PSYC228201, The Neurobiology of Motivated Behaviors  
Summer Session I, 2015, 3 Credits

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Schedule: Monday/Wednesday 6-9:15PM 
Room: Campion 200

Boston College Mission Statement
Strengthened by more than a century and a half of dedication to academic excellence, Boston College commits itself to the highest standards of teaching and research in undergraduate, graduate and professional programs and to the pursuit of a just society through its own accomplishments, the work of its faculty and staff, and the achievements of its graduates. It seeks both to advance its place among the nation's finest universities and to bring to the company of its distinguished peers and to contemporary society the richness of the Catholic intellectual ideal of a mutually illuminating relationship between religious faith and free intellectual inquiry.

Boston College draws inspiration for its academic societal mission from its distinctive religious tradition. As a Catholic and Jesuit university, it is rooted in a world view that encounters God in all creation and through all human activity, especially in the search for truth in every discipline, in the desire to learn, and in the call to live justly together. In this spirit, the University regards the contribution of different religious traditions and value systems as essential to the fullness of its intellectual life and to the continuous development of its distinctive intellectual heritage.

Course Description
Motivated behaviors are critical for the survival of the individual as well as the species. The basic motivated behaviors of 1) reproduction, 2) defensive behavior, 3) foraging, and 4) ingestive behavior are innate and prominent across all species, including humans. The class will discuss how and why these behaviors are necessary for the survival of the species. The course will introduce students to the neural basis underlying both the typical, as well as aberrant, expression of these motivated behaviors.

Course Objectives
1. Gaining factual knowledge (terminology, classifications, methods, trends) 
   Through course lecture, students will learn the four basic motivated behaviors as well as the neurobiological basis underlying them.
2. Learning to apply course material (to improve thinking, problem solving, and decisions) 
   With response papers, students will be able to think about the behaviors discussed, observe them in daily life, and write about their experience. Additionally, they will write about the evolutionary advantage and neurological basis to the specific behavior.
3. Learning how to find and use resources for answering questions or solving problems 
   By learning to read and understand primary research articles, students will learn how to search for and comprehend primary articles if they have questions of their own about certain aspects of different behaviors. This skill is also transferable throughout academia as other areas require this skill.
4. The student will demonstrate their understanding of the motivated behaviors across cultural settings and will learn the impact of culture, gender, and age in the neurobiological basis of behaviors as demonstrated by assignments, exams, and overall discussion.
5. The student will demonstrate ethical understanding of neuroscience research pertaining to psychological and neurological research as demonstrated by assignments in which they are required to discuss research articles.

Grading
Final grades will be determined based on the averages of the two exams (70%), papers (20%), and attendance and participation (10%). Final grades will be graded as follows:

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<thead>
<tr>
<th>Grade</th>
<th>Minimum Average</th>
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<tbody>
<tr>
<td>B+</td>
<td>86.67 – 89.99</td>
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<tr>
<td>C+</td>
<td>76.67 - 79.99</td>
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<tr>
<td>D+</td>
<td>66.67 - 69.99</td>
</tr>
<tr>
<td>A</td>
<td>93.34-100</td>
</tr>
<tr>
<td>B</td>
<td>83.34 - 86.66</td>
</tr>
<tr>
<td>C</td>
<td>73.34 - 76.66</td>
</tr>
<tr>
<td>D</td>
<td>63.34 - 66.66</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60.00</td>
</tr>
<tr>
<td>D-</td>
<td>60.00 – 63.33</td>
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<tr>
<td>C-</td>
<td>70.00 – 73.33</td>
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WCAS Grading System
The undergraduate grading system consists of twelve categories: A (4.00), A– (3.67), excellent; B+ (3.33), B (3.00), B– (2.67), good; C+ (2.33), C (2.00), C– (1.67), satisfactory; D+ (1.33), D (1.00), D– (1.67), passing but unsatisfactory; F (0.00), failure; I (0.00), incomplete; F (0.00), course dropped without notifying office; W (0.00), official withdrawal from course.

Grade Reports. All students are required to log into the web through Agora to access their semester grades. Students must utilize their BC username and password to log on. If your username or password is not known the HELP Desk located in the Campus Technology Resource Center (CTRC) in O’Neill Library will issue a new one. The CTRC requires a valid picture ID (a BC ID, driver’s license or passport) to obtain your password.

Text(s)/Readings (Required)

Text(s)/Readings (Recommended)
1) Reproduction:
2) Defensive Behaviors:

3) Foraging

4) Ingestive Behavior:


Important Policies
http://www.bc.edu/content/bc/schools/adstudies/guide/academicinteg.html

Written Work
Graduate and undergraduate students are expected to prepare professional, polished written work. Written materials must be typed in the format required by your instructor. Strive for a thorough, yet concise style. Cite literature appropriately, using APA, MLA, CLA format per instructors decision. Develop your thoughts fully, clearly, logically and specifically. Proofread all materials to ensure the use
of proper grammar, punctuation, and spelling. You are encouraged to make use of campus resources for refining writing skills as needed [http://www.bc.edu/libraries/help/tutoring.html].

Scholarship and Academic Integrity
It is expected that students will produce original work and cite references appropriately. Failure to reference properly is plagiarism. Scholastic dishonesty includes, but is not necessarily limited to, plagiarism, fabrication, facilitating academic dishonesty, cheating on examinations or assignments, and submitting the same paper or substantially similar papers to meet the requirements of more than one course without seeking permission of all instructors concerned. Scholastic misconduct may also involve, but is not necessarily limited to, acts that violate the rights of other students, such as depriving another student of course materials or interfering with another student’s work.

