Motivation & Reward
NS&B / PSYC 227 – Spring 2016

Instructor: Mike Robinson, PhD.
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Office Location: 003 Judd Hall
Office Hours: Tuesdays between 1-3pm
Course Schedule: 10.30am - 11.50am Tuesdays and Thursdays
Class Location: Exley Science Center 121

Course Overview:

This course is designed to provide students with a better understanding of motivation and reward from a behavioral neuroscience perspective. Some of the broader topics covered in this class include: the theories behind motivation, reward and reinforcement, and how they apply to feeding, drinking, sex, aggression and drugs of abuse. The first few classes are designed to provide students with the fundamental knowledge and tools necessary to understand some of the principle behaviors executed by our brain and nervous system, and will highlight the importance of neurotransmitters and synaptic transmission. For each of the subsequent topics I will provide a brief overview of the main concepts and the fundamental knowledge needed to go further in the given field/area. A brief history and the major findings in the domain will be covered and some of the most recent discoveries or theories will be presented.

The course is organized around lectures but will include some in class discussion of the assigned readings. Lectures will often contain material that is not thoroughly covered in the readings.

Learning Goals:

The goal for each student in this course is to understand and be able to clearly articulate the key concepts underlying Motivation & Reward across a variety of domains. Beyond the knowledge gained in the class about the material covered, the course aims to provide students with the opportunity to learn how to synthesize complex scientific concepts and communicate them clearly both to experts and to the general public. Students are expected to learn and work on how to effectively communicate scientific research through an Article Review, Minute Papers and Short Answer questions. Please make an appointment with
me if you have difficulty with your work in this course. It is strongly suggested that students avail themselves of the opportunity to clarify and discuss research topics and assignments during faculty office hours. Office hours are not opportunities to obtain information missed during absences from class. Such material should be obtained from classmates.

**Topics Covered:**
The Nervous System (recap), Homeostasis & Motivation, Reward & Reinforcement, Substance Abuse, Fluid Regulation, Feeding, Sex, Gambling

**Readings:**
The reading list will be provided. All of the assigned readings can be found on the Moodle website. Readings for the assigned lecture should be done before coming to class.

**Assignment Schedule:**
- Midterm I (30%): March 1st, 2016
- Press Release (30%): March 4th, 2016
- Midterm II (30%): May 3rd, 2016
- Conceptapedia (5%): Due on specific dates throughout the term (see Moodle schedule)
- Minute Papers (5% + 2% bonus if all completed) are due online (Moodle) by Sunday 5pm that week

**Assignments:**
Midterm Exams (30% each):
The two midterms will each count for 30% of the final grade. They will each consist of multiple-choice, very short and short answer questions. Questions will be drawn primarily from what was covered in class but may also cover the assigned readings. Short answer questions will require students to briefly describe in their own words a concept or function covered in the course or to apply knowledge or reasoning from the course to discuss a topic. If a student misses one of the midterms with a justifiable reason, the remaining midterm will each count for 60% of their grade.

Press Release (30%):
Students are required to write a short (500 word limit) review of a scientific article (from a list provided). The review should be in the style of a press release. It should be accessible to the general public, convey the major findings of the article and their impact and relevance to science and society.

Conceptapedia (5%):
Students will be assigned a specific concept covered in the course for which they will be responsible to write a (300 word limit) definition (in your own words). The submission must define the concept and clarify its subtleties and complexities, particularly with how they relate to the course material. These assignments will be posted on Moodle (with the author’s name; but not the grade) to help other students review and better understand certain concepts. The purpose is to learn how to synthesize and be clear and concise when communicating scientific principles. These assignments will be due at specific times throughout the course depending on the relevance of the topic assigned to the lecture content at the time. A group of people will be assigned the same concept. You are encouraged to meet and discuss the concept with me and that group. However, the final submission MUST be your own work!

Minute Papers (5% + 2% bonus):
Minute papers will provide the opportunity to reflect on the class briefly. Students will be asked to: briefly summarize the 2-3 main points of each lecture that week, share the most confusing point(s) and provide any comments or feedback on the class so far. Some of the most confusing topics will be addressed at the start of the following lecture. You are strongly encouraged to attend office hours if any topic needs further clarification. Minute papers will be due online (Moodle) at the end of each week (Sunday 5pm) and will cover the lecture(s) of that week. In order to receive the 2% bonus, students must submit a Minute Paper for every week (all or nothing). Missed lectures should still be covered by going through slides and any notes from fellow students.

Course Requirements:
- **Important:** Students must take/submit all assessments. Exams missed, or assignments not turned in or turned in late without adequate justification will receive a 0. All work is expected to be the student’s own.
- **Attendance and participation:** Students are expected to attend all classes and class participation is greatly encouraged. You are expected to do the assigned readings before coming to class. Your participation (and presence) in class is imperative to the structure of the class, so I encourage you to not skip class unless you are extremely sick or have an adequate excuse. Attendance will not be
taken, but you will be responsible for all material covered and for any
announcements made.
- Atmosphere: It is very important that we respect each other in this class (and all
courses where sensitive topics are discussed). Please be courteous to your peers
and refrain from off-topic comments with your neighbor, using your cell phones
(unless it is an emergency), or checking your email/Facebook/Twitter while you
are in class. If you cannot refrain from these activities, I may ask you to leave
class.

Feedback:
An anonymous message/email form will be posted on Moodle to allow students
to directly communicate with me in order to raise questions or issues with the
course or the material. This is a place for constructive comments or concerns. Be
aware that Moodle does not currently allow me to respond anonymously other
than by general announcements in class (if required).
A mid- and end of semester course evaluation will be posted on Moodle to
provide feedback in order to help improve the course.

Disclaimer:
Some of the information and topics covered in this course may be controversial
or contain sensitive material relating to topics such as eating disorders/obesity,
sexual orientation or various forms of addiction. If you, or someone close, has
been directly or closely affected by one of these areas and you feel like it may
raise some issues, feel free to contact me directly (or anonymously) ahead of the
lecture covering that topic.

NOTE: Drop/Add Period ends on February 3rd, 2016.
Spring Break begins at the end of classes on March 4th and ends on March 21st at
8:00 a.m.
Last day to withdraw from course: April 27th, 2016.

Students with Disabilities:
Wesleyan University is committed to ensuring that all qualified students with
disabilities are afforded an equal opportunity to participate in and benefit from
its programs and services. To receive accommodations, a student must have a
documented disability as defined by Section 504 of the Rehabilitation Act of 1973
and the ADA Amendments Act of 2008, and provide documentation of the
disability. Since accommodations may require early planning and generally are
not provided retroactively, please contact Disability Resources as soon as
possible. If you believe that you need accommodations for a disability, please contact Dean Patey in Disability Resources, located in North College, Room 021, or call 860-685-5581 for an appointment to discuss your needs and the process for requesting accommodations. Students are responsible for registering with Disabilities Services, in addition to making requests known to me in a timely manner. If you require accommodations in this class, please make an appointment with me as soon as possible, so that appropriate arrangements can be made. The procedures for registering with Disabilities Services can be found at http://www.wesleyan.edu/studentaffairs/disabilities/Student/index.html

**Academic Honesty:**
You are expected to adhere to Wesleyan’s Honor Code as stated in the Student Handbook (http://www.wesleyan.edu/studentaffairs/studenthandbook/standardsregulations/studentconduct.html) when it comes to cheating and plagiarism. Academic dishonesty is an inexcusable act and none of these will be tolerated in this class. The sanctions provided in this policy will be used to deal with any violations. If I begin to suspect plagiarism, I will have you attach a signed version of the honor code to submitted assignments.