Syllabus for Neurobiology of Motivated Behavior
PSYC6300-001
Summer, 2011
MoTuWeTh 10:30-12:30
LS, Room 428

Instructor: Linda Perrotti, PhD.
Office: Room 511 Life Science
Office Hours: by appointment
Email: Perrotti@uta.edu

Course Description: This course will focus upon topics in the neuroscience of motivation. The general format will be that of a “journal club” and not a content oriented “mini-course”. While specific topics of this course can be the focus of this seminar course, each class should be considered as a “stand alone” class. 5. Two - four papers will be presented per day. I have provided the papers for selection under each topic at the end of this syllabus. Should students want to present an additional paper or substitute an article they may do so with prior permission of the instructor. One or two students will present the seminar papers each day so that each student will have the opportunity to present multiple times. Students who are not presenting will be required to prepare two written discussion item/question to be submitted via Blackboard prior to each session.

Learning objectives: By the end of this course, students have an understanding of the current literature and hypotheses regarding the biopsychology of motivation. In addition, students will demonstrate an ability to critically read and interpret the literature on motivated behavior.

Readings: We will be reading a lot of advanced papers. If you encounter a paper that you feel you lack the background to fully appreciate, do some additional reading to educate yourself. Every student is expected to read the assigned articles prior to class.

Grading: Your grade will be based on your in class participation (40%), submitted discussion (30%) questions, and the quality of your student-led discussions (article presentations; 30%).

Attendance/Participation - Attendance is mandatory. All students will be required to submit, via Blackboard, and bring to class at least two thoughtful questions per paper prior to the start of each class. We will use these to initiate our discussions of the articles and topics.

Drop Policy: A course drop grade will be assigned in accord with UTA policy (see current catalog). See the Registrar’s Bulletin or the University Calendar in the front part of the UTA catalog for drop dates.

Course Evaluation: Student Feedback Survey forms provided by the University will be used for student course evaluation.

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 93112 -- The Rehabilitation Act of 1973 as amended. With the passage of new 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 accommodation" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.

**Academic Dishonesty:** 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 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, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22).

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<th>Date</th>
<th>Topic</th>
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<td>7/12/11</td>
<td>Introductory Remarks</td>
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<td>7/13/11</td>
<td>Overview of traditional motivation concepts</td>
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<td>7/14/11</td>
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<td>8/11/11</td>
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Tentative topic Schedule

*Topic content dates are tentative and subject to shift according to the needs of an individual class.
**Readings**

**OVERVIEW OF TRADITIONAL MOTIVATION CONCEPTS:**


**PLEASURE**


Small DM, Zatorre RJ, Dagher et al., Changes in brain activity related to eating chocolate - From pleasure to aversion. *Brain* 2001;124:1720-1733


**DOPAMINE AND REWARD**


**ADDICTION**


Naqvi NH, Rudrauf D, Damasio H, Bechara A. Damage to the insula disrupts addiction to cigarette smoking. *Science* 2007;315:531-534

Naqvi N, Bechara A. The insula and drug addiction: An interoceptive view of pleasure, urges, and decision-making. *Brain Struct Funct* 2010;214:435-50

**THIRST AND SODIUM-SPECIFIC HUNGER**


Sakai RR. The future of research on thirst and salt appetite. *Appetite* 2004;42(1):15-19

HUNGER


HUNGER REWARD CONNECTIONS

*Shin AC, Zheng Berthoud H-R. AN Expanded view of energy homeostasis: Neural integration of metabolic, cognitive, and emotional drives to eat. *Physiol Behav* 2009;97;572-80


PAIN, FEAR AND STRESS


Zhao ZQ. Neural mechanism underlying acupuncture analgesia. *Prog Neuropsychopharmacol Biol Psychiatry* 2008;32:256-265


**Sex**


**Sexual orientation & gender identity**


**Experiential control of sexual physiology:**


**More detail on experiential controls of physiology (if you’re really interested)**


**CULTURE & IDENTITY:**


de Waal, F. B. M.. Bonobo sex and society. Scientific American, March 1995, 82-

**AGGRESSION**


Fountas, K. N., & Smith, J. R. Historical evolution of stereotactic amygdalotomy for the management of severe aggression. *J Neurosurg* 2007 106(4), 710-713.


