INTRODUCTION TO NEUROSCIENCE (NSCI/PSYC 320)
Tuesday/Thursday 2:00 – 3:15 PM, Brown Lab, Room 207

COURSE INSTRUCTOR: Amy L. Griffin, Ph.D.
Office: Wolf Hall, Room 113
Phone: 831-2575
Email: amygriff@psych.udel.edu
Office Hours: Tuesday/Thursday, 12:30 – 1:30 PM, or by appt.

TEACHING ASSISTANT: Henry Hallock
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Email: hhallock@psych.udel.edu
Office Hours: Wednesday 9:00 – 10:00 AM, or by appt.

COURSE DESCRIPTION
The goal of this course is to introduce you to the major topics within the field of neuroscience. We will start by covering the basics of how nerve cells function and communicate. Then, we will build upon this foundation by discussing the brain mechanisms of sensory perception and complex behaviors such as movement, learning, reproduction, and sleep. Finally, we will cover disorders of the nervous system. This course will not only lay the foundation for advanced courses in neuroscience, but more importantly, will help you to gain a better understanding of the brain's involvement in behavior.

REQUIRED TEXTBOOK
Physiology of Behavior by Neil R. Carlson, 11th Edition

COURSE COMPONENTS
EXAMS (80% of grade): Exams are designed to test your understanding of important concepts and information covered in lectures and in assigned textbook readings. There will be NO make-up exams unless you have made arrangements with the instructor prior to the exam date. Review sessions for each exam will be held outside of the class meeting time. There will be 3 exams and a comprehensive final, each worth 20% of your grade.

QUIZZES (10% of grade): There will be 8 quizzes designed to provide a “low-stakes” assessment of your understanding of each chapter. Quizzes will be taken using clickers (see below). If you take the quiz but do not stay for the remainder of the class, you will receive a 0 on the quiz for that day unless arranged with the instructor beforehand. The lowest 3 quiz grades will be dropped and not figured into the final grade. There will be no make-up quizzes.

CLASS PARTICIPATION (10% of grade): There will be opportunities during each class meeting to earn participation points by answering questions using clickers (see below). Typically, there will be two ways to earn points: participate in polls and answer questions about the lecture material. Additional points will be given for correct answers.

EMAIL AND WEB-BASED COMMUNICATION/ASSIGNMENT SUBMISSION
One of the course requirements is communication with the instructor and TA via email and Sakai. You must have access to a web browser for online access of Sakai. You will receive email notifications when announcements are posted on Sakai. Problems meeting course requirements due to computer equipment or software malfunction are your responsibility.

