PSY 305. Sec 01. Cognitive Psychology EN B-120, Busch Campus Tu/Th @ 1:40 – 3 pm

Professor: Sarah Carton, Ph.D.
E-mail: sc2081@rutgers.edu
Office: 223 Tillett Hall, Livingston

Office Hours in 223 Tillett Hall

Mon: 12 - 2 pm, open OH's

Tues: 12 - 1 pm, by appointment only

Other times by appointment

#### **Course Description**

This course emphasizes theories and research regarding the mental processes involved in acquiring and retaining information for later retrieval, and the manipulation of that information for complex skills such as recognition, thinking, reasoning, decision-making, and problem solving.

**Prerequisite**: a passing grade in an entry-level course, i.e., Introductory Psychology.

#### **Course Goals**

- In this class students will learn about research that is conducted to study cognitive processes, namely how we are able to perceive, learn, remember and reason about objects, actions and events in the world around us.
- This course will provide you with a scientific basis for understanding human cognition.

#### **Student Learning Objectives**

By the end of this course, students will be able to:

- Describe behavioral research methods devised for evaluating a variety of cognitive abilities and mental processes in humans and non-human animals.
- Differentiate between neuroscience techniques used with humans vs. non-human animals.
- Develop analytical thinking and statistical skills when evaluating scientific research articles.
- Describe the theoretical models of memory processing, language acquisition, and mechanisms of attention, and describe major phenomena in each cognitive capacity.
- Identify the neural substrates subserving working memory, long term memory formation, speech production, language understanding, mechanisms of attention, and perception in all five senses.

#### **Textbook and Homework Readings**

Goldstein, E. B. (2015). *Cognitive Psychology: Connecting Mind, Research and Everyday Experience*, 4<sup>th</sup> ed. Stamford, CT: Cengage Learning. (ISBN-13: 9781285763880)

#### **Reading Assignments**

- Weekly reading assignments may include a textbook chapter and/or a journal article.
- There is a PDF of the textbook available to view and download on our Canvas course page. You can also purchase a copy of the textbook at the bookstore or online wherever available.
- Lecture summaries, study guides, practice quizzes, optional extra credit, video clips, practice test questions, and readings will all be available for you online in our course page in Canvas.

#### **Grading**

- 100% Exams (3 Midterms worth 25% each and a Cumulative Final worth 25%)
- 10% Optional Extra Credit (Discussion Forum, Quizzes, Homework (posted on Canvas)

#### Requirements and Expectations

To do well in this course, you will need to engage in approximately 3-6 hours of time outside of class each week for reading and/or writing. For optimal performance, it is highly recommended that students attend class on a regular basis, complete assignments and exams as scheduled, and keep up with weekly self-quizzes and readings. Optional extra credit may be available, stay tuned. Students should complete the course evaluations for this class at the end of the semester.

#### **Extra Credit Homework Readings and Question Sets**

The required reading assignments will typically involve a textbook chapter and a supplementary homework reading in the form of a primary research article from a scientific journal. There will be a question set for each of the readings. These articles will be available as PDF's for you to download on Canvas. You must complete the assignments in a timely manner to earn full credit.

The homework assignments will help you learn at a deeper level about particular topics in psychology. Homework will include your responses to a set of guiding questions in a short answer format and each written assignment will be approximately 2 pages in total length. All written work should be submitted on or before the due date via online upload directly in Canvas. This is optional extra credit work. <u>Late work will not be accepted</u>. Extensions will not be permitted.

#### **Exams**

There are four exams. Three of the exams are "unit-based" non-cumulative exams, and the final exam is cumulative. Questions on the final exam will focus evenly on topics covered across the midterms. All exams will be comprised primarily of multiple choice, fill-in the blanks, and matching questions. Materials covered both in lecture and associated readings will be included on exams. You are responsible for all related readings, whether or not they are discussed at length in class.

NOTE: Take advantage of practice quizzes in each chapter to test yourself on each topic. Practice tests and quizzes are important parts of the learning process and will help you do well on exams.

#### **Practice Quizzes**

Please take advantage of the free study aids and practice test questions on the textbook's companion web site for the 3<sup>rd</sup> edition of the textbook (click on the clickable link in the PDF file). http://www.cengagebrain.com/cgi-

wadsworth/course\_products\_wp.pl?fid=M20b&product\_isbn\_issn=9780840033550&token=

#### **Optional Extra Credit**

Opportunities for <u>optional extra credit</u> may be offered to students who wish to participate. Stay tuned for announcements and instructions if and when it is available.

#### Policy on Written Work and Assignments

- All of your written work must be done by you and written in your own words using your own thoughts and ideas. Please remember to cite your sources of information in the references.
- Students should aim to complete their written work by the due date. The assignment file can be uploaded directly into Canvas as per the instructions.
- E-mailed assignments will **NOT** be accepted. Do not email your work to the Professor.
- Students are expected to submit all assignments on time as per the specified due date.
- Late work will not be accepted and extensions will not be permitted.
- All work and exams must be completed prior to the conclusion of our final class period of the term (see syllabus schedule for dates). The due dates for submissions are set. Extensions beyond those dates will not be permitted.

