
SHATTERED BRAINS, FRACTURED MINDS in Spring 2021 (PY2009)

Course Code	PY2009	Professor(s)	Seta Kazandjian
Prerequisites	None	Office Number	PL-103/104
Class Schedule	W: 09:00-11:55 in PL-3	Office Hours	Wednesdays 12h00-13h30 and by appointment
Credits	4	Email	skazandjian@aup.edu
Semester	Spring 2021	Office Tel. Ext.	839

Course Description

Brief Description: “Shattered Brains and Fractured Minds” is an intermediate level course that covers human neuropsychology, the study of the brain and behavior relationships following disruptions to the cortical system.

COURSE DESCRIPTION: This course will examine what happens when the human brain is “shattered” – whether due to traumatic injury, disease, neurochemical imbalance or neurodevelopmental issue. It is designed to provide an understanding of how the human brain works in health and disease, and is intended for all students with or without a background in neuroscience or biological psychology. Knowledge of how the human brain works is important for all citizens, and the lessons to be learned have enormous implications for public policy makers and educators.

In Part 1 of this course, the student will learn basic neuroanatomy, neurophysiology, neurochemistry and methods of assessment and research in an accessible format. The course will cover the regional anatomy of the brain and provide an introduction to the cellular function of neurons, synapses and neurotransmitters. It will include a hands-on sheep brain dissection lab exercise (or alternative).

Part 2 of the course, will cover the higher functions and neurological disorders. This course will use clinical case studies in neuropsychology to introduce students to the brain and behavior relationship behind common neurological and neuropsychiatric conditions. This understanding of the causes and symptoms of brain-based disorders will be complemented with current views toward treatment and rehabilitation. Case studies will range from famous cases in neurological history to typical clinical cases from Dr. Kazandjian’s experience. Additional source material will

range from popular nonfiction, textbook cases, documentaries, personal accounts, and film portrayals.

A systemic approach will be presented, such that students leave the course with an understanding of how the brain works, how it can go wrong, and how these deficits can affect the individual, the family, community and society.

Course Learning Outcomes

Describe the main ideas about mind-brain relationship and give critiques to these ideas
Describe how brain damage in different parts of the brains leads to abnormalities in behavior.
Understand neurological disorders, such as Alzheimer's Dementia, Epilepsy, and Autism
Discuss the progression and evolution of the understanding of neurological disorders – from the first case to current cases and how they are treated
Describe what brain plasticity is and how the field has evolved to accept that rehabilitation is possible
Understand the effects of the environment, stress and drugs on the brain-mind relationship.
Develop critical thinking skills, discussion and self-expression skills, presentation skills, and writing skills.

General Education

This course also aims to further develop: Critical thinking skills, discussion and self-expression skills, presentation skills, and writing skills.

Course Outline

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*Chapters are from Kolb & Whishaw's Fundamentals of Human Neuropsychology. Certain chapters do not need to be read in detail. Lecture notes supplement and often can substitute the book chapters, but reading the chapters is recommended.

	Date	Topic	Chapter	Assignment Due
1	January 20	The Field, Theories and Myths Imaging the Brain's Activity	Ch 1 & 7	https://youtu.be/inY0Fi
2	January 27	Brain's organization, structure and communication	Ch 3, 4 & 5 or lecture notes	
3	February 3	Sheep Brain Dissection Lab Neuropsychological Assessment	Handout Ch. 28	
	February 10	No Class		
4	February 17	Quiz 1 Film Viewing (<i>Still Alice</i> and <i>The Man with a 7 Second Memory</i>)		Dissection Report
	February 24	No Class		
5	March 3	Temporal and Frontal Lobes	Ch. 15 & 16	Presentations (<i>Ogden: C</i> 17)
6	March 10	Memory, Amnesia and Dementia	Ch. 18	Presentations (<i>Ogden: C</i> & Interview with Caregiver
7	March 17	Quiz 2 Language Disorders	Ch. 19	Presentations (<i>Ogden: C</i>
8	March 24	Emotion and Social Behavior	Ch. 20	Presentations (<i>Ogden: 1</i>
9	March 31	Occipital and Parietal Lobes	Ch. 13 & 14	Presentations (<i>Ogden: C</i>
10	April 7	Quiz 3 Spatial Issues & Attention Disorders	Ch. 21 & 22	Presentations (<i>Ogden: C</i>

