quiz in an open book/open notes format, you should be aware that you will have 1.5 minutes per item to take each quiz and you will not necessarily have time to look up answers. Therefore, you should study for the quiz before you take it. You may only take each quiz once. If you miss the deadline, you will not be able to take the quiz later.

Grades will be assigned according to the following system: Each quiz will contain ~20 objective

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questions, with each question worth one point. Quizzes will cover the text assignment, the PPT lecture on that topic, and all required CD material and supplementary videos. Objective questions may take the form of multiple choice or true/false formats. There are 7 quizzes (over 16 weeks) and each one must be completed between 7 am Friday and 7 pm Sunday (all Central times). So, there is a total of 140 points available. (That is, 7 quizzes x 20 questions = 140.) This means that it is possible to miss a quiz (a loss of 20 points) and still score a perfect score of 120. (See the grading scale below.) However, I recommend that you take each available quiz-- just in case! On occasion, a bonus question or two will be added to the quiz when I detect a problem with WebCt delivery of the quiz. (I call these events "WebCt hiccups" although "Blackboard burps" sounds better. There is no need to notify me when these events occur since I will detect them from WebCt. So, you can earn a bonus point to offset the rare occurrence of thinking you saved an answer that somehow did not register.) After taking a quiz, you are on an *honor system* and you should not discuss the quiz items with other class members. Assistance in answering the quiz questions from another person or discussing quiz items with other students of the class will be considered cheating. If you have any awareness of student cheating, you should contact me immediately by WebCt email!

Make-up quizzes will only be given for university approved excuses with documentation and at the discretion of the instructor. All make-up quizzes will be given in week 16. You must also inform me of why you missed the quiz and your desire to take a make-up exam within three days of missing the deadline. Make-up quizzes will not be given if you failed to buy the text or CD in a timely fashion, if you simply "forgot" to take the quiz online, or if you failed to access WebCT or an internet connection for any reason. The first PPT lecture (under Course Content on WebCT) is on When and How to Take the Quizzes. In fact, there is a practice quiz (with questions taken from the syllabus and the first PPT lecture on When and How to take the Quizzes) for you as well but no points will be assigned I'm afraid. (☹)

There is one more way to improve your grade: See Optional Discussion Postings below. Postings can count for a maximum of 20 points cumulatively and points received may be substituted for your lowest quiz grade.

Optional Discussion Postings

Discussion postings in an on-line class correspond to in-class participation in a traditional class. In this class, discussion postings are optional for all students except Honors students. If you are going to participate in the discussion, it is important that you select a discussion question as soon as the course begins since the first optional question is due in week 4. To receive credit, the posting must have a minimum of 200 words and a maximum of 400 words. I recommend that you write your posting using Word, perform a spell check and grammar check, and then do a word count using the "Tools" drop-down menu (or simply refer to the bottom of the document if you are using Word 2007). Once you are satisfied with the discussion you plan to post, then copy and paste it under the correct topic in the WebCT discussion space. Please do not attach files. If the posting meets spelling and word count criteria but does not qualify as "thoughtful," I will send you an email privately asking you to re-post for credit. (Note, since correct spelling and minimum word count are objective criteria that you can verify for yourself, I will not necessarily be sending you a warning email if you fail to meet these criteria; I will simply deduct points). Each thoughtful posting that meets these basic criteria will give you 10 points per posting (for a possible total of 20 points) and these points may be substituted for your lowest quiz grade. For the purpose of the discussion postings assignment, a week begins at 7 am Central Time on Monday morning and ends at 7 pm on Sunday of the same week. So, a posting due for week 4

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should be received between Monday, February 8 and Sunday, February 14 (by 7 pm). Late postings and postings in addition to the two required will receive no credit. Please note: Review the discussion questions and due dates below. I will not be reminding you of when your postings are due; it is your responsibility to post by the due date. In fact, the only prompt I have provided for you can be found on the calendar in WebCT. However, you may wish to fill in the course schedule (below) to remind yourself of the questions and weeks you have selected.

Honors College Credit

Students who are members of the Honors College may wish to take this course for Honors credit. If you wish to do so, please provide the instructor with an Honors Credit Contract (downloaded from <http://honors.uta.edu/documents/credit.pdf>). If you are not in the Honors College and would like to learn more about the benefits of membership, visit the website at <http://honors.uta.edu/>, where you will find an application form for electronic submission. Note to Honors Students: To receive Honors credit for this course, you will need to post a response to a discussion question on 4 separate weeks beginning in week 4.