Request for Accommodations
If you have a disability and will be requesting accommodations for this course, please register with either Dr. Kathy Duggan (dugganka@bc.edu), Associate Director, Connors Family Learning Center (learning disabilities or AHD) or Dean Paulette Durrett, (paulette.durrett@bc.edu), Assistant Dean for students with disabilities, (all other disabilities). Advance notice and appropriate documentation are required for accommodations. For further information, you can locate the disability resources on the web at http://www.bc.edu/content/bc/libraries/help/tutoring/specialservices.html.

Attendance
Class attendance is an important component of learning. Students are expected to attend all classes and to arrive by the beginning of and remain for the entire class period. When an occasion occurs that prevents a student from attending class, it is the student’s obligation to inform the instructor of the conflict before the class meets. The student is still expected to meet all assignment deadlines. If a student knows that he or she will be absent on a particular day, the student is responsible for seeing the instructor beforehand to obtain the assignments for that day. If a student misses a class, he or she is responsible for making up the work by obtaining a classmate’s notes and handouts and turning in any assignments due. Furthermore, many instructors give points for participation in class. If you miss class, you cannot make up participation points associated with that class. Types of absences that are not typically excused include weddings, showers, vacations, birthday parties, graduations, etc. Additional assignments, penalties and correctives are at the discretion of the instructor. If circumstances necessitate excessive absence from class, the student should consider withdrawing from the class. In all cases, students are expected to accept the decision of the instructor regarding attendance policies specific to the class.

Consistent with our commitment of creating an academic community that is respectful of and welcoming to persons of differing backgrounds, we believe that every reasonable effort should be made to allow members of the university community to observe their religious holidays without jeopardizing the fulfillment of their academic obligations. It is the responsibility of students to review course syllabi as soon as they are distributed and to consult the faculty member promptly regarding any possible conflicts with observed religious holidays. If asked, the student should provide accurate information about the obligations entailed in the observance of that particular holiday. However, it is the responsibility of the student to complete any and all class requirements for days that are missed due to conflicts due to religious holidays.

There may be circumstances that necessitate a departure from this policy. Feel free to contact the WCAS at 617-552-3900 for consultation.
Deadlines
Assignments are due at the beginning of the class period on the specified dates. Late assignments will be graded accordingly (-1 point per day late). Make-up exams will only be given if you inform the professor of the absence at least 48 hours prior to the exam, or receive a note from the Dean in the case of an emergency.

Course Assignments (readings, exercises and/or experiences)

It is expected that 8 hours per week of your study time out will be spent on out of class assignments and course preparation. These are listed below. Please note that some weeks will require more time and some weeks less time but the average is approximately 8 hours per week over the semester.

Response Papers: Students will be required to write response papers [5 two page papers double-spaced (2% each)]. Examples of the four motivated behaviors will be discussed in class. Discuss a personal experience you observed in your daily life and discuss why the behavior was necessary and the consequences if it did not occur. Incorporate lecture material to demonstrate your understanding of the behavior and its neural mechanisms. If you cannot recall an experience, feel free to find a YouTube clip containing the behavior. This assignment should take approximately 1-2 hours of work per week outside of class. Papers will be due the first class meeting of each week, excluding the first week.

Article Summary Papers: Additionally, students will be assigned minimum two primary journal articles each week to read and will be asked to write a summary of one article that will be discussed later in the week. 5 two page papers double-spaced (2% each). This assignment should take approximately 2 hours per week outside of class. Papers will be due the first class meeting of each week, excluding the first week.

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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading/Exercises/Experiences</th>
<th>Due</th>
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<tbody>
<tr>
<td>Wed 5/13</td>
<td>Introduction</td>
<td>Swanson, Swanson, Berridge</td>
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<tr>
<td>Fri 5/15</td>
<td>Reproduction: Behavior</td>
<td>McGuire, Numan ('07)</td>
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<td>Mon 5/18</td>
<td>Reproduction: Brain</td>
<td>Insel, Numan ('07), Sheehan, Numan ('94)</td>
<td>1st Papers due</td>
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<td>Wed 5/20</td>
<td>Defensive: Behavior</td>
<td>Blanchard, Gross</td>
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<tr>
<td>Wed 5/27</td>
<td>Defensive: Brain</td>
<td>Gross, Feinstein, Nelson, Wilensky</td>
<td>2nd Papers due</td>
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<tr>
<td>Fri 5/29</td>
<td>Exam 1</td>
<td></td>
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<tr>
<td>Mon 6/1</td>
<td>Foraging: Behavior</td>
<td>Sih, Hayden ('14)</td>
<td>3rd Papers due</td>
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<tr>
<td>Wed 6/3</td>
<td>Foraging: Brain</td>
<td>Comeli, Hayden ('11), Kelling</td>
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<td>Mon 6/8</td>
<td>Ingestive: Behavior</td>
<td>Schachter, Popkin</td>
<td>4th Papers due</td>
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<td>Wed 6/10</td>
<td>Ingestive: Brain</td>
<td>Faroogi, Kelley, Petrovich, Smith</td>
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<td>Mon 6/15</td>
<td>Unifying brain mechanisms</td>
<td>Sakurai, Mahler</td>
<td>5th Papers due</td>
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<tr>
<td>Wed 6/17</td>
<td>Exam 2</td>
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** Response Papers and Article Summary Papers will be due the first meeting of the week, excluding the first week.