

Course Info and Description

The theoretical foundations and current controversies and issues in cognitive psychology and cognitive science will be covered. Includes but is not necessarily limited to basic issues in cognition such as attention, perception, mental imagery, categorization, thinking, problem solving, and computational approaches to the study of these topics. These issues will be covered from the perspective of cognitive psychology and emphasis will be placed on the nature, implications, and limitations of the computational model of mind. The ideas of representation and information processing are the central concepts of cognitive psychology, and this is the perspective most of the content of the course will be presented from.

This syllabus contains all the general information you'll need for the course, please keep this copy and refer to it when you have questions about the class. You are responsible for knowing what this syllabus contains.

Instructor:

TBD

Office: TBD

Office Hours: TBA

E-mail: TBA

Classroom and Time:

TBD

Textbook:

Required: *Cognitive Psychology: Connecting Mind, Research, and Everyday Experience 4th Ed.*, by E. Bruce Goldstein. ISBN 978-1-285-76388-0.

Other readings will be required, announced at least one week beforehand, and made available via bCourses.

Course Goals

Student Learning Outcomes.

Upon completion of this course, students should have the following competencies and be able, either independently or with appropriate reference, to demonstrate the following skills and abilities.

- Describe and explain the basic issues and topics considered by cognitive psychology, including but not necessarily limited to attention, perception, visual and mental imagery, categorization and concepts, thinking and problem solving, and computational approaches to the study of these topics, as well as the limitations of the computational approach.

- Describe and explain the concepts of representation, computation, and the neuroscientific theoretical bases of the study of cognition.
- Describe and explain the basic methods of cognitive neuroscience including but not necessarily limited to imaging methods, and in-vitro neurophysiological methods.
- Describe and explain the basic theory and methods of the study of sensory systems and perceptual processes, and how these relate to higher order cognitive processes.
- Describe and explain the concept of attention and its associated phenomena, how the associated functional systems work, and how they underlie the mechanisms of attention.
- Describe and explain the basic mechanisms of learning and memory, including the basic structure and function of the primary memory systems underlying human cognition.
- Describe and explain fundamental theories of knowledge, including categorization and the structure of concepts.
- Describe and explain the basic phenomena of visual imagery, seminal research on visual imagery, how the topic of visual imagery contributed to the development of the field of cognitive psychology, and how these studies lead to the computational study of the mind.
- Describe and explain the basic structure and function of language and its associated phenomena, including reading.
- Describe and explain the concept of problem solving, historical research done on the topic, and current methods of understanding problem solving, as well as higher level phenomena such as reasoning and decision making.

Course Requirements.

Homework (60% of course grade).

There will be a series of seven homework assignments over the course of the semester, comprised of multiple choice questions, and fill-in-the-blank paragraph style questions. Each assignment will cover about two chapters of material from the class and will focus on textbook material and lecture content. Each assignment will vary in length, depending on the amount of content included in the lectures and sections for the part of the course it covers. In other words, homework assignments will vary in terms of the number of points each one has. Specific instructions for homework assignments are given with the assignments. Homework assignments will be returned about a week after they are due. The paragraph type fill-in-the-blank questions will each have a prompt and/or title. These are there for your use to study and prepare for exams.

Exams (34% of course grade).

There will be two exams for the course, each covering about half of the homework assignments. The second exam will not be a comprehensive final, rather, it will be a second mid-term. All exam material will be taken directly from the homework assignments, so you will never be tested on any material you have not had the opportunity to study in advance. Each exam will contain a subset of the material from the homework assignments that exam covers.

On the exams you will receive a set of multiple choice questions taken directly from the homework assignments. There will also be a number of essay questions based on the fill-in-the-blanks paragraphs from the homework assignments. Each essay question will consist of the title and/or prompt given with the fill-in-the-blanks questions from your homework assignments. You will be responsible for composing a one paragraph answer to these questions in which you must demonstrate your understanding of the material, based on the information given in the homework assignments. Due to the size of this class and the time constraints of summer session, we do not have the resources to give you any essay or term paper assignment, so I am using these essay questions to partially make up for that. As such, grammar and spelling will be a factor in the grading of these questions.

