CS - 390L - Cognitive Science and Artificial Intelligence (Fall 2017)

01. UG New Omnibus Course (17-18)

General Course Information

Read before you begin

1. Please turn on the help text before starting this proposal by clicking on the 🛈 icon in the top right corner of the heading.

2. All fields with an * are required. You will not be able to launch the proposal without completing required fields.

NOTE: Omnibus courses may be offered only three times before a regular course must be proposed for the Catalog.

DUE DATES:

For Spring 2017: Received in the Dean's Office September 12, 2016

For Summer 2017: Received in the Dean's Office January 23, 2017

For Fall 2017: Received in the Dean's office February 6, 2017

For Additional Assistance and Step-by-Step Instructions on completing this form, consult this document: Omnibus Form Assistance

Tracking:	NLAS 1718-10

Department*	Mathematical and Computer Sciences, Department of

Status:*	☑ Active-Hidden

Prefix:*	CS	**Course Number:***	390L

Course Type:*	Computer Science

Course Title (include Semester and date for course to run):*	Cognitive Science and Artificial Intelligence (Fall 2017)
Transcript Course Title:*	Cognitive Science and AI
Equivalent/ Crosslisted?	☐ Equivalent ☐ Crosslisted
List all equivalent courses:	
List all crosslisted courses:	

To receive Title IV financial aid funds, all institutions of higher education must comply with the federal definition of a credit hour. The Higher Learning Commission requires institutions to maintain policies and procedures for verifying compliance with this definition.

Federal Credit Hour Definition: A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally-established equivalency that reasonably approximates not less than:
(1) one hour of classroom or direct faculty instruction and a minimum of two hours of out-of- class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time; or (2) at least an equivalent amount of work as required in paragraph (1) of this definition for other activities as established by an institution, including laboratory work, internships, practica, studio work, and other academic work leading toward to the award of credit hours. 34CFR 600.2 (11/1/2010)

Credit Hours:*	4
Distribution of Credit Hours*	4 (4+0)
Schedule Type:*	Lecture
Grade Mode:*	Letter

Face-to-Face or Equivalent Hours per course:

Consult the Appendices of the [Curriculum Manual](#) to determine the hours for the course (appedices begin on page 33 of the document)

Lecture: 60	**Lab:** 0
Internship: 0	**Practicum:** 0

Other: 0	

Additional Student Work Hours per course:*	120

Specified repeatable course:*	⦿ No ○ Yes

If yes, number of credits/ repeats allowed	

Prerequisite(s):	CS 2050, MTH 3170 with grades of "C" or better; or permission of instructor. CS 3210 is strongly recommended.

Corequisite(s):	

Prerequisite(s) and/or Corequisite(s):	

Banner Enforced Prerequisite(s):	CS 2050 and MTH 3170

Minimum passing grade for Banner enforced prerequisite course(s):	C

Banner Enforced Corequisite(s):	

Minimum passing grade for Banner enforced corequisite course(s):	

Banner Enforced Prerequisite(s) and/or Corequisite(s):	

Minimum Passing Grade for Banner Enforced Pre/Corequsites	

Registration restrictions (optional):

Level	Class
Program	**Student attribute**
Major	
Other Registration Restriction(s):	

Course Description: *	This course provides an overview of the interdisciplinary field of cognitive science -- the study of mind and its functions -- with emphasis on the areas of the field involving artificial intelligence. This course builds on students' computer science backgrounds to understand the integration of component disciplines that comprise cognitive science, notably: artificial intelligence, linguistics, psychology, philosophy, neuroscience, and anthropology. Emphases

are given to artificial intelligence and to the use of human behavioral artifacts to reveal underlying aspects of cognition.

Required Reading and Other Materials will be equivalent to:*	José Luis Bermúdez, Cognitive Science: An Introduction to the Science of the Mind (2nd Edition; 2014) Wolfgang Ertel, Introduction to Artificial Intelligence (2011) Justin Leiber, Can Animals and Machines Be Persons? (1985) Massimo Piattelli-Palmarini, Inevitable Illusions: How Mistakes of Reason Rule Our Minds (1994) Dan Ariely, Predictably Irrational, Revised and Expanded Edition: The Hidden Forces That Shape Our Decisions (2010)
Specific, Measurable Student Behavioral Learning Objectives:*	Describe the purview of cognitive science Identify the key constituent disciplines of cognitive science Interpret alternative models of cognition Illustrate applications of cognitive science principles Formulate hypotheses regarding models of cognition Propose computational experiments to test cognition hypotheses Compare artificial intelligence approaches to cognitive modeling Assess ethical issues concerning cognitive science and artificial intelligence
Detailed Outline of Course Content (Major Topics and Subtopics) or Outline of Field Experience/ Internship*	Contextualizing the study of cognition Multidisciplinary essentials of cognitive science Computational models of mind Intelligence - natural and artificial Cognitive processing and cognitive artifacts
Evaluation of Student Performance*	Participatory contributions to group learning activities In-class assignments

Homework assignments

Examinations

Written and verbal communication skills will be applied in this course.

Course Proposal Objective(s)

Learning Objectives   No Learning Objectives

Signatures for CS - 390L - Cognitive Science and Artificial Intelligence (Fall 2017)

There are no signatures required on this proposal.