11	April 14	Cerebral Assymetry & Cortical Disconnection	Ch. 11 & 17	Presentations (<i>Ogden: C</i> & Podcast Report
12	April 21	Plasticity and Rehab	Ch. 25	Presentations
13	April 28	Psychiatric Disorders	Ch. 27	Presentations
14	May 5 15h – 17h30	FINAL EXAM		

Textbooks

Title	Author	Publisher	ISBN	Required
Fundamentals of Human Neuropsychology	Brian Kolb and Ian Whishaw	WORTH PUBLISHERS	9781319154042	Yes

Attendance Policy

PY2009 ATTENDANCE POLICY: Attendance is key. During all online classes, please keep your cameras on during the lecture or discussion portions of class. This is a requirement of the class. If you are participating asynchronously (due to illness or significant time zone issues), then I expect you to participate through the chat features, the Teams platform, and sending in video recordings of yourself asking about or commenting on course topics. I encourage you to try your best to join class synchronously as often as possible.

AUP ATTENDANCE POLICY:

Students studying at The American University of Paris are expected to attend ALL scheduled classes, and in case of absence, should contact their professors to explain the situation. It is the student's responsibility to be aware of any specific attendance policy that a faculty member might have set in the course syllabus. The French Department, for example, has its own attendance policy, and students are responsible for compliance. Academic Affairs will excuse

an absence for students' participation in study trips related to their courses.

Covid-19 temporary amendments:

Students studying at The American University of Paris are still expected to attend ALL scheduled classes. Due to the Covid-19 pandemic, students will have the option of attending classes remotely when special circumstances apply. For example, when students are placed under quarantine by the French authorities or by their doctor, or when students present symptoms of Covid-19 and are directed, by their doctor or the AUP Health Office, to remain home. It is still the student's responsibility to be aware of any specific attendance policy that their professor might have set in the course syllabus. In particular, Students attending remotely from distant Time Zones should check with their professors about the specific attendance policy for remote learners.

Attendance at all exams is mandatory. In all cases of missed course meetings, the responsibility for communication with the professor, and for arranging to make up missed work, rests solely with the student.

Whether an absence is excused or not is ALWAYS up to the discretion of the professor or the department. Unexcused absences can result in a low or failing participation grade. In the case of excessive absences, it is up to the professor or the department to decide if the student will receive an "F" for the course. An instructor may also recommend that a student withdraw, if absences have made it impossible to continue in the course at a satisfactory level.

Students must be mindful of this policy when making their travel arrangements, and *especially during the Drop/Add and Exam Periods*.

ENGLISH LANGUAGE PROFICIENCY STATEMENT:

As an Anglophone university, The American University of Paris is strongly committed to effective English language mastery at the undergraduate level. Most courses require scholarly research and formal written and oral presentations in English, and AUP students are expected to strive to achieve excellence in these domains as part of their course work. To that end, professors include English proficiency among the criteria in student evaluation, often referring students to the university Writing Lab where they may obtain help on specific academic assignments. Proficiency in English is monitored at various points throughout the student's academic career, most notably during the admissions and advising processes, while the student is completing general education requirements, and during the accomplishment of degree program courses and senior theses.

Grading Policy

GRADING: Your grade will be made up of the following seven components:

1. **Class participation** – this is a discussion class so you **MUST** participate. We will be together for almost 3 hours per session. It will be boring for everyone involved if it was just me talking at you. This is particularly important since half the semester will likely be online. Please keep your cameras on during the lecture or discussion portions of class. This is a requirement of the class. If you are participating asynchronously (due to illness or significant time zone issues), then I expect you to participate through the chat features, the Teams platform, and even by sending in video recordings of yourself asking about or commenting on course topics.

