

NSCI100: Psychological and Brain Sciences

The details of the course are described throughout the syllabus. I treat the syllabus like a contract with the student. Thus, details of the syllabus are closely followed with rare exceptions. Know and understand the syllabus. You will be quizzed over it.

Table of Contents	Pg 1
Section I: General Information	Pgs 2-4
Section IA: Course Description and Objectives	
Section IB: Contact Information	
Section IC: Course Materials (textbooks and lab materials)	
Section ID: Course Format (lecture and lab)	
Section II: Assessment and Grading	Pgs 4- 7
Section IIA: Point Values (itemized breakdown of course points)	
Section IIB: Grading Criteria (grade scale and procedures)	
Section IIC: Final Course Grades	
Section IID: Extra Credit	
Section III: Important Dates	Pgs 7
Section IV: Testing	Pgs 7-8
Section V: Assignments	Pgs 8
Section VI: Attendance / Make-up Policy	Pgs 8-9
Section VIA: Is attendance mandatory? (Description and Options)	
Section VIB: Make-up policy	
Section VIC: Murphy	
Section VII: Statement for students with disabilities	Pgs 10
Section VIII: Statement on Academic Integrity	Pgs 10
Section IX: Classroom Etiquette	Pgs 10-11
Section X: Outside The Classroom: Office Hours, Appointments, and Email	Pgs 11
Section XI: Tips for Getting an A	Pgs 12-13
Section XII: Frequently Asked Questions	Pgs 14-15
Appendix A: Laboratory Rules and Regulations	Pg 16
Appendix B: Description of Lab Practical and Lab Checklist	Pgs 17-18
Appendix C: Self Survey and Predicted Grade in the Course	Pgs 19-20

Section I: General Information:

“Diligence is the mother of good luck”, Ben Franklin

“With self-discipline most anything is possible”, Theodore Roosevelt

“If you are going to do it, do it right”, Mike Holmes

Section I A: Course Description and 3 Main Objectives:

Course Description: This psychobiology course merges components of biology, psychology, and neuroscience to explore aspects of behavior and cognition. This course is aimed at incoming neuroscience majors as an alternative to PSYC100. To better prepare neuroscience majors for the road ahead this course combines elements of both PSYC100 (General Psychology) and PSYC314 (Brain & Behavior). From neurophysiology to anatomy to psychopathology to careers in neuroscience a broad array of subjects are covered. Finally, this class is designed with a strong active learning component and includes a laboratory experience.

Objective 1: Master the basic principles spanning many subfields of behavioral neuroscience.

Main topics include neuroanatomy, neurophysiology, sensory systems, psychopharmacology, methods in neuroscience research, sleep, emotion, learning and memory, and neurological/psychological disorders. Detailed checklists/study guides are provided to highlight this information throughout the textbook. Test questions commonly incorporate multiple concepts and assume a detailed understanding of the required material. All tests are cumulative requiring students to approach the material using study techniques that emphasize long term retention. Through discussion, application, repetition, and rigorous testing satisfactory completion of this objective will be inevitable for students planning to do well in this course.

Objective 2: Active learning in lecture and laboratory activities.

Lecture: The course is designed to promote learning through interaction. Students are encouraged to participate in the classroom through discussions, clickers, and group activities. Students are also given some control over daily lecture content through online suggestions and interactive question and answer sessions. Obviously, active learning requires regular attendance and student participation. Thus, course policies and procedures commonly emphasize attendance and participation.

Lab: Neuroanatomy is fundamental to the understanding of psychological and brain sciences. References to neuroanatomy continually appear throughout the textbook, and related scientific literature discussed in the classroom. All lecture exams in this course also have a neuroanatomy component. Students traditionally struggle to learn 3-dimensional neuroanatomy from a 2-dimensional textbook. Thus, an active learning “hands on” laboratory component is included in this course. From rats to sheep to cattle to humans, students work within small groups exploring the neuroanatomy of biological specimens. This unique active learning experience aims to enhance appreciation and understanding of the size, shape, complexity, connectivity, and spatial relationships between neuroanatomical structures.

Objective 3: Develop research, presentation, and collaborative group skills

Within small groups, students will conduct a brief literature review on an assigned topic. Students will also create a slide presentation in Powerpoint and orally present this material to rest of the class. Groups are graded on informational content of the presentation, slide quality, oral communication skills, and ability to respond to questions from the classroom. Students also write a review paper on related topics.

Objective 4: Start prepping students for a potential career in neuroscience

Neuroscience is a broad field with many applications and many different career options. Students are educated about these options so that they may begin to fine tune and plan their undergraduate education and take full advantage of applicable undergraduate opportunities. Students personally meet a variety of neuroscience related University of Delaware graduate students and faculty and then participate in interactive question and answer sessions with these students and faculty discussing undergraduate research opportunities, graduate school, medical school, and related neuroscience careers.

Section I B: Contact Information

Professor: Dr. Eric Roth Contact Info: Email: eroth@psych.udel.edu

Office Hours: Wolf Hall 433, Mon 1:30-3:30PM, or by appointment

Teaching Assistant: All TA information (contact information and office hours) can be found on the teaching assistant file under the resources Sakai tab.

Section I C: Course materials:

Lecture Textbook: Pinel. Biopsychology (9th edition), Pearson

Lab Textbook: Haines, D.E. Neuroanatomy in Clinical Context: An atlas of structures, sections, systems, and syndromes (9th edition).

Other requirements: Clickers (we will likely use frequency AA) and personal protective equipment for the lab (goggles, and appropriate clothing). 8 Mil Nitrile gloves will be provided by the instructor.

