Psych 310: Brain & Behavior
Class Location Kildee 107
Class Time: M-F 12:10-1:10 p.m., 06/15/15-08/07/15

Part 1 (weeks 1-4):
Instructor: Larissa Arnold, M.S.  Office hours: MWF
Office: W017, Lagomarcino  1:10 – 2:00 p.m., or by appointment
Phone: 515-708-7196
Email: lfarnold@iastate.edu

Part 2 (weeks 5-8):
Instructor: Jason Geller, M.S.  Office hours: MTWRF
Office: 0057, Science 1  2 -3 p.m., or by appointment
Phone: 515-520-3464
Email: jgeller1@iastate.edu

Prereq: Psych 101; Biol 109 or 201 or Zool 155.

Required Course Materials

ISBN: 978-1-305-10540-9

Clicker: Response Card RF (by Turning Point) with LCD

NOTE: Using a previous edition of the text is NOT recommended! Neuroscience is constantly advancing, so there have been many changes in the contents of the textbook as well as in the organization since the 10th edition.

Course description

The revered neuroscientist/biologist Francis Crick once said, “It is essential to understand our brains in some detail if we are to assess correctly our place in this vast and complicated universe we see around us.” The brain is the most complicated and fascinating machine in the universe and it is our hope that all of you will gain a better understanding of the interrelationship between brain and behavior from this course.

This course is an introduction to the growing and exciting field of Biological Psychology. During this course we will study relationships between behavior and underlying physiological processes – how the brain produces behavior, and how behavior influences the brain. We will begin with an overview of gross neuroanatomy (i.e., the basic structures of the brain) as well as discuss fundamentals of neuronal communication. Following this will be a discussion of neurotransmitters and drug effects and then brain development. The remainder of the course will focus on brain systems and processes associated with sensation and perception, movement, sleep, emotion, memory, language, and mental illness.
You will want to become well-acquainted with the Blackboard Learn site for this course. Selected lecture slides will be posted on this site. These slides are not meant to serve as a substitute for attending class and taking notes – if you miss class, you will probably miss some information, case studies, and demos that facilitate your understanding of the course material. The slides are designed to save you time in class by providing images and diagrams that might be difficult to copy into your class notes. You can also access the assigned articles from links on the site. Exam grades will also be posted on the site.

**Learning Objectives**

After this class finished, you should be able to:

1. Identify basic structures and describe basic functions of the nervous system.
2. Explain the neural mechanisms underlying vision and other sensory systems, learning/memory, language, and mental illness.
3. Read, understand, and critically analyze neuroscience research findings presented in the literature as well as the media/popular culture.

**Grading**

**Exams**

There will be four in-class exams, worth 100 points each. Exams will consist of several types of questions, including multiple choice, short answer, fill-in-the-blank, etc. Exams will primarily cover topics discussed in lecture, but please note that material not covered in lecture might also appear on the exam.

As noted above, there will be four mandatory in-class exams for this course. The final exam is not cumulative in the strict sense – although the course material tends to be cumulative in that mastering the material from the early part of the course (basic neuroanatomy and physiology) makes the remainder of the course easier.

Exams must be taken during regular class time—dates are shown on the schedule below. Makeup exams will be given only in extreme circumstances and only when the student has contacted the instructor prior to the scheduled time of the exam and received approval. Failure to do so will result in a grade of zero on the missed exam. Makeup exams may differ in format from the regular exam.

**Clicker Quizzes**

Throughout the summer semester, we will administer clicker quizzes, totaling approximately 80 points. Therefore, it is very important for you to purchase a clicker and bring it with you to class every day. Only 50 of the clicker points will count towards your final grade. This will allow you to miss a few classes due to illness, forgetting your clicker, etc. If you miss a quiz, you will not be allowed to make up the points, under any circumstances.

**Grade Breakdown**

All exams and clicker quizzes are worth a total of 450 points. Here is how this breaks down:
<table>
<thead>
<tr>
<th>Total Possible Points</th>
<th>Percent</th>
<th>Letter Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>417-450</td>
<td>93-100</td>
<td>A</td>
</tr>
<tr>
<td>403-416</td>
<td>90-92</td>
<td>A-</td>
</tr>
<tr>
<td>390-402</td>
<td>87-89</td>
<td>B+</td>
</tr>
<tr>
<td>372-389</td>
<td>83-86</td>
<td>B</td>
</tr>
<tr>
<td>360-371</td>
<td>80-82</td>
<td>B-</td>
</tr>
<tr>
<td>345-359</td>
<td>77-79</td>
<td>C+</td>
</tr>
<tr>
<td>327-344</td>
<td>73-76</td>
<td>C-</td>
</tr>
<tr>
<td>315-326</td>
<td>70-72</td>
<td>C-</td>
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<tr>
<td>300-314</td>
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<td>D+</td>
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<td>282-299</td>
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<td>270-281</td>
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</tr>
<tr>
<td>0-269</td>
<td>0-59</td>
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</tr>
</tbody>
</table>

NOTE: We use TOTAL POINTS EARNED to calculate final grades in the course! Final course grades are rounded up at .5 and down at .4, but they will not be “bumped.”

Exam Dates:

- Exam 1: June 26
- Exam 2: July 10
- Exam 3: July 24
- Exam 4: August 7

Attendance

Attendance at every class is strongly encouraged, although I do not take attendance and you are not expected to inform me when you miss class. Poor attendance will indirectly affect your grade, because some of the material on the exams will be covered only in class. If you do miss class, you should contact a fellow student to find out about any announcements and to obtain lecture notes. Lectures will not be repeated individually.

Miscellaneous University Policies:

Academic Dishonesty

The class will follow Iowa State University’s policy on academic dishonesty. Anyone suspected of academic dishonesty will be reported to the Dean of Students Office.

http://www.dso.iastate.edu/ja/academic/misconduct.html

Disability Accommodation

Iowa State University complies with the Americans with Disabilities Act and Sect 504 of the Rehabilitation Act. If you have a disability and anticipate needing accommodations in this course, please contact me to set up a meeting within the first two weeks of the semester or as soon as you become aware of your need. Before meeting with me, you will need to obtain a SAAR form with recommendations for accommodations from the Disability Resources Office, located in Room 1076 on the main floor of the Student Services Building. Their telephone number is 515-294-7220 or email disabilityresources@iastate.edu. Retroactive requests for accommodations will not be honored.

Harassment and Discrimination
Iowa State University strives to maintain our campus as a place of work and study for faculty, staff, and students that is free of all forms of prohibited discrimination and harassment based upon race, ethnicity, sex (including sexual assault), pregnancy, color, religion, national origin, physical or mental disability, age, marital status, sexual orientation, gender identity, genetic information, or status as a U.S. veteran. Any student who has concerns about such behavior should contact his/her instructor, Student Assistance at 515-294-1020 or email dso-sas@iastate.edu, or call the Office of Equal Opportunity and Compliance at 515-294-7612.

**Religious Accommodation**
If an academic or work requirement conflicts with your religious practices and/or observances, you may request reasonable accommodations. Your request must be in writing, and your instructor or supervisor will review the request. You or your instructor may also seek assistance from the Dean of Students Office or the Office of Equal Opportunity and Compliance.

**Contact Information**
If you are experiencing, or have experienced, a problem with any of the above issues, email academicissues@iastate.edu.