

UMass Boston

PSYCH 271L: Introduction to Cognitive Science, Spring 2012 Course syllabus and guidelines

Instructors

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Course description: Cognitive science is an interdisciplinary field fundamentally concerned with furthering our understanding of the development, underlying processes, and implementation of language, perception, problem-solving, learning, memory, and other intelligent capacities. This course offers an introduction to this science for all levels of undergraduate majors in psychology, computer science, biology, and other related fields.

It is your responsibility to read and understand this syllabus thoroughly, and discuss any questions/concerns with the instructor by the end of the second class.

Required text: *Cognitive Science* by Jay Friedenberg & Gordon Silverman; 2nd Edition; Sage Publications, 2012. ISBN: 978-1-4129-7761-6.

Any additional required readings will be posted as required.

Class communication: The instructors will post short assignments (see below), notes, readings, preliminary scores, and other instructions through your umb email accounts and through Blackboard. It is your responsibility to check your email and Blackboard often, and inform the instructors if you prefer alternate email ids for correspondence.

Attendance: Daily attendance is required and will be logged via an attendance sheet. If you cannot make a class, please try to inform the instructor asap, with documentation wherever possible. There is no penalty for four missed classes (besides missing any in-class quizzes). Beyond that, 1 point will be deducted off your final score in the course, for every class missed that is not due to a documented emergency. Missing more than 15min of a class will count as a half-missed class. Missing more than half of the classes for whatever reason will be dealt with on a case-by-case basis.

Participation: Students are expected to complete reading assignments before class. You are highly encouraged to participate in class discussions and to ask questions and request clarifications. This is a very important part of the class. If you are uncomfortable or unable to engage in discussions during the class, please discuss this with the instructor and write down all your comments and questions and turn them in within 24 hours. Remember - no question is silly or unimportant! You should try to maximize the benefit you derive from the class.

Electronic devices should be used for enhancing your classroom experience, and under no circumstances should disturb others. Place devices on silent/vibrate. If you must take a call or text/IM, you should leave the classroom discreetly. Excessive usage of electronic

devices for personal stuff and/or other disturbances will be warned and then counted as a half-missed class, with the associated penalties.

Evaluations:

Please note that it is your responsibility to make sure you attend the exams and turn in your assignments on time (see below for late/missed deadline penalties).

Formal evaluations will consist of the following:

1) Two in-class exams (each worth 15 points) - one **mid-term exam** (Mar 22nd, 2012) and one **final exam** (non-cumulative; date TBA). These will consist of multiple-choice and short-answer questions.

2) Two major writing assignments (each worth 15 points). These will be essays on a specific topic or research article, chosen from a set determined by the instructors. The essays should be printed out, on not more than 4 pages each. Essays should be 1.5-spaced, in 12-point Times New Roman font, with at least 1” borders on all sides (a template will be provided). We will discuss the specifics of these assignments in class. Check the timetable for assignment and submission deadlines. 5% penalties will be assessed for not being on-topic and not following formatting and length guidelines. Assignments are due during class on the dates indicated below. For late submissions, 10% of the points will be deducted each day. After the 7th day, the paper will get an automatic zero.

3) Short, in-class quizzes (worth 40 points). There will be short (10min) in-class quizzes throughout the semester, at the beginning of the class; check the timetable for the exact dates. These quizzes will consist of short-answer and/or multiple-choice questions. Each quiz is worth 5 points. Both the instructors will give 5 in-class quizzes each, and the lowest score for each instructor will be dropped.

Table of assessments

Assessment	Raw score maximum	Contribution to final
10x short (10min) in-class quizzes	5 each (<i>drop lowest for ms & for mp</i>)	40
Mid-term exam	100	15
Final exam	100	15
Writing assignment (ms)	100	15
Writing assignment (mp)	100	15

Expectations for written work: In order to get a good score, your writing must be (a) creative (b) organized and (c) technically sound. *Creativity* implies both that you have thought critically about the material, and that you are able to clearly express your *own* thoughts, and not just repeat what you hear or read. *Organized* refers to how you structure your thoughts and the document. Is there a clear “flow” of ideas? Is the text broken down into a logically connected series of sections and sub-sections? *Technically sound* implies that your text is free of misspellings and grammatical errors, and that you use a consistent style and formatting of the document, including citations.

Bonuses: There are a total of 10 bonus points, in addition to the points that you can get from the formal assessments. These points are eventually at the discretion of the instructors. Five bonus points are for attendance and interaction in classes. The remaining five bonus points are

for your **Key Terms Book**. Each student will maintain a book with key terms from each lecture. At the end of each lecture you will be given the important concepts from that class. You have to write these down in your *Key Terms Book* and write a few lines (no more than half a page) definition or commentary for at least two of the key terms. We will collect these books as indicated in the timetable below. Note that these books also serve as your own study guides, so maintaining them is important for you.