Section I D: Course Format:

Lecture: The general sequence of information that you are presented and tested over is outlined in the important date section below (Section III). The test dates in Section III list the chapters/material to be studied in the order that they will be covered in class. You are expected to review and take notes on the chapters prior to material being discussed in class. To estimate how far you should read to be prepared for class, I will give updates in class at the end of the week to give you a more detailed reading plan for the upcoming week. The course generally follows the required textbook and provided supplemental materials. Additionally, on Sakai I provide chapter checklists for all terms and concepts that you may be tested over. Tests are solely derived from the checklists, textbook, and other provided reference material. Although you are not directly tested over the lectures, classroom activities are designed to provide guidance and enhance efficient acquisition of the material. More specifically, lectures aid in highlighting some (non-inclusive) of the required material, provide additional material examples and clarification, provide hints and tips for testing, and most importantly, give you an opportunity to interact, discuss, and ask questions about the material. The Powerpoint presentations associated with lecture are designed to lead discussion for instructive, interactive, and organizational purposes only. They are not intended to be reference material and will not be provided as such. Other miscellaneous reference material and assignment instructions will be provided on Sakai under the resources tab.

Lab: Laboratory procedures **are conducted at another classroom location (Mckinly Lab 008)**. Lab dates and associated point values are indicated in Section III of this syllabus. **Laboratory attendance is required** and associated laboratory exercises and quizzes make up a significant portion of the course grade. If a student is forced to miss a lab, for most labs (other than the 75 point lab practical which must be made-up in the laboratory) opportunities to make up those lost points will likely come in the form of a mini review paper or related textbook based exercises depending on the specific lab missed. If you miss a lab and wish to make up the points, you must email me (preferably before the lab missed but **no later than 12 hours after the lab**) to acknowledge your absence and request permission to make up the points. Access to laboratory materials is restricted to scheduled laboratory times. Laptops, tablets, phones, cameras, and other electronic devices are prohibited in the laboratory. Laboratory models and biological specimens are fragile and expensive. Please handle with care. See Appendix A of this syllabus for a complete list of laboratory rules and regulations.

Personal protective equipment: Each student is **expected to provide and wear their own personal protective laboratory equipment** (disposable or appropriate dedicated washable clothing (arms and legs must be covered, no open-toe shoes) and protective eye-ware). Disposable gloves (8 mil nitrile) are also required for handling some materials. These gloves will be provided by the instructor.

Lab training: Students **must complete Environmental Health and Safety (EHS) training modules**. This includes right to know training for undergraduates (basic Right-to-know safety for undergraduates in lab class sections) and BloodBorne Pathogen (BBP) safety training. You must also complete the hepatitis B waiver form (posted on Sakai under resources). If possible, live in-class trainings will be scheduled. If you miss the in-class training, you must instead complete the online training modules. The online training modules can be found at the University of Delaware Environmental Health and Safety website (<http://www.udel.edu/ehs/>). You can obtain and read the instructions for online training under the drop down training tab or if you are familiar with the process, you can just click on the EHS online training tab. If you have any questions, let us know. After you have successfully completed the online training modules, you must print your certificates of completion and deliver them to the Graduate TA along with the HEP-B waiver form by Thurs 5PM the second week of classes.

Section II: Assessment and Grading:

Section II A: Point Values: Your course grade will be based on a total of 770 points.

300 Pts = 3 Tests (100pts each)

(The tests are multiple choice and cumulative. Each test typically consists of about 60-70 questions. Most questions are focused on a few chapters highlighted within that unit, but approximately 10-20% of the test also revisits previous material)

55 Pts = Lecture Quizzes

(Lecture quizzes come in many different formats and range from 1-20 points in value. Most of them are scheduled far in advance but others may pop up as a pleasant surprise.)

125 Pts = Lab: Quizzes and exercises

(The main purpose of the lab is to enhance your understanding of neuroanatomy as related content appears throughout the textbook and on all the lecture exams. Most lab periods include a 10pt worksheet/exercise/quiz that is completed within a small group. The early labs are designed

to prepare you for the lab practical which accounts for most of the laboratory points (75). This “fill in the blank” exam is individually completed. See appendix B for a detailed description of the lab practical.

50 Pts = Group Presentation

(You will randomly be assigned to a group. The group will receive instructions to research an assigned psychological disorder. As a group, you will create Powerpoint slides and present in front of the class. Groups are graded on informational content of the presentation, slide quality, oral communication skills, and ability to respond to questions from the classroom.)

40 Pts = Participation: Attendance, Clickers, and Classroom Interactions

*We will monitor classroom participation. Participation events include sharing a fact/opinion, volunteering for an occasional classroom activity, asking a question, answering a question, clicker responses, and participating in the “Ask the Professor” program. **For each day, you may receive a 0(absent), 1(attended class), 2(attended class and engaged in at least 1 participation event), or 3(attended class and engaged in multiple participation events).** If you average at least a 2.0 (67% participation) across the semester, full participation points are awarded. If you fall below a 2.0 average, points are determined by your participation ranking (%) among the other students.*

100 Pts = Research Review Paper (Part I: 5pts, Part II: 15 Pts, Part III: 80 Pts)

(Students will conduct a detailed literature review including 20 or more peer reviewed citations on a psychological/ neuroscience topic of their choice. Detailed instructions will be provided on Sakai.)

100 Pts = Final Exam

(Multiple choice, approximately 100-110 questions, cumulative)

Section II B: Grading Criteria

The percentage cutoffs and the total number of earned points out of a possible 770pts needed to reach each grade level are listed below.

A $\geq 95\%$ (731.5pts), A- $\geq 90\%$ (693pts), B+ $\geq 87\%$ (669.9pts), B $\geq 83\%$ (639.1pts), B- $\geq 80\%$ (616pts), C+ $\geq 77\%$ (592.9pts), C $\geq 73\%$ (562.1pts), C- $\geq 70\%$ (539pts), D+ $\geq 67\%$ (515.9pts), D $\geq 63\%$ (485.1pts), D- $\geq 60\%$ (462pts), F < 60% (<462pts)

- Grade Calculations: Calculating your grade at any point in time in this class is a simple process. All grades are posted on Sakai as well as the possible points for each item. Just add up your total points earned and divide by the total points possible. Multiply by 100 to get a %, and then compare to the % cutoffs above. At the end of the semester you don't even need to calculate a percentage. Just simply compare your total points earned to the cutoffs above. For example, you will receive a B+ if you earn 669.9 to 692.9 points. Periodically on Sakai I also update your overall course grade by calculating a percentage for you that you can compare to the cutoffs above. This grade reflects all accumulated points, extra credit, and the class curve. I post this gradebook item under the name “Course Grade %”. Whenever this is updated, you should personally calculate your overall grade as well to make sure that your calculations match.

