

PSB 3340
Behavioral Neuroscience
Spring Semester 2012

Section: 3924

Tuesday period 1, 7:25 – 8:15 a.m. and Thursday periods 1 – 2, 7:25 - 9:20 a.m.

PSY 130

3 credits

Professor: Darragh P. Devine, Ph.D.

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Psychology Building room 324

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office hours: Tuesday and Thursday period 3 (9:35 – 10:25 a.m.)
(or by appointment)

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Psychology Building room 361

office hours: Tuesday and Thursday period 7 (1:55 – 2:45 p.m.)
(or by appointment)

Required Text: *Biological Psychology – An Introduction to Behavioral, Cognitive, and Clinical Neuroscience*, 6th ed. (2010), by S. M. Breedlove, N. V. Watson, and M. R. Rosenzweig

COURSE OBJECTIVES: The purpose of this course is to provide a broad background in the neural basis of behaviour. What is the brain made of? How is it put together? What do neurons do? How do neurons communicate? How are behaviours regulated? How can the brain malfunction?

Lectures and reading material will emphasize the cellular biology, anatomy, physiology, and development of the nervous system, the neurobiology of sensation and motor function, and the neurobiology of circadian rhythms.

GRADING: This course will have three tests and one final exam. Each test will have 50 MC and one short essay (bonus) question. Each of the first three tests will cover only the text and lecture material from the chapters that have most recently been discussed in class. Each of these tests will count 33 ⅓% toward your final grade. The final exam will be comprehensive and can replace the test you missed or on which you did poorly. If you take all the three regular tests and are satisfied with your grade, you may skip the final exam. If you miss a test, or if you do poorly on a test, you can drop that test and take the final exam to replace it. In this case the better test score (regular test or replacement) will count.

The final is the only option for a missed or failed test.
There will be no other makeup tests under any circumstances.

You will need to bring an official photo ID (Gator1, driver's license) to take exams. You will be required to display the ID on your desk during the exam. You will also need a #2 pencil to take exams. Note – If you arrive late for an exam, you may be refused. If any student has completed the exam and left, you will not be permitted to write the exam

The grading scheme is as follows:

A (outstanding)	93-100	C (slightly below average)	73-76
A- (superior)	90-92	C- (below average)	70-72
B+ (excellent)	87-89	D+ (well below average)	67-69
B (very good)	83-86	D (poor)	63-66
B- (above average)	80-82	D- (very poor)	60-62
C+ (average)	77-79	E (failure)	<60

ADDITIONAL SUPPORT FOR STUDENTS WITH DISABILITIES: Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

ACADEMIC HONESTY GUIDELINES: The academic community of students and faculty at the University of Florida strives to develop, sustain and protect an environment of honesty, trust and respect. Students are expected to pursue knowledge with integrity. Exhibiting honesty in academic pursuits and reporting violations of the Academic Honesty Guidelines will encourage others to act with integrity. Violations of the Academic Honesty Guidelines shall result in judicial action and a student being subject to the sanctions in paragraph XI of the Student Conduct Code. The conduct set forth hereinafter constitutes a violation of the Academic Honesty Guidelines ([University of Florida Rule 6C1-4.017](#)).

Cheating. The improper taking or tendering of any information or material which shall be used to determine academic credit. Taking of information includes, but is not limited to, copying graded homework assignments from another student; working together with another individual(s) on a take-home test or homework when not specifically permitted by the teacher; looking or attempting to look at another student's paper during an examination; looking or attempting to look at text or notes during an examination when not permitted. The tendering of information includes, but is not limited to, giving of your work to another student to be used or copied; giving someone answers to exam questions either when the exam is being given or after taking an exam; giving or selling a term paper or other written materials to another student; sharing information on a graded assignment.

Plagiarism. The attempt to represent the work of another as the product of one's own thought, whether the work is published or unpublished, or simply the work of a fellow student. Plagiarism includes, but is not limited to, quoting oral or written materials without citation on an exam, term paper, homework, or other written materials or oral presentations for an academic requirement; submitting a paper which was purchased from a term paper service as your own work; submitting anyone else's paper as your own work.

