

ITCS 3216/PSYC 3216 – *Introduction to Cognitive Science*

Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?
-T.S. Elliot

Instructor: Mark Faust, Ph.D. **Office:** Room 4041 Colvard
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Office Hours: 11 am – 1:30 pm, TWR, open door policy 9-5 M-F, scheduled appts. not necessary
Text: *Cognitive Science: An Interactive Approach*, P. Goolkasian, Ed.
Lecture: TR 9:30– 10:45, 3120 Colvard
Prerequisites: None, PSYC 1101 General Psychology recommended

49er Express: All course-related documents (e.g., handouts, & homework assignments) and student grades will be posted on Moodle pages in 49er Express. See 49er Express webpage if you have problems: <https://secure.uncc.edu/express/>

Goals:

- 1) To undertake a survey of major topics in the sub-fields of cognitive science.
- 2) To identify the fundamental concepts in cognitive science.
- 3) To learn to think critically about theory and evidence regarding how the mind works.

Overview: This course will provide an overview scientific research and theory regarding how natural and artificial cognitive systems represent knowledge and produce intelligent action.

Approximate Grading (based on total points earned):

Online Chapter Quizzes	10-20 pts. each
1-2 Short Writing Assignment(s)	40 pts. each
4 Mid-term Exams (Drop Lowest Grade)	100 pts. each
Comprehensive Final (randomly selected quiz questions)	50 pts

Notes on Grades:

- (A) **Final grade** based on percent total points earned. 90%(A), 80%(B), 70%(C), 60%(D), are guaranteed **maximum** criteria. Criteria may be shifted down if distribution of total scores warrants.
- (B) Quizzes will be taken from test bank for chapters in the text. Quizzes will be administered online in Moodle, will be time-limited to 20 minutes for 20 questions, and may be repeated with the best score out of a maximum of 3 attempts recorded in the score sheet online in Moodle. Deadlines for completion of each of the chapter online quizzes will be posted in the syllabus.
- (C) There will be 4 mid-term exams, the last will be administered during the final exam period. NO make-up exams will be given. Instead, students will drop an exam score.
- (D) If, for any reason, you think you might miss a *third* quiz or a *second* exam, consult with the instructor *immediately* (that is, BEFORE the fact)!!
- (E) Late writing assignments will receive a 10% late penalty (equivalent to a letter grade) up to the point that the assignment is handed back in class, and a 20 % late penalty thereafter.
- (F) While there is no explicit attendance requirement for this course, the high number of pop-quizzes and lack of mid-term make-up exams make regular attendance critical.
- (G) The comprehensive final exam will be a randomly selected set of questions, taken verbatim from the quiz questions for each chapter of the text.

Academic Integrity: UNCC's code of Student Academic Integrity will be followed and enforced in this course. In particular, the following conduct is prohibited: cheating, fabrication and falsification, multiple submissions, plagiarism, abuse of academic materials, and complicity in academic dishonesty. A fuller description of this code can be obtained on p. 275 of the catalogue and complete text of it can be obtained from the Office of the Dean of Students. Violation of the code will result in failure for that activity, possible failure of the course, and possible reporting to Department Chair and Dean. Please see the instructor if you have any questions regarding what constitutes academic dishonesty.

Tentative Schedule :

<u>Week</u>	<u>Date</u>	<u>Topic(s)</u>	<u>Text</u>	<u>Assignment</u>
1	Jan. 10 12	Introduction CRUM	Ch. 1	
2	17 19	Cognitive Science Emerges Cognitive Science Emerges	N/A	http://www.pbs.org/wnet/humanspark/ Watch Human Spark Episode 1 Online
3	24 26	Knowledge Representation Knowledge Representation	Ch. 2	Watch Human Spark Episode 2 Online
4	31 Feb. 2	Enduring Questions Vision	Ch. 3 Ch. 4	Watch Human Spark Episode 3 Online
5	7 9	Vision Exam 1		Quizzes 1-4
6	14 16	Attention Cognitive Neuroscience 1	N/A Ch. 5	
7	21 23	Cognitive Neuroscience 1 Cognitive Neuroscience 2		
8	28 Mar. 1	Cognitive Neuroscience 2 Class Cancelled		Human Spark Assignment Due
9	6, 8	Spring Break NO CLASS		
10	13 15	Exam 2 Memory	Ch. 6	Quiz 5
11	20 22	Memory Network Models	Ch. 6	
12	27 29	Network Models Decision Making	Ch. 7	
13	Apr. 3 5	Decision Making Problem Solving and Reasoning	Ch. 8	Watch NOVA Episode on Watson
14	10 12	Language Language	Ch. 9	http://video.pbs.org/video/1786674622/
15	17 19	Artificial Intellegence Exam 3	Ch. 11	Quizzes 6-9
16	24 26	Artificial Intellegence Robotics		
17	May 1	Complex Systems, Bonus Quiz	Ch. 12	Quizzes 10-12, Watson Assignment Due
Finals	10	Optional Midterm Exam 4 (Thursday, 8:30-10:30am)		Online Comprehensive Final Quiz Due

NOTE: (A) Unforeseen circumstances may necessitate changes to course schedule or policies. Ample notice will be given. (B) If you have a specific disability that qualifies you for academic accommodation, please notify the instructor and provide certification (Office of Disability Services, 237 Fretwell, 704-687-4355, www.uncc.edu/dability/).