- Curve : If there is an additional class curve at the end of the semester, I will simply post the point curve total on Sakai. Treat these curve points like extra credit points (See Section II D). In other words, for grade calculations only add them to your total points earned (do not add them to your total points possible).

Section II C: Final Course Grades

- Course Grades: You determine your grade through classroom activities and test performance. Grades are not need-based. Thus if you know you need a given grade to graduate, maintain a scholarship, etc..., prepare accordingly from the beginning of the semester. Grades are determined by strict point thresholds (See Section II B). **All point cutoffs are firm.** I do not manipulate individual borderline grades. You either meet and/or exceed the threshold or you do not. I simply enter the number of points you accumulated into the system, and it assigns your course grade based on the predefined criteria set in this syllabus. Under attendance option 1 (see section VI), I do give you 10 free extra credit points. One of the purposes of these free points is to push you up to the next grade level in borderline situations (see Section II D below). Throughout the semester I am more than happy to try to assist you in improving your performance, but after the final is completed, I do not have any options available for offering additional extra credit or selectively revising grades. Plan accordingly.

Section II D: Extra Credit

- Extra Credit Points: Defined: An extra credit point is a free point (no point basis; out of 0pts) that is added to your total earned points at the end of the semester. It does not affect the total points possible. In other words, when calculating your grade (%), it only affects the numerator.

- 10 Points: You are automatically given 10 extra credit points under attendance policy option 1 (See Section VI). The extra credit points are simply added on to your total earned points for the semester. These free points serve 3 main purposes: 1) They encourage attendance and timely completion of assignments; 2) They provide some insurance against Murphy (see Section VI C); and 3) If you have a very borderline grade, they may bump you up to the next level.

- If instead you chose attendance policy option 2 (see Section VI), you may also receive up to 10 extra credit points. Instead of being attendance based points, these points may be acquired through additional graded writing/research assignments. All such assignments should be completed prior to the third 100pt exam. If desired, ask for more details.

- Cumulative Final Exam/Test Replacement: *Potential extra credit points: 0-100pts*: Sooner or later, everyone has a test they would like to do over. To provide such an opportunity or a similar insurance policy, if your percentage on the Final Cumulative Exam is above your lowest test score, I automatically replace your lowest test score with your % grade on the Final. In summary, the Final Exam can negatively impact your grade similar to an individual test score as it is also worth 100 points, but for those that need it, the Final Exam can have a tremendous positive impact on your overall grade as it may replace the lowest test score if it is higher. As with every other grade, the grade on the final will be posted on Sakai and your new "Course Grade %" will be calculated. On Sakai I will leave all original test grades posted so that you still have a record of all the grades, but the updated "Course Grade %" should reflect your new grade in the class after the test replacement calculation. You should check this calculation and make sure you agree with the final grade before grades are officially submitted.

- 3 or 5 Points (not both): The above test replacement policy related to the Final exam is meant to be an emergency insurance policy. For many students it is extremely helpful to their grade, but it does come with some minor negative side effects. Motivationally speaking, it is best if you just forget that the test

replacement even exists and then if you really need it, you will be pleasantly surprised when I remind you about the policy as we get close to the Final. However, some students can't resist the temptation to essentially minimize preparations for 1 of the 3 major tests with the intention that the Final exam will replace it. This is a risky strategy, especially in a course with cumulative exams. The purpose of the following points is to award students for consistently doing well and discourage the above mentioned risky testing strategies. Thus, if all three 100pt regular exams (i.e. not including the Final) have a score of 80% or higher, a **5 point extra credit bonus** is added to your total earned semester points, or students can earn a **3 point extra credit bonus** if all three 100pt regular exams have a score of 70% or higher.

Section III: Important Dates: Dates are firm, see schedule below, plan accordingly.

Tues Aug 30 ... First day of class
Tues Sept 6 ... Mandatory! In Class Bloodborne Pathogen and Right to Know lab training.
Thurs Sept 8 ... Quiz: 20 Pts (Syllabus, Chap 2, and journal article), Lab training/ hep. B waiver due to TA by 5PM
Thurs Sept 15 ... Lab 1: 10 Pts (class meets in Mckinly Lab 008)
Thurs Sep 22 ... Test 1: 100 Pts (Chapters 2, 3, and 4: see checklist)
Tues Sept 27 ... Research Paper Part I (Topic Summary) Due by 10 PM
Thurs Sep 29 ... Quiz 10 Pts (Chap 5)
Tues Oct 4 ... Lab 2: 10 Pts (class meets in Mckinly Lab 008)
Thurs Oct 13 ... Test 2: 100 Pts (Chapters 5, 6, 7, 8 and previous material: see checklists)
Tues Oct 18 ... Research Paper Part II (Table) Due
Thurs Oct 20 ... Lab 3: 10 Pts (class meets in Mckinly Lab 008)
Tues Oct 25 ... Last day to withdraw without academic penalty
Thurs Oct 27 ... Quiz 10 pts (Chap 9+11), Begin Group Projects (see sakai for details)
Tues Nov 1 ... Open Lab Review: Attendance Optional (class meets in Mckinly Lab 008)
Thurs Nov 3 ... Lab Practical : 75 Pts (See Sakai for checklist and exam details: class meets in Mckinly Lab 008)
Fri Nov 11 ... Research Paper Part III Due: If needed, request extension to Nov 30 by email (6pt penalty)
Mon Nov 14 ... (1:30-3:30 office hours cancelled)
Thurs Nov 17 ... Test 3: (Chapters 9-17, and previous material: see checklists)
Tues Nov 29 ... Comparative Lab: 20 Pts (class meets in Mckinly Lab 008)
Wed Nov 30 ... (Last chance to submit late research papers)
Thurs Dec 1 ... Presentations (50 pts) begin and may continue until Dec 8: Attendance mandatory
Thurs Dec 8 ... Last day of class
Date TBD ... Final Exam (100 Pts) (Cumulative)