Bribery. The offering, giving, receiving, or soliciting of any materials, items or services of value to gain academic advantage for yourself or another.

Misrepresentation. Any act or omission with intent to deceive a teacher for academic advantage. Misrepresentation includes using computer programs generated by another and handing it in as your own work unless expressly allowed by the teacher; lying to a teacher to increase your grade; lying or misrepresenting facts when confronted with an allegation of academic dishonesty.

Conspiracy. The planning or acting with one or more persons to commit any form of academic dishonesty to gain academic advantage for yourself or another.

Fabrication. The use of invented or fabricated information or the falsification of research or other findings with the intent to deceive for academic or professional advantage.

UF's Academic Honesty Policy is clearly stated in rule [6C1-4.017 Student Affairs: Academic Honesty Guidelines](#).

WEBSITE: PowerPoint images from lectures will be available for students to review at the course website. The website is found at: <http://www.psych.ufl.edu/~dpdevine/behneuro/bn.html> It is very important for students to access this site. If you experience any difficulty, contact me as early as possible.

Free software to view the images is available through the website. Additional materials and interesting links will also be posted on this site.

COURSE SCHEDULE: (This schedule is tentative. The timing of topics covered may change, and therefore the chapters assigned to examinations will be adjusted accordingly – details will be described in class. The dates of exams will not change.)

For critical semester dates see <http://www.registrar.ufl.edu>

Approximate Dates	Chapter and Topic
Jan. 10 - 12	Chapter 1: Biological Psychology: Scope and Outlook
Jan. 17 - 19	Chapter 2: Functional Neuroanatomy: The Nervous System and Behaviour
Jan. 24 - 26	Chapter 3: Neurophysiology: The Generation, Transmission, and Integration of Neural Signals
Jan. 31 – Feb. 2	Chapter 4: The Chemical Bases of Behaviour: Neurotransmitters and Neuropharmacology
<i>Feb. 6</i>	<i>optional review session (room and time TBA)</i>
Feb. 7	Exam #1: Chapters 1 - 4, and all material covered in lectures.
Feb. 9 - 14	Chapter 5: Hormones and the Brain
Feb. 16	Chapter 6: Evolution of the Brain and Behaviour
Feb. 21 - 23	Chapter 7: Lifespan Development of the Brain and Behaviour
Feb. 28	Chapter 8: General Principles of Sensory Processing (pages 215-228 only)
March 1	Chapter 10: Vision: From Eye to Brain
March 6 and 8	<i>spring break – no classes</i>
March 13 - 15	Chapter 10 (cont'd): Vision: From Eye to Brain
<i>March 19</i>	<i>optional review session (room and time TBA)</i>
March 20	Exam #2: Chapters 5 – 8 and 10, and all material covered in lectures.
March 22 - 29	Chapter 11: Motor Control and Plasticity
April 3-5	Chapter 12: Sex: Evolutionary, Hormonal and Neural Bases
April 10-12	Chapter 13: Homeostasis: Active Regulation of Internal States
April 17-19	Chapter 14: Biological Rhythms, Sleep and Dreaming
<i>April 23</i>	<i>optional review session (room and time TBA)</i>
April 24	Exam #3: Chapters 11 - 14, and all material covered in lectures
<i>April 30</i>	<i>optional review session (room and time TBA)</i>
April 30, 3:00 – 5:00 p.m.	OPTIONAL FINAL EXAM (comprehensive –chapters 1-8, and 10-14 and all lecture materials)

The chapters we will cover in this course will provide a solid foundation in Behavioural Neuroscience, which will prepare students for more advanced courses that are offered by faculty of the Behavioral and Cognitive Neuroscience program. Those more advanced courses include courses on the neurobiology of additional sensory systems (hearing, taste and smell), the neurobiology of ingestive behaviour (feeding and drinking), the neurobiology of emotion, the neurobiology of stress, the neurobiology of developmental disorders, the neurobiology of learning and memory, etc.