ORIGINATOR'S SECTION: 1. College: Desired Term and Yea Spring 2017 CoEHHS ☑ CSM 2. Current Course abbreviation and Number: CS471 (3) Introduction to Artificial Intelligenc TYPE OF CHANGE(S). Check √all that apply. Course Number Change ☐ Delete Prerequisite			Fall 2008):		
CS471 (3) Introduction to Artificial Intelligenc TYPE OF CHANGE(S). Check √all that apply.	e				
The state of the s					
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			Other Prerequisite Change		
Course Title Change	Add Corequisite		Grading Metho	od Change	
Unit Value Change	Delete Corequisite		Mode of Instru Number)	ction Change (C/S	
Description Change	Add Consent for Enrollment			.E. If yes, also fill riate GE form.	
Add Prerequisite	Delete Consent for Enrollment		Cross-list	Mary GZ Torm.	
Information in this section—both current and n			lor items checked IATION:	l (√) above.	L
		Course abbreviation and Number:			
		Title: (Titles using jargon, slang, copyrighted names, trade names, or any non-essential punctuation may not be used.)			
4. Abbreviated Title for Banner (no more than 25 characters):		Abbreviated Title for PeopleSoft: (no more than 25 characters, including spaces)			
5. Number of Units:	Number of U	Number of Units:			
6. Catalog Description: DEC 16 2016 BY:	Catalog Description: (Not to exceed 80 words; language should conform to catalog copy. Please consult the catalog for models of style and format; include all necessary information regarding consent for enrollment, pre- and/or corequisites, repeated enrollment, crosslisting, as detailed below. Such information does not count toward the 80-word limit.)				
7. Mode of Instruction* (See pages 17-23 at http://www.calstate.	edu/cim/data-eler	n-dic/API	DB-Transaction-L	DED-SectionV.pdf for	
Type of Number of Instructional Mode CrediUnits Course Classification Number)	Type of Instruction		edit Units (nstructional Mode Course Classification Number)	
Lecture	Lecture				
Activity	Activity				
Lab	Lab				
8. Grading Method:* Normal (N) (Allows Letter Grade +/-, and Credit/No Credit) Normal Plus Report-in-Progress (NP) (Allows Letter Grade +/-, Credit/No Credit, and Report-in-Progress) Credit/No Credit Only (C) Credit/No Credit or Report-in-Progress Only (CP)) 9. If the NP or CP grading system was selected, please explain the	Normal P +/-, C Credit/No	N) <i>(Allow</i> lus Repor <i>Credit/No</i> (Credit O Credit o	t-in-Progress (NP) Credit, and Report Inly (C) r Report-in-Progre		

^{*}If Originator is uncertain of this entry, please consult with Program Director/Chair-

CURRENT INFORMATION:	NEW INFORMATION:				
10. Course Requires Consent for Enrollment? ☐ Yes ☐ No ☐ Faculty ☐ Credential Analyst ☐ Dean ☐ Program/Department/Director/Chair	Course Requires Consent for Enrollment? Yes No Faculty Credential Analyst Dean Program/Department/Director/Chair				
11. Course Can be Taken for Credit More than Once? Yes No If yes, how many times (including first offering)	Course Can be Taken for Credit More than Once? Yes No If yes, how many times (including first offering)				
12. Is Course Cross Listed: Yes No If yes, indicate which course	Is Course Cross-listed? Yes No If yes, indicate which course and check "yes" in item #17 below.				
13. Prerequisite(s): CS311	Prerequisite(s): CS311. May not be taken by students who have received credit for CS 571.				
14. Corequisite(s): 15. Documentation attached:	Corequisite(s):				
Syllabus Detailed Course Outline					
PROGRAM DIRECTOR/CHAIR - COLLEGE CURRICULUM (Mandatory information – all items in this section must be complete	d.)				
16. Does this course fulfill a requirement for any major (i.e. core course or elective for a major, majors in other departments, minors in other departments? ☐ Yes ☐ No If yes, please specify: Computer Science elective for Masters and Bachelors students					
17. Does this course change impact other discipline(s)? (If there is any uncertainty as to whether a particular discipline is affected, check "yes" and obtain signature.) Check "yes" if the course is cross-listed. Yes No If yes, obtain signature(s). Any objections should be stated in writing and attached to this form.					
Discipline Signature	SupportOppose Date				
Discipline Signature	SupportOppose				
18. Reason(s) for changing this course: CS471 is a subset of CS571 Artificial Intelligence in terms of the depth at which the topics are covered. Therefore, students should not take CS471 after taking CS571. The topics not covered in CS471 are highlighted in the course outline of CS571 (attached).					
SIGNATURES: (COLLEGE LEVEL):	(UNIVERSITY LEVEL)				
Rika Yoshii 11-23-16 1. Originator (Please Print) Date 12/7/16	5. UCC Committee Chair Date				
Program Director Chair Pull Guet 12/19/16	6. Vice President for Academic Affairs (or Designee) Date				
3. College Curriculum Committee Date 12/14/16 4. College Dean (or Designee) Date	7. President (or Designee) Date				

CS471 INTRODUCTION TO ARTIFICIAL INTELLIGENCE Elective for CSIS Majors

Catalog Course Description: An <u>introduction to the objectives and techniques</u> used by practitioners and researchers in artificial intelligence. Explores a number of aspects of computational models of intelligence including problem solving (uninformed and informed strategies), game playing, knowledge representation, reasoning, planning, natural language processing (text and speech), and learning.

Textbook Required: Russell and Norvig. *Artificial Intelligence: A Modern Approach.* Third Edition. Pearson/Prentice-Hall, 2010.

Learning Outcomes: Upon completion of the course students should be able to:

- 1. Explain and trace various search algorithms.
- 2. Explain and trace other Al algorithms.
- 3. Explain basic knowledge representation techniques.
- 4. Explain and trace machine learning techniques.
- 5. Explain approaches to natural language processing.
- 6. Write programs that implement artificial intelligence algorithms.

Topics and the Order:

Topic	Readings in Book
Introduction	Chap. 1
Intelligent agents	Chap. 2
Environments	Chap. 2
Problem Solving Agents	Chap. 3: 3.1-3.3
Uninformed Search Strategies	Chap. 3: 3.4
Informed Search Strategies	Chap. 3: 3.5-3.6
Adversarial Search	Chap. 5
Constraint Satisfaction Problems	Chap. 6
Classical Planning	Chap. 10:10.1-10.3
Knowledge-Based Agents & Knowledge Representation	Chap. 7: 7.1-7.2
Learning From Examples	Chap. 18:18.9, 18.11
Natural Language Processing	Chap. 22
Natural Language for Communication	Chap. 23
Final Exam	