***In the rare event that classes are cancelled due to weather related University shutdown or other reasons, once classes resume the above schedule will likely remain firm. If classes are cancelled on a scheduled exam/quiz or assignment due date, the exam/quiz/assignment will be taken (or collected/due) the first class period that our class resumes. Otherwise, we may miss a few lectures, but all scheduling (assignments/tests) will likely continue as printed above. If any additional amendments to the schedule or course content are required, updates will be on Sakai.*

Section IV: Testing

- Required materials: multiple sharpened #2 pencils and eraser
- **All tests are officially cumulative** and may contain review questions from prior material, but the majority of test questions focus on information highlighted in the chapter checklists for the assigned chapters (See Section III for chapters on each test)
- Tests are scheduled far in advance. Plan your schedule accordingly. If you have a personal conflict with a test date, the sooner you alert me, the more likely something can be done to accommodate you. The amount

of advance notice generally required to accommodate you is variable dependent upon my schedule and other obligations, but you should think in terms of weeks not days or hours.

- **On the day (all day: before and after) of the test, I will not answer test content related questions** and I will not answer content questions over email starting at 4PM the day before and continuing through the day of testing. I am happy to personally provide you with more information than you likely ever wanted to know but don't wait until the last minute to ask questions. The above policies are meant to discourage test preparation procrastination.
- I retain all tests, quizzes, and some assignments for documentation. If you wish to review your materials after grading or dispute a grade, you must request an office hour appointment **within 2 weeks of a grade being issued**. After that time, **all grades are finalized and all items are archived and no longer accessible**.
- All grades are continually updated on Sakai. Check Sakai frequently and immediately report any grading issues before the grades become permanent after that two week review period

Section V: Assignments

Assignments are due at a prescheduled date and time. **Assignments more than 1hr late should be accompanied by an email (no later than 12hrs after the assignment deadline)** from you documenting the late assignment and requesting an extension as needed. All late assignments are subject to point penalties. Detailed information on all assignments will be posted on Sakai.

Section VI: Attendance / Make-up Policy

Section VI A: Is attendance mandatory?

- Yes!! This course is designed to promote learning through lecture, problem solving, classroom interactions, and other forms of active learning. Obviously attendance is extremely important for an active learning course model. The general attendance policy falls under 2 options. You are automatically enrolled under option 1 unless you specify otherwise. Attendance policy options are as follows.

Default Option 1: Honor System/ Attendance based extra credit:

Under this system attendance is mandatory but with greater flexibility representing more of an honor system code of conduct. It is assumed that you always attempt to attend class and turn in assignments on time. If you fail to do this, it is also assumed that you have an excellent reason for doing so. As appreciation for your honesty and professionalism, I give you 10 extra credit points and a flexible “**no questions asked**” attendance policy, as I do not require medical documentation, dean verification, etc... All missed/late exams/quizzes/labs/assignments may be made up, regardless of excuse, as long as you notify me within 12 hours (see Section VI B) of the absence. Participation points may not be made up, but as long as you have 67% participation, no participation grade penalties are applied (see Section II). However, the missed/late exams/quizzes/assignments/labs all come with an automatic extra credit point penalty. Thus by choosing option 1 and accepting these 10 extra credit points, **you are also agreeing to the stipulation that these points will be removed usually in intervals of 5 up to 10 points, regardless of excuse**, if you miss a scheduled exam/quiz/lab or turn in an assignment late. In other words, in this system excused and unexcused absences are all treated the same, both resulting in automatic extra credit point penalties for late exams/quizzes/labs/assignments.

Alternative Option 2: Traditional Attendance Policy/Research assignment Extra Credit

In extreme cases of chronic illness or attendance related issues, where you have already accumulated 2 or more attendance/assignment offenses and have used up all (10pts) the free extra credit points, you may be switched to the more traditional system. In this system you will not receive automatic point penalties related to attendance, but attendance/assignment flexibility no longer applies to you. All absences require an appropriate excuse and documentation (dean verification when applicable) to avoid penalty and permit make-up opportunities. Otherwise point penalties may still apply. Although this option is not commonly selected, if you know that absences will be a problem for you this semester but you are able to provide appropriate excuse and documentation, you can simply choose the more traditional system to start the semester by sending me an email request. Otherwise you will be enrolled under default option 1. Rather than earning extra credit through attendance, under this traditional option 2 system you can earn up to 10 extra credit points by completing an additional research assignment. Ask for details.

Section VI B: Can I make up missed tests/quizzes?

- It depends. If you miss a scheduled exam (test or quiz) and wish to make it up, you must email me (preferably before the exam but **no later than 12 hours after the missed exam**) to acknowledge your absence and request permission to make up the exam ASAP. Assuming you are enrolled under attendance option 1, all timely requests for a make up exam are approved regardless of excuse. An exam date, time, and location will be determined and an **automatic 5pt late penalty will be applied**. The free 10 points extra credit serves to reimburse you for these points in the event of an unfortunate absence on these dates. Exams are generally made up before or during the next scheduled class period following the missed exam. Failing to make up the exam in this time frame may result in additional point penalties. Some exceptions are made for medical or extreme situations but if the test can't be made up in a timely manner, a zero will be awarded, and the grade on the final may serve as the replacement grade. If you know you will be absent on a given date, prior arrangements can be made for you to take the exam/quiz/lab earlier and avoid the late penalty. Just notify me of the upcoming absence, make a request, and if possible, I will accommodate you but sufficient advanced notice (**generally 2-3 weeks**) is required for taking the exams early to provide time for scheduling and generating the exam. Other accommodations can also be made for athletes or other university related obligations if prior notice and documentation is provided.

