

# Psychology 6011: Cognitive Psychology

Fall 2016

## Instructor Information

### Instructor

Dr. Daniel Spieler

### Email

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### Office Location & Hours

229 Coon Bldg, Wed 1-2:30pm or by appointment

## General Information

### Description

This course is intended as an advanced survey of theory and data in cognitive psychology. Typically, a course like this will pick up where sensation and perception ends, and ends where human behavior becomes increasingly conditioned by the social context. My goal is to provide a mixture of a current 'state of the field' along with some historical context for how we got to where we are. The study of cognition is undergoing yet another revolution stemming from the greater emphasis on brain-behavior relationships. The result of this revolution is apparent in some areas of psychology where the 'state of the field' may be almost entirely given over to explanations of how particular processes are implemented in the brain. In other cases, current theories remain largely framed in functional information processing terms.

### Lecture

The course is primarily lecture based. I do not mean this format to limit discussion and I encourage discussion in class as part of helping us understand the theories, models, and empirical data. The format simply reflects the fact that there is a large amount of material that we will cover and in many cases, individuals in the course will have a limited prior experience with the material. Please do not hesitate to ask question or raise (relevant) issues during class.

### Readings

I view the readings for this course as the real meat of the course. I want to give you both a picture of the current state of the field as well as some historical context. Combined with the range of topics for the semester, the reading list is bound to be hefty. Lectures will overlap with the readings but I cannot really provide the nuanced treatment that is possible here. I have selected a mixture of chapters, review papers, and original empirical publications. I would recommend initially doing the readings around the time that these topics are covered in class. To paraphrase the old Chicago saying about voting, you should read early and often. If you do not understand the material, then raising questions either in class, with your classmates, or online will all be valuable strategies to mastering the material. I also provide pointers for optional readings. These are papers that I would like to assign but do not out of a sense of mercy for you.

### Exams

There will be a midterm and final exam for this class. Two to three weeks prior to each, I will provide you with a list of 12 to 15 questions. These questions will tend to be broadly integrative across multiple readings and lectures. On the day of the exam, a random selection of 3 of those questions will appear on the exam and you will have the class time to write your answer. The best strategy for doing well on the

exam will be to prepare full answers for each of these questions prior to the exam because there will not be sufficient time to formulate your answer during the exam.

Studying for the exam with other members of the class is allowed and encouraged. Sharing of written answers for the exam with other members of the class is not forbidden but it is not encouraged. My experience has consistently shown that sharing written answers helps poor students but hurts good students. Collaboration or sharing of any materials with students not currently enrolled in the course is expressly forbidden and doing so constitutes academic misconduct (see Academic Integrity below).

### Online Discussion

I will admit to a love/hate relationship with online discussions for courses. Sometimes they work extremely well but other times contributions feel like they are forced and just individuals checking off required contributions. But hope springs eternal. We will have an online forum for the course, using Piazza, accessible via a sidebar link on t-square. I am asking for 8 contributions from each student over the course of the semester. Your contributions should be your thoughts, questions, or critiques of topics raised in the readings or in lecture. To count as a contribution, your comment should show thought and contain something of substance. It does not need to be long, it does not have to be purely factual (opinion with associated rationale is acceptable), and it does not have to be a new topic posting. It can be a question or a response to someone's question provided it demonstrates some thought went into formulating it.

### Final Paper

You will write a final paper of no more than 9 pages (1 inch margins, double spaced, 11-12 pt font, excluding references) on a topic of your choice closely related to the course (Cognitive Psychology). The paper should address a fairly specific issue similar in specificity to an introduction section to a paper published in a Journal of Experimental Psychology. That is, there is a specific issue to be addressed and you are writing about the research relevant to answering that question. Primary source material for your paper must be peer review journals from some area of experimental psychology. There must be a minimum of 10 such references. Books, tech reports, and other sources are acceptable but are not a substitute for peer reviewed research and these do not count towards the minimum references required. Please be aware that it is inappropriate to cite papers that you have not actually read. If you wish to refer to sources that you have not directly accessed, you should refer to it "as cited in ...".

To help you identify a topic, you must meet with me prior to the midterm exam to discuss possible topics. By Oct 17, you must provide me with a 1 page prospectus, submitted via email. Formal approval is required for all papers (my reply email to you must include "This is approved"). Papers not approved will not be accepted. I apologize for the formality of this process but experience has shown that its best to avoid all misunderstandings.

This paper should not be directly related to a one of your current research projects. It must be unrelated to either your first year project or Master's thesis. If you are unsure about the meaning of "related", talk to me well before Oct 16.

Papers should be submitted to me via email in either a Word (doc) or PDF format. The criteria for grading includes clarity of exposition, demonstration on an understanding of the topic, and quality of logical argumentation.

### Electronic Resources

Readings are available via t-square and all lecture materials will also be made available here. I will attempt to have all slides posted the morning before class.

## Final Grades

Midterm Exam 1	35%
Final Exam	35%
Final Paper	20%
Discussion Contribution	10%

## Attendance

This is a graduate class so you should come to class.

## Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit <http://www.catalog.gatech.edu/policies/honor-code/> or <http://www.catalog.gatech.edu/rules/18/>.

I encourage collaboration in the preparation for the exams and in learning the material in general. Of course, no collaboration is allowed during the exam. Your final paper should also reflect your own work and the writing should be entirely your own. Let me emphasize a couple of points:

**Plagiarism includes taking material without attribution even if you change the wording. Be sure to provide citations when drawing on other researchers' ideas.**

Any student suspected of violating this policy will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

## Accommodations for Individuals with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (often referred to as ADAPTS) at (404)89-2563 or <http://disabilityservices.gatech.edu/>, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

## Student-Faculty Expectations

At Georgia Tech we believe that it is important to continually strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See <http://www.catalog.gatech.edu/rules/22/> for an articulation of some basic expectations - that you can have of me, and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech, while in this class.

## Important Dates

Midterm Exam - October 13<sup>th</sup>

Paper Prospectus - October 17<sup>th</sup>

Final Paper - December 5<sup>th</sup>

Final Exam - December 15<sup>th</sup>, 11:30am to 1:30pm