#### **Attendance Policy**

Attending class sessions and being on time are valuable and important components of the college experience and in life more generally. Your participation in the class is an integral part of a successful classroom format. If you are unable to attend a class session on an exam day due to an unforeseen emergency, you must notify the instructor as soon as possible.

Exams are to be taken during the scheduled date during class period. Please make note of the midterm and final exam dates and speak to the Professor during the first week of class if you anticipate a problem. We cannot schedule alternative exam times for students who have conflicting examination schedules, travel plans, etc. An unexcused absence on a scheduled test date will result in a grade of "F" on that exam. To be excused from an exam in the event of a medical or family emergency, please notify the Professor prior to the exam if that is possible. As soon as you are able, you would need to present written documentation certifying the legitimacy of your urgent absence during an established exam period. Please note that the University strictly limits situations in which a grade of "Incomplete" can be granted.

If you do miss an exam, there are two steps involved to verify your legitimate, valid, urgent situation:

- (1) Please have your doctor write a letter explicitly stating that you were barred from taking the exam that day due to your urgent medical condition.
- (2) Bring the physician's letter with you to the Dean of Students or your Academic Advisor and have them write a memo on your behalf excusing you from the exam and asking me (the faculty member) to pardon you from the test period and grant you additional time on account of your personal emergency or urgent medical condition.

#### **Classroom Courtesy Policy**

Please note that we would like to have a classroom environment that is conducive to learning. As a courtesy to the instructor and fellow students, please remember to turn off cell phones and social networking devices during class period as these can cause distractions for you and other students sitting nearby. All text messaging, chatting and cell phone use should take place outside of class. Students who engage in distracting activity (i.e., texting, chatting) in class may be asked to leave. If you like to snack during class, students should try to avoid eating extremely odorous and /or noisy meals. We are a large group of people in a classroom with little ventilation. Noisy and smelly food items are most likely going to be highly distracting for the students around you.

#### **Student Evaluations of Instruction**

You are responsible for completing the Student Evaluations for this course and for all your courses with an enrollment of five or more students. The Instructors value your feedback and will use it to improve on teaching and planning in the future sections of the course. Please complete the online survey during the open period at the end of the semester.

#### **Student Learning Center (Tutoring)**

If you would like tutoring, or to be a tutor for your peers, contact the peer tutoring office on campus. Visit the website for locations and times:

https://rlc.rutgers.edu/student-services/peer-tutoring

#### Student Health Services and Psychological Counseling Center

To set up an appointment, visit the website:

http://health.rutgers.edu/medical-counseling-services/appointments/

#### **Career Resource Center**

Get helpful assistance building your resume, finding volunteer opportunities and summer internships. Visit the website for more information: <a href="https://careers.rutgers.edu/">https://careers.rutgers.edu/</a>

#### **Accommodations for Students with Disabilities**

Our community values diversity and seeks to promote meaningful access to educational opportunities for all students, and the university is committed to providing access to all programs and curricula to all students. If you have a disability that requires an academic accommodation or the use of auxiliary aids and services in the classroom, and/or testing accommodations based on the impact of a disability, please let the instructor know within the first two weeks of classes. You should also contact the Office of Disability Services (ODS) as soon as possible. The ODS determines the specific needs of students with disabilities, and develops and implements programs and policies to meet those needs. Procedures for registering with ODS can be found online at: <a href="https://ods.rutgers.edu/students/registering-for-services">https://ods.rutgers.edu/students/registering-for-services</a>

The ODS will provide for your instructors an Accommodation Memo verifying the need for accommodations. Assessing and providing services requires advanced planning, and students are encouraged to request accommodations as close as possible to the beginning of the semester.

#### **Scarlet Listeners**

scarlet.listeners@gmail.com

### **Statement on Academic Integrity**

The intellectual venture in which we are all engaged requires of faculty and students alike the highest level of personal and academic integrity. As members of an academic community, each one of us bears the responsibility to participate in scholarly discourse and research in a manner characterized by intellectual honesty and scholarly integrity. Scholarship, by its very nature, is an iterative process, with ideas and insights building one upon the other. Collaborative scholarship requires the study of other scholars' work, the free discussion of such work, and the explicit acknowledgement of those ideas in any work that informs our own. This exchange of ideas relies upon a mutual trust that sources, opinions, facts, and insights will be properly noted and carefully credited.

In practical terms, this means that, as students, you must be responsible for the full citations of others' ideas in all of your research papers and projects; you must be scrupulously honest when taking your examinations; you must always submit your own work and not that of another student, scholar, or internet agent. Any breach of this intellectual responsibility is a breach of faith with the rest of our academic community. It undermines our shared intellectual culture, and it cannot be tolerated. Students failing to meet these responsibilities should anticipate disciplinary action.