- *What happens if I miss an assignment due date?* Same general policy as above. If I am promptly notified (12 hour window), a new deadline will be determined and automatic point penalties will be applied.

Section VI C: Beware of Murphy, Prepare for Murphy

- Most of you are likely familiar with Murphy's law: **Anything that can go wrong will go wrong**. Since sufficient advanced notice is not always possible and all late exams and assignments, regardless of excuse, are subject to a point (likely 5pts) penalty under attendance option 1, it is possible that Murphy (sickness, injury, travel problems, family matters, and other factors beyond your control) may cost some of your points. To make up for this, I add 10 extra credit points (see Section II D) to your overall total earned points. Thus, I have essentially given you 2 free amnesty/sick/vacation days to counteract Murphy, but you can also take steps to reduce the influence of Murphy. Here are a few suggestions that may help minimize Murphy: study for exams well in advance, turn in assignments early, read and follow instructions carefully, **frequently back up your computer and digital files to an external device**, manage your time wisely, ask questions if you don't understand, get plenty of sleep, and generally attempt to do what is needed to maintain the mental and physical health required for you to academically perform at high levels.

Section VII: Statement for students with disabilities:

- Any student who thinks he/she may need an accommodation based on a disability should contact me as soon as possible, as well as contact the Disability Support Service (DSS) office. The DSS office is located at 119 Alison Hall, Phone: 302-831-4643, www.udel.edu/DSS.

Section VIII: Statement on academic integrity:

- “All students must be honest and forthright in their academic studies. To falsify the results of one's research, to steal the words or ideas of another, to cheat on an assignment, or to allow or assist another to commit these acts corrupts the educational process. Students are expected to do their own work and neither give nor receive unauthorized assistance. Any violation of this standard will be reported to the Office of Student Conduct.”

- My advice: Without assumptions of academic integrity, university degrees are not real meaningful. Thus universities may take rather severe action on what you may otherwise perceive as a minor violation. Beyond the immediate resulting failing grade on an assignment or course, various university sanctions and documentation of the event on your permanent transcript can be devastating to your long-term academic career and beyond. When you consider the big picture, it is unfathomable that some students are willing to take such tremendous risk to gain what is likely nothing more than a slight advantage on a single test/quiz/assignment. You will likely complete hundreds of tests/quizzes/assignments during your academic career. Most students play by the rules most of the time, but it only takes one mistake or a single act of misconduct to cause you great hardship and perhaps tarnish your entire academic record. In some cases violations are rather easy for the professor to catch. In other cases students are actually turned in by other students that have knowledge of the misconduct and are upset by the unfair advantage. Also keep in mind that the providers of answers and unauthorized assistance may also be sanctioned. **Be very careful not to inadvertently provide answers or assistance.** Protect your answers as much as possible during testing. Be very cautious when allowing other students access to your computer or digital files. Another potential pitfall is that students from other sections will often casually ask about tests, quizzes, or assignments that you have already completed but they have not. Choose your responses wisely as to not provide them with what may be perceived as an unfair advantage. To further protect yourself you should check out the online UD reference guide to academic integrity. It discusses the different types of violations (plagiarism, fabrication, cheating, and other academic misconduct) as well as proactive strategies for students.

Section IX: Classroom Etiquette

- Be respectful and refrain from talking during lecture
- Be respectful and refrain from behavior that may be disruptive or offensive to others
- Unless it gets to be excessive, you do not need permission to enter or exit the classroom at any time (except during tests). However, be aware that this can be disruptive. Try to arrive to class on time and minimize disturbance when entering/exiting during lecture.
- Cell phones, laptops, tablets, and similar devices: You are expected to silence your cell phone during class. Obviously, receiving/placing calls during class can be disruptive to others. During a quiz/test all these devices must be kept stored away hidden from all lines of sight and **all usage of electronic devices during tests/quizzes is strictly prohibited and may be treated as academic misconduct** resulting in the

immediate expulsion from the exam and/or course. Such violations will be reported to the Office of Student Conduct. Otherwise, such devices are welcome in the lecture classroom for taking notes and course related activities. However, social networking, listening to music, and other recreational activities may be extremely distracting to others, hinder your ability to interact in the classroom, and are not appreciated. Please restrict such activities for outside the classroom. Finally, keep in mind that you are in a public space in relative close proximity to others. Thus, pictures, words, and sounds from your electronic devices are likely less than private. Be cautious not to expose others to something disruptive or offensive.

- **Cell phones, laptops, tablets, and similar devices are not permitted in the laboratory**
- During student presentations, put away all electronic devices and give the student your full attention

Section X: Outside the Classroom: Office Hours, Appointments, and Email:

- Email me at any time. I will respond as quickly as possible.
- I get many many many emails on any given day, thus I quickly sort and prioritize them prior to opening and responding. ***To ensure your email is not ignored, prioritized, and sorted appropriately, you must include your course and section number in the email subject heading (example: psy314 sect 12) .***
- To answer as many emails as possible I try to keep responses brief and commonly address short procedural/administrative types of questions. As for complex content related questions, I will typically avoid answering them over email. Email is just an inefficient way to exchange complex course information. Additionally, brief email exchanges without appropriate context may lead to a misunderstanding of the material. Thus, if you ask a complex content related question over email that requires a detailed answer, I will likely just provide an answer during an upcoming class period (see below: ask the professor section) or invite you to office hours.
- Ask the professor: mailbox. At the beginning of each class, I will answer course content email questions from students. For any question you may have or topic you wish to discuss in class, just send me an email request and it will be addressed in class. Each question will be anonymously posted along with a corresponding discussion. It does take time to process and incorporate your requests into lecture. Allow 1 or 2 class periods, for an official response. Also feel free to ask questions during class or office hours.
- Office hours are commonly used by students to review course materials, review tests, discuss assignments, grades, and other concerns. Feel free to visit (no appointment necessary) during any regularly scheduled office hour. I will meet with you on a first come/first served basis as time permits. If you see that I am with a student, just let me know that you are waiting and then wait in the lobby area (Wolf Hall 4th floor) and I will be with you shortly. If you wish to schedule an appointment outside of regular office hours, I do have extra time slots that vary from week to week. These time slots are also on a first come/first served basis and often fill up quickly. Although this varies throughout the semester, generally **at least a 2-3 day notice prior** to a desired meeting date is required to find an open time slot outside of normal office hours that matches both of our schedules.

Section XI: Tips for Getting an A

- The first thing you should do with each unit is familiarize yourself with the study checklist provided on Sakai under the resources tab. The checklist provides a list of terms and key concepts that are fair game for the exams. The textbook provides an overwhelming amount of information so it is important that you use the provided checklists to focus your studies and note taking on items that you are specifically required to know.
- Come to class prepared! Read and take notes on the material prior to class. Feverish note taking during class simply results in hand cramps and joint stiffness with very little intellectual benefit. Classroom awareness, critical thinking, and interactive discussions are all inhibited within a feverish note taking classroom paradigm. There is no need for feverish note taking in this class as I have already provided you with a checklist of information that is on the test that is derived from your textbook. Furthermore, many topics are complex and difficult to understand. For the most efficient use of your time, it is extremely important that you come to class with at least some familiarity with the material. Lecture can then become more of an opportunity for clarification, interaction, questioning, repetition, and consolidation. Lectures and powerpoint presentations also move very quickly and are simply intended to lead discussion. Information from powerpoint slides can be found in the textbook and the slides are not intended to be copied in class. Rather they are to serve as a simple reminder of what is in the chapter and on the checklist so that we may briefly discuss them. If you have already taken notes on the material, you can simply make minor updates and briefly supplement your notes during class. It is my intent that you spend very little time in class writing/note taking. This will free you up for listening, thinking, and interacting.
- Engage yourself/interact. Pay attention, contribute to class discussions, and ask questions. The class is designed with an emphasis on active learning to enhance understanding of the material, memory acquisition, and retention.
- Lectures and classroom activities may be customized for your needs. Take advantage of this. We may not have time to talk about everything on the study guide/checklist. To make the most efficient use of classroom time, I will focus activities, lecture, and discussions on topics most requested by students. Perhaps you find a particular topic more interesting or perhaps you are having difficulty with a particular topic. Simply send me an email request and I will attempt to customize the lecture/classroom activities to best fit your needs.
- The course is cumulative. Use study skills that emphasize long term retention. Repeated exposure and deep processing are important. Study often, avoid cramming, and frequently review prior material. Don't get too far behind.
- General rule of thumb: for every hour in class plan to spend 2-3 hours outside of class learning the material. Outside of class I would allocate about 2/3rds of this allotted time to preparing for the next lecture and the remaining (1/3) time for reviewing material from previous lectures.
- Form a small study group. This can have many benefits: comradery, support, motivation, enhanced awareness, and interactive learning. One often extremely effective way to deeply process and learn the material is to attempt to teach it to someone else.

- Contrary to popular belief, what you don't know will hurt you. Actually, since the course is cumulative, what you don't know will likely hurt you multiple times. Many students don't realize that they don't know something until they see it on the exam and attempt to answer the question. Commonly, the difference between an "A" student and a "B" student is that the "A" student has a greater awareness of what they don't know. This allows them to better prepare for exams, research the deficient area, ask questions for clarification, and fill in these gaps in knowledge prior to the exam. If you commonly go into an exam with confidence and then the exam takes you by surprise, this advice likely applies to you. There are many different techniques you can try to improve your awareness of knowledge deficiencies or knowing what you don't know.

- Knowing class trends may be helpful so I am also providing this information. Regarding the 3 100pt exams, many students get their lowest score on the first test. Most students simply report that they didn't know what to expect and were underprepared for the first test. As students modify their preparation approach, averages on the second and third test tend to move upward. Despite the increasing scores, students typically report that the sequential tests get progressively harder due to the cumulative nature of the course.

- Lab: Another interesting trend is that many students report that the lab practical was the **most difficult exam of the semester** with some students scoring less than 10% on the practical. Perceiving 3 dimensional space and spatial relationships between the neuroanatomical structures is conceptually difficult for many students and the practical testing format (fill in the blank) requires that you have an excellent grasp of the material. The first 4 individual labs are designed to get you ready for the lab practical and give you unique access to the hands-on study materials (models and biological specimens). Access to these materials is strictly limited to the scheduled labs. Use your limited time in each lab wisely to maximize your interactions with the testing materials and enhance learning. Similar to each classroom lecture, you should read ahead and study your lab atlas prior to the labs. A study checklist for the lab is provided in Appendix B of this syllabus. If you are already familiar with the textbook anatomy prior to lab, you can more efficiently use lab time to take your textbook knowledge and begin superimposing that onto the 3 dimensional models and biological specimens. I have also noticed that many students waste a great deal of lab time simply trying to navigate the lab atlas to find the appropriate brain structures. Use time ahead of lab to familiarize yourself with the atlas and maybe even add tabs or bookmarks to particular pages. This will allow you to more efficiently navigate the atlas as you identify structures for the lab exercises. Your efforts in lab will not only benefit you on the lab practical (75pts) but in lecture as well. All three 100pt lecture exams as well as the final contain a significant neuroanatomy component.