Pop-Quizzes (Extra credit for exams).

Throughout the class, you will receive a number of pop-quiz questions to give a written answer to (approximately one per week). These are to be completed during class, and must be turned in by the end for credit. The questions given will be based on the content from previous lectures, and will consist of a straightforward question that can be answered in two or three sentences. A complete answer will earn you 1 - 3 points of extra credit for the currently pending exam; if the pop-quiz is given before the first exam, credit for that quiz will be applied to your grade for the first exam; if the pop-quiz is given after the first exam and before the second, that credit will be applied to the second exam. If you come to lecture regularly, pay attention, and take good notes, you will be prepared for and successful with the pop-quizzes.

RPP Participation (6% of course grade).

Two hours of participation in the psychology department's Research Participation Pool (RPP) are required for the course (3% per hour of participation). Note that RPP participation is "all or none"; all three hours of RPP must be completed for you to receive a grade for the course. Please note that RPP hour opportunities tend to greatly decrease toward the end of the semester, and students who put off their RPP hours can sometimes find themselves without any studies to participate in. As such, it is in your best interest to do your RPP hours as early in the semester as possible.

If you do not wish to participate in RPP, please let us know within the first two weeks of the semester so an alternative assignment can be created for you (typically this will be some sort of an essay assignment).

Lecture Attendance.

Lecture attendance is not required, but is highly recommended. Pop-quizzes will be given in class and based on lecture content, so it is in your best interest to attend lecture as often as possible. Given the fast pace at which summer session takes place, we may not have much time for discussion, but I will work to facilitate in-class discussion and question and answer as much as possible.

Instructor/Class policies

Waitlist.

Admission to the course will be determined through the course waitlists, for Psych majors administered by the Psychology Student Services Office and for Cogs Majors through the Group Major in Cognitive Science. In order to be admitted to the course, you must be placed in a section. Neither the GSI's or I can override the priority system determined by the university. In the past, many students on waitlist have been admitted, though it does vary from year to year. In general, this class is usually impacted, so do not expect to be able to "crash" the course; if you cannot get in via waitlist in the first two weeks, you will probably not be able to get into the class. Any questions with regard to the waitlist must be directed to your respective Major Office mentioned above; please do not ask me about being waitlisted, as I have no control over the waitlist, and can do nothing to change how waitlisted students are admitted to the course.

Instructor Correspondence.

Before contacting me with questions about course policies, due dates, etc., please consult this syllabus; more often than not, the answers to such questions will be somewhere here in the syllabus. I will make every effort to respond to emails within 24 hours, though that may not always be possible. No phone calls or texts will be allowed or accepted.

If you cannot contact me via email, you can contact the psychology department office via phone to leave a message. Emails received after regular hours on Fridays or on weekends will be responded to the following Monday. As much as possible, I will try to respond to emails on weekends whenever possible, but for personal reasons my ability to respond on some weekends will be limited or nonexistent, so please plan accordingly.

Office Hours.

I hold regular office hours each week, as listed above. All class business other than what takes place in lecture is to be conducted during designated office hours. In other words, questions about homework assignments and exams, administrative issues, attendance issues, review of lecture and section content, etc. can all be handled in office hours, but they will not be used as a substitute lecture for you if you miss a lecture. If you cannot make any of the designated office hours, contact me to make an appointment.

Electronic Device Policy.

Students may use laptops for note-taking during lecture, but I recommend the old-fashioned way of taking notes, using a notebook and pen or pencil. Taking notes by hand will actually help you learn the material as you take notes, whereas typing on your laptop will not. There is research evidence to support this; if you want an explanation of it, please come see me in office hours. Also, please do not play games, surf Facebook, etc. during lecture time; it is a waste of valuable time, and distracting to other students. If I discover non-course related activity on a laptop during lecture or section, you will be asked to stop, or leave the room.

Every student is expected to turn off their cell-phone/smart-phone during lecture and section, or at least to put it on silent mode. Rings, alarms, alerts, etc. coming from your phone will be very distracting to yourself and other students. And everyone will know EXACTLY whose phone went off in lecture... So please make sure your phone is off or in silent mode BEFORE you come into the classrooms.