Topics for Discussion Postings:

Topics for Discussion Postings are organized around particular themes. Note: Even if you opt out of the posting assignment, you are welcome to read and respond to a posting by using the “threaded” option to respond and writing “Commentary” in the subject line. Of course, I expect professional behavior toward your colleagues at all times. I hope your reading will enrich your learning further!

Choose either 1a or 1b:

Discussion posting #1a: Consult either one of the articles given below and describe how the scientific study of the development of these individuals can further our knowledge of: gender identity; gender role behaviors; sexual orientation; sexual behaviors

<http://www.usrf.org/news/010308-guevedoces.html>

http://www.usrf.org/news/010308-eunuchs_china.html

Discussion posting #1b: An argumentative writing assignment: The biological clocks of pre-teens and teenagers differ significantly from those of adults. After reading about these differences, write out three “talking points” that you would like to share with parents and teachers in order to convince them to consider changing class starting times in high schools. (Be sure to describe in laypersons’ terms the underlying physiology of each point you have made.) Some suggested websites:

http://www.sleepfoundation.org/site/c.hu1XKjM0lxF/b.2419129/k.23A7/Sleep_Drive_and_Your_Internal_Body_Clock.htm

<http://www.pbs.org/wgbh/pages/frontline/shows/teenbrain/from/sleep.html>

<http://www.mayoclinic.com/health/teens-health/CC00019>

Choose either 2a or 2b:

Discussion posting #2a: (From your text): Suppose that you have obtained blood samples from matadors and bulls immediately after a number of bullfights. You notice that the matador’s blood androgen concentration is elevated whenever he decisively defeats the bull, but that the bull’s androgen concentration is elevated if it gores the matador. Is “winning” the critical factor in determining the blood androgen concentrations? What other endocrine events might account for

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the data? (Please be sure to include your references.)

Discussion posting #2b: An argumentative writing assignment: (From your text): Given what you know about the effects of hormones on behavior, should people be able to use “hormonal state” (for example, anabolic steroid use, postpartum depression, PMS) as a defense against criminal charges? Why or why not? (Please be sure to include your references.)

Detailed Guidelines for Discussion Postings:

Rubric

<i>For each posting, a maximum of 10 points can be earned</i>	Expert (9-10) Points Earned	Acceptable (4-8) Points Earned	Unacceptable (<4) Points Earned
Remember! A minimum of 200 and maximum of 400 words	The posting was made on time and free of mistakes in spelling and grammar. The posting answered or explained the discussion question, the content was “thoughtful” and the information received was appropriately referenced.	The posting contained some errors in spelling or grammar. Minimum and/or maximum word limits were not followed exactly. Information (including web pages) was not cited well.	The posting was late (0 points). The response was plagiarized (0 points). The posting contained multiple errors in spelling and/or grammar. Word limits were ignored.

Posting 1 (10 pts) + Posting 2 (10pts.) =	TOTAL = 20 points
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Grading scale:

Final course grade assignment by point range:

A = 107.4-140 (89.5% or better based on a total of 120 points; 140 total points are possible)

B = 95.4-107 (79.5% or better)

C = 83.4-95 (69.5% or better)

D = 71.4-83 (59.5% or better)

F ≤ 71 (59% or less)

Course Policies:

Schedule of lessons and activities: You must complete all assignments and quizzes by the due dates. All due dates for the assignments and quizzes are listed in the course schedule, which is located at the end of this syllabus.

Academic Integrity:

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for

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credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

Americans with Disabilities Act:

The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in Room 102 of University Hall, or call them at (817) 272-3364.

The Writing Center:

The Writing Center, Room 411 in the Central Library, will assist you with any writing assignment while you are a student at UT-Arlington. The Writing Center's hours are 9 a.m. to 7 p.m., Monday through Thursday; 9 a.m. to 4 p.m., Friday; and 2 p.m. to 6 p.m., Saturday and Sunday. You may schedule appointments online by following directions available at www.uta.edu/owl/appointments, by calling (817) 272-2601, or by visiting the Writing Center. If you come to the Writing Center without an appointment, you will be helped on a first-come, first-served basis as tutors become available. Writing Center tutors are carefully chosen and trained, and they can assist you with any aspect of your writing, from understanding an assignment to revising an early draft to polishing a final draft. However, the Writing Center is not an editing service; tutors will not correct your grammar or rewrite your assignment for you, but they will help you learn to solve your grammatical and organizational problems. I encourage each of you to use the Writing Center.