- When needed, don't hesitate to ask questions and/or seek assistance

Section XII: Frequently Asked Questions

- Do I have to take the final even if I do not need to replace a grade?
Yes the final is required. It can be used to replace a test score, but it is also a stand-alone gradebook item worth 100pts that can't be dropped or replaced.
- Can I retake an exam or quiz? *Missed exams/quizzes may be made-up but if you have already taken the exam/quiz, retakes are not permitted. However, as stated before, the final exam may function similar to a retake as the % grade on the final can replace your lowest test score.*
- If I do miss a class, lab, or a test or something, do I need a doctor's note or written excuse documentation.
Under attendance option 1(section VI A), no documentation is needed. All absences (excused/unexcused) are treated the same, and all point penalties apply. However, I do need written notice simply acknowledging your absence within 12 hours, if you wish to schedule a make-up. See attendance option 2 for alternative.
- Under the default attendance option, beyond the final test replacement grade and the extra credit (up to 15 pts) described in Section II D, are there any other ways to acquire extra credit?
Occasionally, opportunities arise where I may offer the class a couple of extra credit points for various activities, but otherwise, additional extra credit is not available. Plan accordingly.
- Do I really need the textbook(s)?
Yes, the entire course is heavily focused on the textbook(s). The study checklists also make specific references to specific figures and page numbers in the textbook.
- The textbook mentions many names of scientists and dates including authors and specific scientific studies. Do I need to know all these studies and associated names (e.g. Smith et al., 2007) for the exams?
Yes, but only if they are listed on the study checklist on Sakai. If I want you to know a specific person, that individual's name (e.g. Sigmund Freud) will be listed under the Key Terms section of the checklist. If I want you to know the details of a specific study (e.g. Smith et al. 2007), the study citation will be listed in the Key Concepts section of the checklist.
- Could you email my grade to me?
For privacy reasons, I try to refrain from discussing grades over email and instead rely on Sakai for exchanging this information. All individual scores are posted on Sakai with detailed instructions in this syllabus on how to calculate and determine the associated letter grade. At any time I am also happy to privately discuss your grade in person. Just set up an appointment.
- Class moves so quickly and I am unable to copy the slides or take many notes
Good, I really don't want you taking many notes in class (see section XI, second paragraph). Use your checklist and textbook to review and take notes on the material prior to class. This will free up class time for listening, thinking, and interacting. Rather than basic acquisition of the exam material (this is primarily what your textbook is for), try to approach lecture with a greater emphasis on understanding, clarification, and consolidation.

- For taking notes prior to class how do I know what will be covered in the upcoming class?

The class lecture proceeds chapter by chapter in a systematic order as outlined on the checklist and syllabus. We generally spend about 1 or 2 lectures per chapter. This varies depending on student requests and the amount of material in the chapter. During class I will give frequent updates about the general content of upcoming lectures. If you are still not sure, just send me an email and I can quickly provide a detailed outline for the upcoming week.

- I am not doing as well as I would like, what do I do?

There is not a great universal answer for this question as every person has a different set of circumstances. However it is generally true that if you keep doing what you are doing, you will keep getting what you are getting. Thus, you need to make some changes. For many people, the required change may be simply devoting more time to learning the material. For others, it is far more complicated. For a more detailed analysis of your situation, I would be happy to schedule a meeting with you and provide additional feedback specific to your situation.

Have a great semester! I look forward to interacting with you. If you need anything, please let me know.

Appendix A

Laboratory Rules and Information

- No food, drinks, or guests
- No electronic devices (cell phones, tablets, lap tops, cameras, etc.)
 - Human specimens should never be photographed
- All book bags and personal belongings other than a lab atlas, notebook, and writing utensils should be left in the clean locker and backpack area. Space in the locker area is limited. Please minimize the personal belongings you bring with you to lab.
- The locker area is meant to be a clean area, do not wear gloves (clean or dirty) in that area and always wash your hands before using the lockers. You may place a lock on the lockers to secure personal items during class. The lock must be removed at the end of class.
- When biological specimens are present, personal protective equipment must be worn
 - * Goggles, 8 mil nitrile gloves, appropriate clothing, no open toe shoes
- All dirty gloves and other contaminated materials should be thrown away in the boxes with the red biohazard bags. Non-contaminated trash can be placed in the regular trash can.
- Avoid touching models, doorknobs, and other room fixtures with dirty gloves
- Gloves should not be worn outside the classroom. If you need to leave the classroom and return, discard your gloves before you leave and get a new pair of gloves when you return
- Brains are delicate. Be careful! Brains should never be touched with metal probes, pens, pencils, or other solid objects. Instead cotton balls may be twisted to create a disposable pointer/stylus.
- Likewise, do not use pens or pencils when pointing/interacting with models. Use some other stylus or probe that will not leave a mark on the model.
- Formalin is a hazardous chemical used in the laboratory. Be sure to read the material data safety sheet for formalin
- Wash your hands prior to leaving the laboratory

Appendix B: Lab Practical Description and Checklist

Goal: The main purpose of the lab is to enhance your understanding of neuroanatomy. It is difficult to acquire an enhanced understanding of complex 3-dimensional neuroanatomical structures by simply studying pictures and abstract representations in a 2-dimensional textbook. Thus to give you a better appreciation for the size, shape, texture, connectivity, and general complexity of spatial relationships between neuroanatomical structures, we are providing you with the real thing as well as lifelike models.