Be prepared to discuss:

- Readings required up to the lecture day (chapters, articles)
- Videos or podcasts posted on lecture list (TED, BBC etc)
- Recent research updates from journals and websites above

In the effort to encourage class discussion and participation, students will be asked direct questions randomly. Your response and class participation are not graded, so don't worry. The goal is to encourage discussion and experience has taught me that I need to call on people sometimes.

TOTAL TOWARD YOUR FINAL GRADE: 0 % (but the effects of participation will be evident)

1. **Mid-term Quizzes** :There is a lot of material to cover in this course and much of it is quite dense. A key component to learning the material in a more stable manner is to offer opportunities for retrieval practice. This means testing. Therefore, several multiple-choice quizzes will be given throughout the course on the material up to that quiz. These quizzes will be brief and administered through Blackboard at the start of certain class sessions. They are not heavily weighted toward your final grade, but I do strongly encourage you to try your best on the quizzes. You will be given the opportunity to retake the quizzes. There will be no make-ups .

TOTAL TOWARD YOUR FINAL GRADE: 20 %

1. **Discussion Lead/Presentation:** Students, in teams of 2-3, will lead one class discussion with a case presentation. The presentations will consist of case studies from Dr. Ogden's book (Fractured Minds). This is a 5 minute presentation that will introduce a clinical case to your fellow students. You do not need to get into the specifics of the disorder in question, but rather present to the class the case background and symptoms. Presentations will be spread out from Lecture 5 through 13.

TOTAL TOWARD YOUR FINAL GRADE: 10 %

1. **Sheep Brain Dissection Lab Report:**On **February 3**, we will spend 1.5 hours of course time to undertake a sheep brain dissection. Ideally each student will dissect his/her own sheep brain (information on how to acquire one and tools will be provided) as will the instructions. Students will be excused from the dissection lab but not the project. In lieu of dissecting a sheep brain, excused students will be asked to watch a video and make sketches. All students will be asked to prepare a one-page reaction essay on your experience, what you were surprised to discover, and what was challenging. Reaction paper due **February 17**.

TOTAL TOWARD YOUR FINAL GRADE: 10%

1. **Interview with A Caregiver** : Students will be asked to reach out to their communities and interview someone who serves as a caregiver for an individual who has a neurological disorder (Alzheimer's or other dementia or traumatic brain injury). A list of questions will be provided. A two-page report of your interview and what you learned from it is due on **March 10**.

TOTAL TOWARD YOUR FINAL GRADE: 10%

1. **Podcast or Webinar Report** : Student are asked to listen or view an episode from Navigating Neuropsychology, Brain Science Podcast, Charlie Rose Brain Series or a pre-approved webinar. A brief summary (1-page) is due on **April 14**.

TOTAL TOWARD YOUR FINAL GRADE: 10%

1. **Final Exam**: An essay exam that covers topics from throughout the course. Several essay questions will be listed and the student must choose three of the questions and write a well-thought out essay in response (2-3 pages each). All questions will have been from discussions in class.

TOTAL TOWARD YOUR FINAL GRADE: 40 %

- *To the best of my ability, I will try to provide notices of your grade every three weeks.*
- *I strongly advise visiting me during office hours several times during the semester to check in on how you are doing and how you might improve.*

Summary:

	POINTS	Grading Brackets

Class Participation	0	92-100% = A
Quizzes	20	
Case Study Presentation	10	90-91.9% = A-
Dissection	10	88-89.9% = B+
Interview	10	82-87.9% = B
Podcast	10	
Final	40	80-81.9% = B-
Total	100	78-79.9% = C+
		72-77.9% = C
		70-71.9% = C
		68- 69.9% = D+
		60-67.9% = D
		59.9% or less = F

Other