Use of recording devices and equipment.

California state law prohibits the use of audio and video recording equipment in class without consent. I do not allow the use of such devices and technologies unless necessary to accommodate students with disabilities. These devices are also somewhat unreliable, as I tend to be very animated during lecture, moving around, asking questions, and interacting with students when I can. As such, your recording device will probably not pick up most of what I say.

Students who violate this policy will be asked to leave, and escorted from class if necessary. Repeat offenders will be dropped from the course, or referred to appropriate campus authorities for further action.

Grading Scale.

Homework assignments and exams are graded on a sliding scale. The highest score in the class for an assignment constitutes 100% for the scale. For example, if the highest score in the class on

homework 1 is 95/100, that constitutes a 100% score and all grades will be based on 95 possible points.

The grading scale is as follows:

| | |
|-----------|----|
| 100 – 97: | A+ |
| 96 – 93: | A |
| 92 – 89: | A- |
| 88 – 85: | B+ |
| 84 – 81: | B |
| 80 – 77: | B- |
| 76 – 73: | C+ |
| 72 – 69: | C |
| 68 – 65: | C- |
| 64 – 61: | D+ |
| 60 – 57: | D |
| 56 – 53: | D- |

Appealing Grades.

If you believe an assignment or exam grade you've received is in error, you may submit an appeal. To do so, write a cover letter explaining your concern, detail what you believe the error was, and deliver it to me along with the assignment or exam in question. Any appeal must be submitted within 72 hours (3 days) after the graded assignment or exam has been returned to the class. Assignments for all appealed grades will be considered in their entirety, so if there was a grading error in your favor, that would also be corrected as part of the appeal. As a result, your grade can increase, but it might also decrease.

Late Assignments/Exams.

Any late assignment will be penalized one-third of a grade per day late past the scheduled due date, including weekend days. For example, if a homework assignment is due on a Friday, but not handed in until the following Monday, a delay of three days, that assignment will be reduced by one full grade; e.g., an "A" will be reduced to a "B", and so on. Assignments not turned in by the time that assignment is graded and returned to the class will receive no credit.

If you must hand in a homework assignment late, please notify me in advance via email. The time-stamp on the email will provide a record for us to know that you have notified us in advance so you will not be penalized for handing in the assignment late. We all have unexpected things come up and take us by surprise. However, in this day and age when anyone with a smart-phone can access their email most anywhere they are, there is no excuse for not notifying us in advance that you need an extension for your assignment.

If you must miss an exam, you *must* notify me in advance. If you cannot, you must provide some concrete evidence of the reason you missed the exam. You must make-up the exam as soon as possible,

and I will make special arrangements with you to do so. Failure to notify me or to provide sufficient evidence of a valid reason for missing an exam will result in a 0 score on that exam. Exams not made-up by the time that exam is graded and returned to students will receive a 0 score. Extra credit assignments to make up for missed homework and exams are not available.

Let me repeat one thing to make sure it is absolutely clear; *no assignment will be accepted late, even if given an extension, once that assignment has been graded and returned to students, NO EXCEPTIONS.*

Accommodation of Religious Creed.

In compliance with the California Education Code, it is the official policy of the University of California to permit any student to undergo a test or examination, without penalty, at a time when that activity would not violate the student's religious creed, unless administering the exam at an alternate time would impose undue hardship that could not be reasonably avoided. Requests to accommodate religious creed by scheduling tests or exams at alternate times must be submitted to directly to me no later than the end of the third week of the semester to provide time to make necessary arrangements.

Absence Due To Illness.

Students are encouraged to NOT attend lecture or section if they have a fever, flu, or other potentially contagious illness or disease. The university's guidelines specifically state "The University has adopted the CDC recommendation that members of the campus community who develop flu-like illness should self-isolate until at least 24 hours after they are free of fever or signs of fever without the use of medication." In such cases, as above, please contact me as soon as possible to arrange accommodations for missed lectures and/or sections. If you must miss an exam due to illness, please visit the Tang Center to receive a diagnosis and a note to verify your illness, and we will do whatever we can to help you make up the exam you've missed from being sick. Please note that a note from the Tang Center is required for this.

