The Science of Psychology

PSYC S1001D Summer Session I (2019)

<u>Course Information</u> <u>Instructor Information</u>

Class location: Tina Kao, PhD

Class time: 1:00pm - 3:05pm email: tk2436@columbia.edu Class days: Mon, Tues, Wed, Thurs Office location: 500 Schermerhorn

Office hours: Wednesday 3:10pm - 4:10pm

Course Description

This course provides an introduction to the major concepts, issues, and research relevant to the field of psychology. The topics covered will include an overview of many of the fascinating research within the field of psychology, across levels of analysis from the biological to the cognitive to the social perspectives.

Course Overview

Why do human beings think, feel, and behave the way we do? This course provides an overview of the underpinnings of psychology and behavior. Past and current research will be presented within these major areas: physiological psychology (neuroscience), learning and motivation, sensation and perception, cognition, emotion, development, social psychology, personality, and abnormal and clinical psychology. Students will gain an understanding of major issues addressed currently within the field of psychological research such as the complex interactions between nature and nurture, of intelligence, and of the neural and social bases of human behaviors.

Course Objectives

The objectives for each student taking this course will be a bit different depending on your circumstances. If you are taking this course because you are interested in the many fields of psychology, this course will provide you with a basic understanding of the concepts and research within these fields. This course will also provide the foundation for those majoring in, or those with concentrations in neuroscience and behavior. Others may be taking this course to fulfill a requirement for science. You may find that quite a bit of the Science of Psychology applies to other fields, including those that you are interested in and/or pursing. Finally, many of you may be involved in a pre-health track towards a future in medicine. As you may well know, questions pertaining to psychology have been added to the MCAT. I will do my best to address the related questions, although it is my hope that you will find the course in its entirety to be an engaging and enriching experience.

Grading

Exam 1: 20%
Non-Cumulative Exam 2: 25%
Non-Cumulative Exam 3: 35%
Paper: 15%
Attendance: 5%

The letter grade equivalent for your final grade for the course will be assigned according to the following scale:

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97 – 100: A+ 89.9 – 87.0: B+ 79.9 – 77.0: C+ 69.9 – 60.0: D
96.9 – 93.0: A 86.9 – 83.0: B 76.9 – 73.0: C 59.9 & below: F
92.9 – 90.0: A- 82.9 – 80.0: B- 72.9 – 70.0: C-
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<u>Exams</u>

The exams will be your opportunity to demonstrate how well you have learned the material covered in the course. There will be three exams administered during this course. The exams will consist of multiple choice and short answer questions. As part of the exams, you will be responsible for both the material covered in lectures *and* the assigned readings of the textbook.

<u>Paper</u>

There will be one paper required for this course. The paper required will be two-pages in length, double-spaced, and due on the day of Exam #3 (see tentative schedule below). More information about this paper will be provided towards the latter part of the course, but you will be expected to understand and synthesize the information you have learned throughout the course so that I can see that you have a fundamental understanding of hypothesis driven research.

Course Policies

Absences

I will not be taking attendance. However, the faculty guidelines of Columbia University state that "Students are expected to attend every class meeting. Also, the six-week terms are so short that a student with three absences has missed one-quarter of the course". Again, I will not be taking attendance, but given the small size of the class, I will be able to assess who has not been attending, and this will be reflected in your final grade (see above for grading proportions). Also, be aware that much of the material covered in lectures will NOT be contained in the textbook, and also note that the material on which I lecture will constitute the greater portion of the exams.

Lateness for Paper

Grades for late submissions of the paper will generally be reduced by 10% based on a 24 hour cycle. For the paper, if you contact me **prior** to the deadline, I **may** be willing to discuss the possibility of an extension. There are very few reasons your papers may be submitted late, examples being unanticipated illness or family emergencies. If any of this is the case, please provide a note from your doctor, or from your advising advisor or dean, explaining why you were unable to complete the assignment on time.