Extra assignments: There are no extra assignments or replacements for the exams or the major writing assignments. For the in-class quizzes, since we will only consider the best eight assignments (see above), in effect you have extra opportunities to improve your score. Look at the class policy regarding make-ups below.

Academic dishonesty: Any act of academic dishonesty will incur penalties ranging from getting a failing grade on an individual evaluation to failing the entire course. Be particularly aware that, when writing your open-ended essays, you use your own thoughts and words. If you do copy something (a sentence, a passage) from another source, you should properly acknowledge the source; failure to do so constitutes plagiarism. But be aware: since we are also interested in your creativity, using too many quoted sources will also lead to a poorer score. Please contact the instructor if you have any questions. For additional information, consult the university website at http://www.umb.edu/life_on_campus/policies/regulations/

Makeup exams and incompletes: Makeup exams are not allowed except under rare circumstances, and *only in the case of a properly documented exigency*. Make-ups will be by pre-arrangement with the instructor only, and will be decided on a case-by-case basis. Each student is allowed only one make-up exam for the course. Incompletes will only be considered for documented extreme medical or family emergencies. Please contact the instructor to work out the details, should the need arise. Please remember that the university rules require that you successfully finish at least 50% of the course material in order to be considered for an incomplete.

Enhancing your learning: There are several resources on campus for enhancing your learning experience. Please contact staff and members of the various resources - they will be happy to help you. The resources include:

1) The library.

2) Academic support programs: see the website at

http://www.umb.edu/academics/vpass/academic_support/

These include writing tutors and programs like the following:

http://www.umb.edu/academics/vpass/academic_support/tutoring/rwssc/

3) **Students with disabilities** can find appropriate services at the Ross Center:

<http://www.umb.edu/academics/vpass/disability/>

Please get in touch with the Ross center and inform the instructor as early as possible if you require disability accommodations.

Upsetting Material: Course material in psychology may cause strong emotional reactions for students. Please feel free to discuss your reactions with the instructor. If major difficulties are encountered during the semester, students can access the University Counseling Center, 2nd floor, Quinn Administration Building.

Timetable: Please note: timetable might change, including the posting of additional reading materials as the class progresses. Please check the course website before each class.

(MS=Mohinish Shukla; MP=Marc Pomplun; TBA=To Be Announced; KTB=Turn in Key Terms Book)

Week	Who	Day, date	Topic	Readings	Notes
Week 1	MS/MP	Tue, 1/24	Course Intro		
	MS	Thu, 1/26	Introduction to Cognitive Science	Ch. 1	Add/drop ends 1/30
Week 2	MS	Tue, 1/31	Philosophy and Psychology	Ch. 2	Quiz ms1+KTB
	MS	Thu, 2/2		Ch. 3	Quiz ms2
Week 3	MS	Tue, 2/7	Introduction to Cognitive Psychology	Chs. 4, 5	
	MS	Thu, 2/9			
Week 4	MP	Tue, 2/14	Neuroscience	Ch. 6	
	MS	Thu, 2/16			
Week 5	MS	Tue, 2/21	Linguistics	Ch. 9	Quiz ms3
	MS	Thu, 2/23			Quiz ms4+KTB
Week 6	MS	Tue, 2/28	Evolutionary, Emotional	Chs. 8,10	Quiz ms5
	MS	Thu, 3/1			
Week 7	MS	Tue, 3/6	--- spring break ---		
	MS	Thu, 3/8			
Week 8	MS	Tue, 3/13	Social; Review	Ch.11	Turn in Writing 1
	MS	Thu, 3/15	MID TERM EXAM		
Week 9	MP	Tue, 3/20	Cognitive Psychology	Chs. 4, 5	
	MP	Thu, 3/22			
Week 10	MP	Tue, 3/27	Artificial Intelligence: The Basics of Computation	Ch. 12	Quiz mp1 PF/Withdraw deadlines
	MP	Thu, 3/29			
Week 11	MP	Tue, 4/3	Artificial Intelligence: Computation as a Model of the Mind	Ch. 12	Quiz mp2+KTB
	MP	Thu, 4/5			
Week 12	MP	Tue, 4/10	Biological and Artificial Neural Networks	Ch. 7	Quiz mp3
	MP	Thu, 4/12			
Week 13	MP	Tue, 4/17	"Intelligent" Systems	Ch. 13	Quiz mp4+KTB
	MP	Thu, 4/19			
Week 14	MP	Tue, 4/24	Computational Models of Brain Function	Chs. 4, 5	Quiz mp5
	MP	Thu, 4/25			
Week 15	MP	Tue, 5/1	Conclusions; Review	Ch. 14	Turn in Writing 2
	MP	Thu, 5/3			
Week 16	MP	Tue, 5/8	Final exam period		
		5/14 to 5/18			