Student Support Services Available:

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should contact the Office of Student Success Programs at (817) 272-6107 for more information and appropriate referrals.

Drop Policy:

If you choose to withdraw from the course for any reason, you must follow University procedures. It is your responsibility to execute these procedures correctly and within the deadlines. I cannot and will not drop anyone for any reason from this course. However, I may strongly recommend that you drop if you are significantly behind on completing the required assignments.

Important Dates:

January 18: Martin Luther King, Jr. Holiday

February 3: Census Date

March 15-19: Spring vacation

April 2: Last day to drop courses with an automatic 'W'

May 7: Last day of classes

Videos (Links for these videos can also be found in the PPT lectures)

Week 5-6: Sex

Prof. Robert Sapolsky on the Neurobiology of Primate Sexuality: Part 1(1:39)

<http://video.google.com/videoplay?docid=-2732704984000303543#>

Prof. Robert Sapolsky on the Neurobiology of Primate Sexuality: Part 2 (1:40)

<http://video.google.com/videoplay?docid=-2732704984000303543#docid=210262239460023471>

Week 8: Adolescence

Frontline: Inside the Teenage Brain (50:05)

http://video.google.com/videoplay?docid=1361431077653693526&ei=6ZxLS_bHLojorgL_qLjTC&q=hormones+and+behavior&hl=en#

Weeks 10-11 Stress

Recommended: LinkedIn interviews Dr. Robert Sapolsky about stress (4:41)

<http://www.youtube.com/watch?v=TtjU0-dOTLM>

Required: Speaking of Science Series - Robert Sapolsky: Stress and the Animal Kingdom (8:10; cc available)

<http://www.youtube.com/watch?v=Z-3qqJhSetc&feature=Playlist&p=510B28EDDCA82E40&index=0>

Recommended: Stress Response: Savior to Killer (5:10; cc available)

<http://www.youtube.com/watch?v=sPS7GnromGo>

Required: 'Stress, Neurodegeneration and Individual Differences' by Robert Sapolsky (1:19)

<http://video.google.com/videoplay?docid=1877467554618436978#>

Week 15: Depression

Required: Stanford's Sapolsky On Depression in U.S. (Full Lecture) (52:28)

<http://www.youtube.com/watch?v=NOAgplgTxfc>

(You may wish to review) Required: 'Stress, Neurodegeneration and Individual Differences' by Robert Sapolsky (1:19)

<http://video.google.com/videoplay?docid=1877467554618436978#>

Course Schedule Important Dates:

Wk	Dates (Mondays)	Topic	Assignment	Due (F-Su)
1	1/18	Getting started	Links: Getting started (above) PPT on Quizzes	Practice quiz WebCT
2	1/25	Behavioral Endocrinology	Ch. 1	
3	2/1	Endocrine System	Ch. 2; Appendix	Quiz Ch. 1 & 2
4	2/8	Sex Differences in Behavior: Differentiation Disorders of differentiation	Ch. 3	Discussion posting #1a (optional)
5	2/15	Sex Differences in Behavior: Animal models and humans	Ch. 4: Videos (2)	Quiz Ch. 3 & 4
6	2/22	Male sexual behavior Female sexual behavior	Ch. 5 & 6	Quiz Ch. 5 & 6
7	3/1	Homeostasis	Ch. 9	Discussion posting #1b (optional)
8	3/8	Biological rhythms	Ch. 10; Video	Quiz Ch. 9 & 10
9	3/15	<i>Spring Break!</i>		
10	3/22	Stress	Ch. 11	
11	3/29	Stress & coping	Videos (2)	Quiz Ch. 11
12	4/5	Social behavior	Ch. 8	Discussion posting #2a (optional)
13	4/12	Parental behavior/ infanticide	Ch. 7	Quiz Ch. 8 & 7
14	4/19	Learning and memory	Ch. 12	Discussion posting #2b (optional)
15	4/26	Affective disorders	Ch. 13; Video	Quiz Ch. 12 & 13
16	5/3	<i>All make-up quizzes Check your grades on WebCT!</i>		<i>Course evaluations please!</i>