Academic honesty in writing assignments, examinations, and participation is expected of all students in this class. Academic dishonesty is one of the most serious offenses a student can commit in college. Not only does it violate the University's policy, it severely inhibits your opportunity to develop academically, professionally, and socially.

Students are expected to maintain the highest standards of honesty in their college work. Cheating, forgery, and plagiarism are serious offenses, and students found guilty of any form of academic dishonesty are subject to disciplinary action.

#### Academic dishonesty may be intentional or unintentional. Here are some examples:

- Plagiarism (copying word for word or even paraphrasing illegitimately, without proper citation or acknowledgment, from any other written, electronic, or online source)
- Cheating on examinations (regardless of whether you are on the providing or receiving side)
- Unauthorized collaboration or receiving unauthorized assistance on an assignment
- Submitting work for one course that has already been used for another course
- Unauthorized distribution of assignments and exams
- Forgery (alteration of college forms, documents, or records, or the signing of such forms or documents by someone other than the proper designee)
- Lying to an Instructor or College official
- Obtaining advance knowledge of exams or other assignments without permission

**Plagiarism** is the representation, intentional or unintentional, of someone else's words or ideas as one's own. Since words in print are the property of an author or publisher, plagiarizing is a form of larceny punishable by fine. When using another person's words in a paper, students must place them within quotation marks or clearly set them off in the text and give them appropriate footnoting. When students use only the ideas and change the words, they must clearly identify the source of the ideas. Plagiarism, whether intentional or unintentional, is a violation of the property rights of the author plagiarized and of the implied assurance by the students when they hand in work that the work is their own.

#### Statement on Academic Integrity (continued)

**Cheating** is defined as giving or obtaining information by improper means in meeting any academic requirements. Receiving credit for the same work in more than one course without knowledge or consent of the instructor(s) is a form of cheating and is a serious violation of academic integrity.

Faculty members are responsible for making the initial determination of the academic penalty to be imposed in cases of cheating, plagiarism, or forgery and for informing the department chair, the dean and the student in writing of the alleged violation and proposed penalty. The academic penalty may range, for instance, from a reprimand accompanied by guidance about how to avoid plagiarism in the future to failure for the course. The academic dean may request that the Dean of Students send a follow-up letter to the student indicating that they have also been notified of the academic integrity violation and that subsequent violations will lead to judicial action.

If a student has any question about what constitutes a violation of academic integrity, it is that student's responsibility to clarify the matter by conferring with the instructor and to seek out other resources available on the campus.

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Schedule of Weekly Topics and Assignments (preliminary schedule as of January 15 -- topics and order may be subject to minor changes)

Module #	Day	Date	Module Topics for Class	Assignment Due	Readings
-	Т	21-Jan	Course Overview: Cognitive Psychology	-	Ch. 1
1	Th	23-Jan	Research Methodologies	-	Ch. 2
1	Т	28-Jan	Research Methodologies	-	Ch. 2
2	Th	30-Jan	Cognitive Neuroscience	-	Ch. 2
2	Т	4-Feb	Cognitive Neuroscience	-	Ch. 2
3	Th	6-Feb	Perception	-	Ch. 3
3	Т	11-Feb	Perception	-	Ch. 3
3	Th	13-Feb	Perception	-	Ch. 3
Exam	Т	18-Feb	Midterm Exam 1	Midterm 1	Modules 1-3
4	Th	20-Feb	Attention	-	Ch. 4
4	Т	25-Feb	Attention	-	Ch. 4
4	Th	27-Feb	Attention	-	Ch. 4
5	Т	3-Mar	Consciousness	-	TBD
6	Th	5-Mar	Memory (STM & WM)	-	Ch. 5
6	Т	10-Mar	Memory (LTM)	-	Ch. 6
6	Th	12-Mar	Memory (False Memory)	-	E. Loftus TedTalk
-	1	March 14- 22	Spring Recess No Classes!	-	-
6	T	24-Mar	Memory (Encoding, Retrieval)	-	Ch. 7 & 8
6	Th	26-Mar	False Memory	-	-
Exam	Т	31-Mar	Midterm Exam 2	Midterm 2	Modules 4-6
7	Th	2-Apr	Cognitive Development	-	TBD
8	Т	7-Apr	Conceptual Knowledge & Categorization	-	Ch. 9
9	Th	9-Apr	Thinking and Intelligence	-	Ch. 9
10	T	14-Apr	Creativity	-	Article PDF & PBS Video
11	Th	16-Apr	Mental Imagery	-	Ch. 10
12	Т	21-Apr	Language	-	Ch. 11
Exam	Th	23-Apr	Midterm Exam 3	Midterm 3	Modules 7-12
13	Т	28-Apr	Aging & Dementia	-	Article PDF
-	Th	30-Apr	Final Course Review	-	-
-	T/W	May 5-6	Reading Period	-	
-	F	8-May	CUMULATIVE FINAL Sec 01. Fri 5/8 @ 8-11 am	Final Exam	Modules 1 - 13