Lab practical: Towards the end of the semester prior to the third lecture exam, we will have a test (i.e. lab practical) over these models and actual brain specimens. Many students report that this is the most difficult exam of the entire semester but perhaps the most important as related content appears throughout the textbook and on all the lecture exams. To begin studying for this lab practical (75 Pts), it may be useful to first understand how the exam is administered. You will be provided with the answer sheet that simply has a question number and blanks for you to fill in. Brain models and biological specimens will be placed at stations around the room and students will systematically rotate from station to station identifying indicated structures by writing the name of the structure in the blank provided on the answer sheet. Structures are commonly indicated on the specimens and models with push pins, stickers, and other small pointing devices. There will be 18-20 stations and each station has 2 associated questions written on note cards in front of the specimens. For example, one notecard may read, “For question 2A)



Identify the structure indicated by the green pin. ” You then look up at a brain slice and note that the green pin is sitting in the hippocampus. Thus you would write hippocampus on the appropriate answer blank. For example,

1A _____

1B _____

2A ___Hippocampus_____

2B _____

Note that some structures may be used more than once on the test, other structures from the lab checklist may not appear at all. You will now continue to rotate around the lab answering questions for each station. Rotations are completed rather quickly with strict time constraints for each station. The instructor will tell you when to rotate to the next station. Fill in all answers as you go as time limitations do not permit students to return to previously visited stations. All exams are immediately collected after the final rotation is completed.

You will have 4 labs to prepare for this lab practical. During these labs you will work in small groups to complete a lab worksheet. However, for the lab practical you are tested individually. **A checklist/ study guide is provided on the next page indicating all the structures you may be asked to identify on a model or actual specimen for the lab practical.** First begin studying these structures in your lecture textbook and lab atlas and then start applying this knowledge to the lab models and actual specimens as you start to work through the lab worksheets during the 4 scheduled laboratory exercises.

Key Structures

Amygdala
Anterior Commissure
Broca's Area
Caudate Nucleus
Central Sulcus/ Fissure
Cerebellar Peduncle
Cerebellum
Cerebral Aqueduct
Cerebral Cortex
Choroid Plexus
Cingulate Gyrus
Claustrum
Corpus Callosum
Crus Cerebri
Dorsal Root of Spinal Cord
External Capsule
Extreme Capsule
Fornix
Fourth Ventricle
Frontal Lobe
Globus Pallidus
Hippocampus
Hypothalamus
Inferior Colliculus
Insula (Insular Cortex)
Internal Capsule
Lateral Fissure
Lateral Ventricles
Longitudinal Fissure
Mammillary Body
Massa Intermedia
Medula
Occipital Lobe
Olfactory Tract/bulb
Optic Chiasm
Optic Radiations
Parietal Lobe
Periaqueductal Grey
Pituitary Gland
Pons
Postcentral Gyrus
Posterior Commissure
Precentral Gyrus

More Key Structures

Putamen
Red Nucleus
Septum Pellucidum
Substantia Nigra
Superior Colliculus
Superior Temporal Gyrus
Tegmentum
Temporal Lobe
Thalamus
Third Ventricle
Ventral Root of Spinal Cord
Vermis
Visual Cortex

Key Concepts/Big Picture

What structures make up the basal ganglia?
What structures make up the tectum and tegmentum?
General functions and locations of primary areas of cerebral cortex
Flow of CSF through the ventricles
Understanding location of structures relative to the ventricles
Understanding location of all structures relative to each other
Understanding the relative shape and size of each structure

Appendix C: Final Grade Prediction

To estimate your likely grade in the course, please fill out the survey below.

1. On average, including class time I will spend _____ on this class each week.
 - 1) 0-3hrs
 - 2) 4-7hrs
 - 3) 8-11hrs
2. I will use the provided checklist to take notes on upcoming materials **prior to** covering it in lecture.
 - 1) rarely
 - 2) occasionally
 - 3) frequently
3. I will use the provided lab checklist to locate and familiarize myself with brain structures **prior to** lab.
 - 1) rarely
 - 2) occasionally
 - 3) frequently
4. The course is cumulative so I will make a strong effort to continuously review previous chapters/checklists.
 - 1) rarely
 - 2) occasionally
 - 3) frequently
5. I will attend class and during class I will pay attention, ask questions if I don't understand, volunteer to answer questions, and participate in classroom discussions.
 - 1) rarely
 - 2) occasionally
 - 3) frequently
6. I plan to participate in at least some of these healthy study habits, such as keep a written record logging my study time, avoid cramming and spread out my study time over smaller regular intervals, repetition, deep processing, know what I don't know, review material missed on previous tests/quizzes, get a reasonable amount of sleep, join a study group, and attend office hours if I need more help outside the classroom.
 - 1) rarely
 - 2) occasionally
 - 3) frequently
7. I will take advantage of the "Ask the Professor Program" to customize lecture so that it best fits my needs.
 - 1) rarely
 - 2) occasionally
 - 3) frequently
8. In other courses, such as natural science classes (Biology, Chemistry, Physics), that also cover complex material and require a great deal of memorization and application, I typically _____.
 - 1) do poorly or avoid such courses
 - 2) score around the class average
 - 3) do very well
9. Compared to other students in this class, I would characterize my academic background or knowledge in the natural sciences (physics, chemistry, biology) as _____.
 - 1) weak
 - 2) average
 - 3) strong
10. On average, including class time I will spend _____ on this class each week (yes, this is a repeat of question 1 as it is intended to weigh most heavily on the survey results).
 - 1) 0-3hrs
 - 2) 4-7hrs
 - 3) 8-11hrs

Appendix C: results

Each of the 10 survey questions has 3 answers. Add up the numbers in front of the answers you chose. For example, if you chose number 3 for each answer for all 10 questions, you will end up with a score of 30. Thus, total scores will range from 10 -30 points. Based on several semesters of student feedback and performance in this course, below is a breakdown of your expected grade outcome. There are always exceptions to the rule and grade correlations with this survey will vary from person to person, but I think this survey gives you a starting point for course grade expectations and provides you with a list of factors/predictors that are likely to affect your grade.

Tip: If you know you are likely to be deficient in some of these predictor categories (i.e. answered with a 1 or 2), it may be wise to try to compensate for those deficiencies by enhancing performance in some of these other predictors/categories.

28-30 pts = A

26-27 pts = A-

24-25 pts = B+

22-23 pts = B

20-21 pts = B-

19 pts or less: C, D, or F seems likely