Academic Honesty.

Academic honesty is expected and required of all students for all assignments and exams. Any evidence of copying from another student's work will be penalized with a 0 score for that homework assignment or exam. Academic dishonesty includes but is not limited to the following:

- Any unauthorized copying or collaboration on a test or individual assignment, or the use or attempted use of unauthorized materials.
- Tampering or altering or interfering with evaluation materials and documents.
- Falsifying material of any type, such as verification of reasons for missed exams, false citations of sources, failure to properly cite sources, or fabrication of information of any kind.

- Plagiarism; representing someone else's words, ideas, artistry, or data as one's own. This includes copying another person's work including published or even unpublished material, without appropriate citation and referencing, presenting another's opinion and theories as one's own, or joint work on a project that goes uncredited.
- Assisting another student in academic dishonesty, such as providing answers for a test or exam, changing or altering answers on an already graded assignment, or inappropriately disseminating information or materials to another student about an exam or other evaluative assignment.

Any evidence of a violation of these principles will result in that student being immediately reported for the violation, removal from the class, and the assignment of a failing grade for the class.

Recommendations for Success

Attend lecture and section regularly.

Lecture is the primary forum for the class, and much of the information I expect you to know for the course will be presented in lectures. The majority of the material you see on homework assignments will be presented in lecture, and there may be opportunities to earn extra credit for participating in lecture as well.

Do the assigned readings BEFORE class.

All class content is presented based on the assumption you've already read the assigned material for that class. If you haven't done the reading, you won't be prepared to take good notes, or to ask questions about material in the reading you are confused about and need help understanding. By doing the assigned reading before class, you will get a preview of the material to be covered in lecture for that day, and can make notes of what you don't understand, then ask questions about it. It will also provide an outline of the material to be covered, which will help you plan out in advance your studying for homework assignments. This will help you succeed with those assignments, and improve your grade in the course. You will also be able to participate in any in-class activities regarding that material and may lose any extra-credit points that might be available from that activity.

Come to office hours.

This is the single biggest mistake any student ever makes; not coming to office hours. (In fact, it's the better students who make this mistake most often. Attending office hours creates opportunities for additional learning for the course material as well as about other topics and important skills such as note

taking and reading strategies that you may find advantageous for all of your courses. I am a resource to help you learn and succeed, so take advantage of office hours when you can.

Class/Lecture Schedule

M, July 3:

- Course introduction, instructor/TA introductions, course policies.
- Goldstein, Chapter 1.

W, July 5:

- Goldstein, Ch. 2.

F, July 7:

- Homework 1 due (covers Goldstein chapters 1 & 2).
- Schiffman reading on psychophysics.

M, July 10:

- Goldstein Ch. 3.

W, July 12:

- Homework 2 due (covers Schiffman reading and Goldstein chapter 3).
- Johnson & Proctor reading.

F, July 14:

- Goldstein, Ch. 4.

M, July 17:

- Homework 3 due (covers Johnson & Proctor reading and Goldstein chapter 4).
- Goldstein, Ch. 5.

W, July 19:

- Goldstein, Ch. 6

F, July 21:

- Homework 4 due (covers Goldstein chapters 5 & 6).
- Goldstein, Ch. 7.

M, July 24:

- Goldstein, Ch. 9.

W, July 26:

- First exam (covers homework 1 – 3).

F, July 28:

- Homework 5 due (covers Goldstein chapter 7 & 9).
- Goldstein, Ch. 10.

M, July 31:

- Goldstein, Ch. 11.

W, Aug 2:

- Homework 6 due (covers Goldstein chapters 10 & 11).
- Goldstein, Ch. 12.

F, Aug 4:

- Goldstein, Ch. 13:

M, Aug 7:

- Homework 7 due (covers Goldstein chapters 12 & 13).

W, Aug 9:

- Review for second exam.

F, Aug 11:

- Second exam (covers homework 4 – 7).