Text: Kolb and Whishaw, *An Introduction to Brain and Behavior, 3rd edition*

Grading: Your grade will be based upon the average of four exams. Three of the exams will be worth 23% each, and the final 31%, as it will be partly cumulative. ONLY A DOCTOR’S NOTE will suffice as a valid excuse to miss an exam. THERE IS NO EXTRA CREDIT, so keep up on your reading and studying.

Attendance: Although attendance will not be tracked, you are strongly encouraged to attend class, because material in this course is complex and can be difficult. Exams will be based on information presented in the text as well as any presented only in class. Remember: this is your course, and you are responsible for learning the material however it best suits you, my role is to help you achieve that goal.

Office Hours: I am glad to meet with students who have questions or would like additional assistance. My office is LD 120F, and I will have office hours for half an hour after each class (that is, T Th 4:15-4:45), or by appointment. I can be reached at 274-0194 or by email at ngrahame@iupui.edu.

Schedule: This schedule below is tentative in terms of which chapters will be covered in each exam and on each day. However, the exam dates are firm, and I will always make it clear which material will be on each exam.

- **January 8-10:** Chapter 1: What Are the Origins of Brain and Behavior?
- **January 15-17:** Chapter 2, 3: How Does the Nervous System Function?
- **January 22-24:** Chapter 3, 4: What are the Nervous System’s Units?
- **January 29:** Chapter 4: How Do Neurons Transmit Information?
- **January 31:** Exam 1
- **February 5-7:** Chapters 5: How Do Neurons Communicate and Adapt?
- **February 12-14:** Chapters 6: How Do We Study the Brain’s Structure and Functions?
- **February 19-21:** Chapters 7: How Does the Nervous System Develop and Adapt?
- **February 26:** Chapter 8 (1st half) How Do Drugs and Hormones Influence the Brain?
- **February 28:** Exam 2
- **March 5-7:** Chapter 8 (2nd half), Chapter 11: How Does the Nervous System Respond to Stimulation and Produce Movement?
- **March 12-14:** No Class, Spring Break
- **March 19-21:** Chapter 12: What Causes Emotional and Motivated Behavior?
- **March 26-28:** Chapter 13: Why Do We Sleep and Dream?
- **April 2:** Chapter 14 (1st half): How Do We Learn and Remember?
- **April 4:** Exam 3
- **April 9-11:** Chapter 14, 15: How Does the Brain Think?
- **April 16-18:** Chapter 15, 16: What Happens When the Brain Misbehaves?
- **April 23-25:** Chapter 16, Final Exam Review
- **May 2:** Final, 3:30-5:30PM

Other Dates to Keep in Mind:
- **March 1:** Last day to receive an automatic W with advisor, but no instructor signature.
- **April 1:** After this date, withdrawal isn’t likely to be granted.
Overview of the Course
This class focuses on how behavior emerges from the organ that produces it, the brain. You will learn about evolution and anatomy of the brain, neurophysiology, how brain networks function, and what happens to behavior when the brain has problems. The textbook, Kolb and Whishaw, keeps a fairly clinical perspective on neuroscience, which I think makes the topic more interesting and a bit less intimidating to many students. I will largely follow the text and its ordering of the material, with a few main exceptions: I’ll skip over Chapters 9 and 10, which are covered in the Sensation and Perception course. However, I’ll go a bit more in depth on alcoholism and drug abuse (Chapter 8), behavioral genetics (throughout), and learning and memory (Chapter 14).

Reading
You are strongly advised to read the relevant chapters before coming to class, so that you may better follow the lectures. Your syllabus provides an approximate reading schedule, with modifications that I’ll announce when applicable at the beginning of class.

Learning the Material
At the back of each chapter, you will find two sections that are very helpful: Summary and Key Terms. Online at the publisher’s website, you will find review questions. In addition to reading the material and attending class, these online and printed sections will help to prepare you for exams. Remember, some exam questions will be based upon pure vocabulary, so learning key terms is really important. Also, if you don’t know the vocabulary, the chances of being able to understand the concepts greatly decrease. My advise is that as you are reading, when you encounter a term you don’t understand, IMMEDIATELY look it up in the Glossary at the end of the book (Section G) so that you don’t miss the concept that the book is trying to explain.

My Teaching Philosophy
I believe that you are all adults. You are here in school because you are pursuing your own life goals. Therefore, it’s your responsibility to learn the material. Some of you learn a great deal from attending class, while others of you do not. This is why attendance isn’t reflected in your grade. On the other hand, I will not tolerate your missing an exam unexcused.

For my part, I am responsible for helping you learn this material. I hope that you will find me approachable – during class, don’t be afraid to interrupt me to ask a question or raise an issue. I don’t promise to know the answers (believe me when I say that!) but I am determined to try. Remember, if you have a question, or something seems unclear, chances are that there are lots of other students in the class who will silently thank you for asking exactly that question. I especially welcome any discussion, as this is sometimes the best way to understand the issues that will be presented in this class.

Exams
Exams will be multiple choice and fill in the blank. You will be tested on
- Vocabulary
- Neuroanatomy
- Key concepts
- Key experiments

Many of these questions can be covered with multiple choice, but you will also be responsible for labeling neuroanatomy and cellular anatomy figures that you see in the text. In other words, you’ll get an exam with a figure from your text, and your job will be to label the structures seen in the figure.