CLICKER USE
This course will require the iClicker (either the original iClicker or the iClicker2, available at the UD bookstore). You are responsible for registering your clicker with Sakai, using these instructions. You are also responsible for making sure that your clicker is functional for each class, so be sure to check the battery life before coming to class.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
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<tbody>
<tr>
<td>Aug. 26</td>
<td>Course Introduction &amp; Cells of the Nervous System</td>
<td>Chapter 2</td>
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<tr>
<td>Aug. 28</td>
<td>The nerve impulse: Resting potentials and action potentials</td>
<td>Chapter 2</td>
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<tr>
<td>Sept. 2</td>
<td>Synaptic Transmission</td>
<td>Chapter 2</td>
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<td>Sept. 4</td>
<td>Anatomy of the nervous system</td>
<td>Chapter 3, Quiz 1: Ch. 2</td>
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<td>Sept. 9</td>
<td>Anatomy of the nervous system</td>
<td>Chapter 3</td>
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<td>Sept. 11</td>
<td>Psychopharmacology</td>
<td>Chapter 4, Quiz 2: Ch. 3</td>
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<td>Sept. 16</td>
<td>Psychopharmacology</td>
<td>Chapter 4</td>
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<td>Sept. 18</td>
<td><strong>Exam 1</strong></td>
<td><strong>Chapters 2 – 4</strong></td>
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<td>Sept. 23</td>
<td>Neuroscience research methods</td>
<td>Chapter 5</td>
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<td>Sept. 25</td>
<td>The Visual System: The retina</td>
<td>Chapter 6, Quiz 3: Ch. 5</td>
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<td>Sept. 30</td>
<td>Analysis of visual information</td>
<td>Chapter 6</td>
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<td>Oct. 2</td>
<td>Audition</td>
<td>Chapter 7, Quiz 4: Ch. 6</td>
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<td>Oct. 7</td>
<td>The body senses</td>
<td>Chapter 7</td>
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<td>Oct. 9</td>
<td>The chemical senses</td>
<td>Chapter 7</td>
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<td>Oct. 14</td>
<td><strong>Exam 2</strong></td>
<td><strong>Chapters 5 -7</strong></td>
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<td>Oct. 16</td>
<td>Control of Movement</td>
<td>Chapter 8</td>
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<td>Oct. 21</td>
<td>Control of Movement</td>
<td>Chapter 8</td>
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<td>Oct. 23</td>
<td>Sleep &amp; Circadian rhythms</td>
<td>Chapter 9, Quiz 5: Ch. 8</td>
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<td>Oct. 28</td>
<td>Sleep &amp; Circadian rhythms</td>
<td>Chapter 9</td>
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<td>Oct. 30</td>
<td>Reproductive behavior</td>
<td>Chapter 10, Quiz 6: Ch. 9</td>
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<td>Nov. 4</td>
<td>Election Day, NO CLASSES</td>
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<td>Nov. 6</td>
<td><strong>Exam 3</strong></td>
<td><strong>Chapters 8-10</strong></td>
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<td>Nov. 11</td>
<td>Learning and Memory: Synaptic plasticity</td>
<td>Chapter 13</td>
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<td>Nov. 13</td>
<td>Learning and Memory: Neural systems</td>
<td>Chapter 13, Quiz 7: Ch. 13</td>
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<td>Nov. 18</td>
<td>SFN conference, CLASS CANCELED</td>
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<td>Nov. 20</td>
<td>Neurological disorders</td>
<td>Chapter 15</td>
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<td>Nov. 25</td>
<td>Schizophrenia</td>
<td>Chapter 16, Quiz 8: Ch. 15</td>
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<td>Nov. 27</td>
<td>No classes – THANKSGIVING</td>
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<td>Dec. 2</td>
<td>Mood disorders</td>
<td>Chapter 16</td>
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<td>TBA (Dec. 6-13)</td>
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<td><strong>Final Exam</strong></td>
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GRADE DETERMINATION

Your final grade will be determined as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<tbody>
<tr>
<td>93 – 100</td>
<td>A</td>
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<tr>
<td>90 – 92.9</td>
<td>A-</td>
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<tr>
<td>87 – 89.9</td>
<td>B+</td>
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<tr>
<td>83 – 86.9</td>
<td>B</td>
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<tr>
<td>80 – 82.9</td>
<td>B-</td>
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<tr>
<td>77 – 79.9</td>
<td>C+</td>
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<tr>
<td>73 – 76.9</td>
<td>C</td>
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<tr>
<td>70 – 72.9</td>
<td>C-</td>
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<td>67 – 69.9</td>
<td>D+</td>
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<td>63 – 66.9</td>
<td>D</td>
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<tr>
<td>60 – 62.9</td>
<td>D-</td>
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<tr>
<td>Below 60</td>
<td>F</td>
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OTHER POLICIES

KEEPING UP WITH COURSE MATERIAL: Please take advantage of the many resources available to help you understand the course material, including asking questions in class, coming to office hours or visiting the supplemental website from the textbook publisher. For a list of all student resources available with *Physiology of Behavior*, go to www.mypearsonstore.com, enter the text ISBN (0205239390) and check out the “Everything That Goes With It” section under the book cover.

LAPTOP COMPUTERS: If you chose to bring a laptop computer to class, please refrain from engaging in activities not related to the class (i.e. Facebook, email, etc.). If you use a laptop during class, you are not permitted to sit in the back row of the classroom.

ACADEMIC DISHONESTY: I follow the University of Delaware Policy on academic dishonesty. Especially note that the University of Delaware’s Code of Conduct pertaining to Academic Honesty specifically addresses clicker use, stating that academic dishonesty includes “completion for another person of an academic work, or permitting someone else to complete an academic work for oneself, including through the use of personal response systems (clickers).” If a student is observed entering data on more than one clicker, the clicker ID numbers will be recorded and the owners of both clickers will receive a zero for participation and/or the quiz for the day. Students involved in more than one such incident will be charged with academic dishonesty.

RECORDING OF CLASS MEETINGS: This course uses UD capture to record the audio from the classroom along with visuals from the instructor’s laptop computer. These recordings will be available approximately 15 minutes after the scheduled end time of each class. Please be aware that your questions/comments before, during and after class will be heard on the audio. If you notice a problem with the recordings (e.g. lack of audio), please notify the instructor immediately.