Class Etiquette

Cell phones are not permitted. Laptops may be used. However, please be considerate to those around you if you do use a laptop. I understand that there are many people who think they are gifted and capable of processing in-depth understanding of the foundations of human thought, behavior and the brain, while checking their 140-character status updates on Facebook or Twitter. If you believe that you are one of these gifted individuals, please be considerate of the fact that checking non-course-related materials on your laptop can be distracting to those around you. In other words, sit in the back of the classroom.

Exam Scheduling

If you are unable to take an exam during the day/time it is scheduled, contact me **as soon as possible**. For the most part, the only acceptable reason for missing an exam is due to serious illness/emergency. If such a situation should arise, a make-up exam may be administered after receiving permission from your advising advisor or dean, and from me. Having multiple exams on a single day, or vacation plans, are NOT acceptable reasons for scheduling a make-up exam.

<u>Academic Integrity</u>

Academic integrity means presenting only your own work for your assignment(s). Taking credit for the work of others is a serious violation of the academic community, and this will result in cheating or plagiarizing. If this is the case, the student will receive a zero for that assignment, and will be reported to the University. Information on what constitutes a violation of academic integrity can be found in Columbia's Undergraduate Guide to Academic Integrity (http://www.college.columbia.edu/academics/integrity).

That said, if you have any questions about how to appropriately cite another's work or build upon someone else's ideas, please feel free to contact me.

Required Textbook

Gazzaniga, Michael S. (2016). "*Psychological Science*". W.W. Norton & Company. ISBN: 9780393640342. This is the 6th edition of the textbook.

There is a copy of this textbook held on reserve in the Science & Engineering Library (401 NWC). Students can ask to see this copy at the circulation desk by call number BF121G393. Please note that reserved books can be checked out for 2 hour loans (or overnight loans if it's within 3 hours of the desk's closing time).

Tentative Schedule

Below you will an overview of the topics to be covered, the respective dates for when these topics will be covered, along with the required readings. You are required to complete the assigned readings *before* each lecture. Please note that the lecture topics and assigned readings are subject to revision. Additional readings may be posted onto Canvas.

Class	Date	Lecture Topics	Assigned Readings
1	5/28	Introduction to the course and to Psychology	
2	5/29	Introduction to Psychology cont'd and Research	Chapters 1 & 2
		Methods	
3	5/30	Biology of behaviors	
4	5/31	Brain and its components: neuroanatomy	Chapter 3
5	6/03	Brain and its components: mechanisms of action	
6	6/04	Consciousness: attention and circadian rhythm	Chapter 4
7	6/05	Sensation: mechanisms of sensory transduction I	Chapter 5
8	6/06	Exam #1	
		Sensation: mechanisms of sensory transduction II	
9	6/10	Perception	
		Learning: study of associations	Chapter 6
		Learning: biological basis of learning	
10	6/11	Memory: biological basis of memory	Chapter 7
11	6/12	Memory cont'd and Directive thinking	Chapter 7

12	6/13	Understanding and assessing intelligence	Chapter 8
13	6/17	Understanding and assessing intelligence cont'd	
14	6/18	Human lifespan development	Chapter 9
15	6/19	Human lifespan development (cont'd)	
16	6/20	Non-Cumulative Exam #2	
10	0/20	Motivation	
17	6/24	Motivation (cont'd) and Emotions	Chapter 10
18	6/25	Health Psychology	Chapter 11
19	6/26	Social Psychology	Chapter 12
20	6/27	Social Psychology (cont'd)	
21	7/01	Personality and Psychological Disorders	Chapter 13
22	7/02	Psychological Disorders cont'd	Chapter 14
23	7/03	Treatments of Symptoms of Psychological	Chamtan 15
		Disorders	Chapter 15
24	7/05	Paper due	
		Non-Cumulative Exam #3	

Syllabus is subject to revision. If necessary, updates to the syllabus will be posted on Canvas.