

Instructor: Shirin Birjandi, Ph.D.
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Course description:

- Overall, the goal is to explain how the highly evolved human brain provides for diverse mental skills and drives, including perception, emotion, motor control, memory, and consciousness. Much of our discussions will be on the cellular and at the systems level.

Goals of the course:

- Origins of human brain and behavior including our genetics and evolution.
- Discussion of modern genetic testing and its potential societal impact.
- At the cellular level, we learn about the structure of individual neurons as well as how they communicate with one another.
- At the systems level, we learn the names of the major brain structures and focus on those regions that are specialized in what they contribute to the mental skills and drives.
- Brain regions that control emotions and memory formation. Emotions, learning and memory discussed both at a cellular and molecular level. Many of the current explanations of emotion and mood are based on the chemical substances that are released from the neuron terminals. Moreover, many of the concepts for how sensory information is processed or how memories are stored are based on research that has recorded the activity of individual neurons.
- How the brain controls sleep, ingestion, and sexual drive.
- Introduction to techniques used to investigate questions relating to the brain and disease.

Textbooks:

- *Biopsychology: Fundamentals and Contemporary Issues* by Martin S. Shapiro v1.0
- Selected readings will also be assigned from various sources and posted on Blackboard.

Course assignments and evaluations:

Assignment	Points	Approx % of Grade
Midterm 1	100	22.2%
Midterm 2	100	22.2%
Midterm 3	100	22.2%
Final Exam	100	22.2%
Pop-Quizzes	50	11.1%
TOTAL	450	100%

The final grade is calculated based on point totals; percentages are given for your reference.

Attendance will not be taken at class sessions; however, attendance is strongly encouraged. If you must miss one or more class sessions, it is your responsibility to keep up with the course work.

Grade scale:

A 100-90%	B+ 84-86.9%	C+ 75-77.9%	D 60-68.9%	F \leq 59.9%
A- 87-89.9%	B 81-83.9%	C 72-74.9%		
	B- 78-80.9%	C- 69-71.9%		

Exams:

EXAM DATES ARE FIRM. An exam can be taken only on the scheduled date and at the scheduled starting time. Respondus Lockdown browser must be enabled on your laptops. Students who are unable to take an exam at the scheduled time must give written notification as soon as possible, preferably in advance. Students who miss an *exam, pop-quiz, case study, etc.* for a legitimate reason, must provide documentation of said reason within seven days of the exam date or due date. Documentation must be sent to course Instructor. If documentation is not received within seven days, the score for the missed assignment/exam will be zero. Making up an exam will only be allowed if the student can demonstrate with written documentation a compelling reason (such as family or medical emergency) for not taking the exam at the scheduled time. A make-up exam may include an oral component and will generally be more difficult than the in-class exam.

Re-grading of exams:

Your graded midterm exams can be reviewed with a 20-minute window. If you feel an error was made in the grading of your exam, you must submit your exam, along with a Regrade Request Form (found on Bb) in which you have a thorough (but concise) **typewritten** explanation of why you think your answer deserves more credit, to Dr. Birjandi within 1 week of the time it was viewed. The entire answer will be re-graded, not just the part you think deserves more credit. Your score may increase or decrease as a result of a regrade.

Pop quizzes:

Eight short pop quizzes, each worth 6.25 points, will be administered via Blackboard throughout the semester to test students' knowledge of course material and encourage class attendance. Each quiz will consist of 6-8 multiple-choice or true/false questions. Students must be present in class to take the quiz. The material tested will cover concepts from lectures and readings up to the most recent quiz.

Extra Credit Case Studies:

There will be two case studies throughout the course where a primary journal article will be presented by the instructor. The papers can be found on Blackboard under the tab *Case Studies*. Students are encouraged to read the papers prior to lecture. Primary journal articles are crucial to understanding how scientific advancements are made. More importantly, how are questions answered through the process of experimental design, data collection and interpretation. Advances in science are routinely reported in peer reviewed publications and it is crucial for students to understand how to navigate and to understand scientific articles.

Extra Credit Case Study Participation:

Students are expected to familiarize themselves with the case study articles prior to the presentation in order to ask thoughtful scientific questions pertaining to the work. **Student participation will be evaluated based on attendance and submission of two written questions pertaining to the article(s) presented. Participation is worth 10 pts/presentation for a total of 20 pts.** No credit for participation will be given in the case of an unexcused absence.

LockDown Browser Requirement: This course requires the use of LockDown Browser for online exams and quizzes.

Watch this brief video to get a basic understanding of LockDown Browser feature.

<https://www.respondus.com/products/lockdown-browser/student-movie.shtml>

Download Instructions. Download and install LockDown Browser from this link:

<https://download.respondus.com/lockdown/download.php?id=945755274>

No use of AI Generators:

Since creating, analytical, and critical thinking skills are part of the learning outcomes of this course, all assignments should be prepared by the student working individually or in groups. Students may not have another person or entity complete any substantive portion of the assignment. Developing strong competencies in these areas will prepare you for a competitive workplace. Therefore, using AI-generated tools is prohibited in this course, will be identified as plagiarism, and will be reported to the Office of Academic Integrity.

Course Content Distribution and Synchronous Session Recordings Policies:

USC has policies that prohibit recording and distribution of any synchronous and asynchronous course content outside of the learning environment.

Recording a university class without the express permission of the instructor and announcement to the class, or unless conducted pursuant to an Office of Student Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future, and thus infringe on the academic freedom of other students as well as the instructor. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

Distribution or use of notes, recordings, exams, or other intellectual property, based on university classes or lectures without the express permission of the instructor for purposes other than

individual or group study. This includes but is not limited to providing materials for distribution by services publishing course materials. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the internet, or via any other media. ([Living our Unifying Values: The USC Student Handbook](#), page 13).

Course Evaluations:

Course evaluation occurs at the end of the semester university-wide. It is an important review of students' experience in the class.

TENTATIVE COURSE SCHEDULE (subject to modification of specific topics and reading)

WK	Lectures	Topic	Readings
1	08/22/23 1	History and Introduction	Chap 1
	08/24/23 2	Introduction (Cont'd) Genetics and Evolution I	Chap 1 Chap 5
2	08/29/23 3	Genetics and Evolution II Can “human races” be defined? <i>Case study 1</i>	Chap 5 Article Posted on Bb
	08/31/23 4	Functional Anatomy I	Chap 2 Chap 8.2-8.5
3	09/05/23 5	Functional Anatomy II	Chap 2 Chap 8.2-8.5
	09/07/23 6	Functional Anatomy III The Developing Nervous System	Chap 2 Chap 8.2-8.5 Chap 15
4	09/12/23	Exam 1 (Lectures 1-6)	
	09/14/23 7	Neuron Communication I	Chap 3.1-3.3 Chap 3
5	09/19/23 8	Neuron Communication II	Chap 3.1-3.3 Chap 3
	09/21/23 9	Psychopharmacology, Recreational Drugs, Tolerance, and Sensitization I	Chap 3.4 Chap 14
6	09/26/23 10	Psychopharmacology, Recreational Drugs, Tolerance, and Sensitization II	Chap 3.4 Chap 14
	09/28/23 11	Methods and Strategies of Research <i>Case study 2</i>	Chap 4 Article Posted on Bb

7	10/03/23	Exam 2 (Lectures 7-11)	
	10/05/23	Human Communication I	Chap 7
8	10/10/23 12	Human Communication II	Chap 7
	10/12/23 13	Fall Recess, No Lecture	
9	10/17/23 14	Sleep, Dreaming, and Circadian Rhythms I	Chap 9
	10/19/23 15	Sleep, Dreaming, and Circadian Rhythms II	Chap 9
10	10/24/23 16	Ingestive Behavior I	Chap 10
	10/26/23 17	Ingestive Behavior II	Chap 10
11	10/31/23	Exam 3 (Lectures 12-17)	
	11/02/23 18	Hormones, Sex, and Love I	Chap 11
12	11/07/23 19	Hormones, Sex, and Love II	Chap 11
	11/09/23 20	Emotions and Stress I	Chap 12
13	11/14/23 21	Emotions and Stress II	Chap 12
	11/16/23 22	Learning and Memory I	Chap 13
14	11/21/23 23	Learning and Memory II (Zoom Lecture)	Chap 13
	11/23/23	Thanksgiving, No Lecture	
15	11/28/23 24	Addiction and Affective and Neuropsychiatric Disorders I	Chap 15 & 16 (p608-615)
	11/30/23 25	Addiction and Affective and Neuropsychiatric Disorders II	Chap 15

			& 16 (p608-615)
12/8/2023 @ 2PM Final Exam (Lectures 18-25)			

Statement on Academic Conduct and Support Systems

Academic Integrity:

The University of Southern California is a learning community committed to developing successful scholars and researchers dedicated to the pursuit of knowledge and the dissemination of ideas. Academic misconduct, which includes any act of dishonesty in the production or submission of academic work, compromises the integrity of the person who commits the act and can impugn the perceived integrity of the entire university community. It stands in opposition to the university's mission to research, educate, and contribute productively to our community and the world.

All students are expected to submit assignments that represent their own original work, and that have been prepared specifically for the course or section for which they have been submitted. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s).

Other violations of academic integrity include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), collusion, knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university. All incidences of academic misconduct will be reported to the Office of Academic Integrity and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see [the student handbook](#) or the [Office of Academic Integrity's website](#), and university policies on [Research and Scholarship Misconduct](#).

Please ask your instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. [The Office of Student Accessibility Services](#) (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

[Counseling and Mental Health](#) - (213) 740-9355 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

[988 Suicide and Crisis Lifeline](#) - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline is comprised of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

[Relationship and Sexual Violence Prevention Services \(RSVP\)](#) - (213) 740-9355(WELL) – 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

[Office for Equity, Equal Opportunity, and Title IX \(EEO-TIX\)](#) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

[Reporting Incidents of Bias or Harassment](#) - (213) 740-5086 or (213) 821-8298

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

[The Office of Student Accessibility Services \(OSAS\)](#) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

[USC Campus Support and Intervention](#) - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

[Diversity, Equity and Inclusion](#) - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

[USC Emergency](#) - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

[USC Department of Public Safety](#) - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call
Non-emergency assistance or information.

[Office of the Ombuds](#) - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

[Occupational Therapy Faculty Practice](#) - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.