SYLLABUS FOR ARTIFICIAL INTELLIGENCE PROGRAMMING (164)	
Spring 2020	**California State University, Fresno**
Course Information: An Introduction to Artificial Intelligence	**Instructor Name:** Dr. David Ruby
Units: 3	**Office Number:** Sci II 273
Time: TuTh 12:30-1:45pm	**E-Mail:** druby@csufresno.edu
Location: IT 104	**Telephone:** 278-4312
Website: TBD	**Office Hours:** MWF, 11:00am - 12:00 Tu, 3:30pm-5:30

Prerequisites

CSci 117

Required Textbooks and Materials

Textbook:
Artificial Intelligence: A Modern Approch (3rd Edition)
  By Stuart Russell & Peter Norvig

Laptop:
Laptops will be used for some quizzes and tests.

Course Goals and Primary Learning Outcomes

Course Goals:

Provide students with an understanding of key concepts from the world of Artificial Intelligence.

Primary Learning Outcomes:

- Introduction to Artificial Intelligence
  — Students will understand the discipline of Artificial Intelligence and where it plays critical roles.
  — Students will be able to identify tasks requiring or benefitting from approaches from Artificial Intelligence.

- Machine Learning
  — Students will understand how machine learning is used to solve important real world problems.

- Search
  — Students will understand how search is used to solve problems.
  — Students will understand how search is applied to games.
  — Students will understand how search is applied to Constraint Satisfaction Problems.

- Knowledge Representation
  — Students will understand how logic is used as a knowledge representation.
  — Students will understand how probability is used as a knowledge representation.

Assignment and Examination Schedule

Period	Presentations/Examinations/Assignments	Points
Various	Attendance	100
	In-Class Activity/Presentations	100
	Quizzes	100
	Qwiklabs	200
	Midterm	200
	Final	300

Grading

There are a total of 1000 points available for the class. Final letter grades will be assigned based on the points earned and the standard grade scale listed below, with adjustments to this scale made as needed based on the final distribution of points earned by the class:

       A: 900-1000
       B: 800-899
       C: 700-799
       D: 600-699
       F: < 600

Subject to Change:

This syllabus and schedule are subject to change in the event of extenuating circumstances. If you are absent from class, it is your responsibility to check on announcements made while you were absent.

Immediate Access Textbook

- You are enrolling into an Immediate Access (IA) course - This means the textbook is delivered to you digitally through your class Canvas system.
- All IA communication will be delivered to your Fresno State email account…It is YOUR RESPONSIBILITY to read all communication coming from the Bookstore. Look for email headers such as "IMPORTANT INFORMATION" or "REMINDERS"
- ALL IA materials are free for the first 10 days of the start of the semester to all students enrolled - After the 10th day, students who did not OPT OUT of the materials will be charged on their student account the cost of the materials. This information can be found in your welcome letter email from the Bookstore. If you didn't receive an email, please contact sguthier@mail.fresnostate.edu
- OPTING OUT means that you DO NOT want the materials delivered digitally and that YOU are responsible to get the materials on your own – usually at a higher cost. If you OPT OUT, your digital access will be revoked.
- DO NOT purchase digital materials directly from the Publisher website or any other purchase that would require you to enter a credit card for purchase. You will be billed TWICE! If you are OPTED IN, the campus will bill your student account.
- **THE LAST DAY TO OPT OUT IS January 31st, 2020**. – It is YOUR responsibility to OPT OUT. Once you click on the OPT OUT link in your Welcome Letter email or in you Professor's Canvas page, you will receive a confirmation email. If you do not receive this email, try opting out again or contact the Bookstore.
- DO NOT pay for your materials through Canvas!!! If the link provided requires an "ACCESS CODE" it will be delivered to you in your Fresno State email account from the Bookstore. ALL CHARGES will be billed to your student account.
- Student accounts will be charged by **February 10th, 2020**…You will have until **February 20th, 2020** to pay on your student account either online or at Joyal Administration. If you're on financial aid, scholarship or other benefit programs you are still obligated to pay on your account…Please put this money aside.
- If you enroll after the 10th day of class, you will have 24 hours to review the materials and OPT OUT of the program.
- Any questions about the IA program can be directed to sguthier@mail.fresnostate.edu

University Policies

Students with Disabilities:

Upon identifying themselves to the instructor and the university, students with disabilities will receive reasonable accommodation for learning and evaluation. For more information, contact Services to Students with Disabilities in the Henry Madden Library, Room 1202 (278-2811).

Honor Code:

"Members of the CSU Fresno academic community adhere to principles of academic integrity and mutual respect while engaged in university work and related activities." You should:

a) understand or seek clarification about expectations for academic integrity in this course (including no cheating, plagiarism and inappropriate collaboration)

b) neither give nor receive unauthorized aid on examinations or other course work that is used by the instructor as the basis of grading.

c) take responsibility to monitor academic dishonesty in any form and to report it to the instructor or other appropriate official for action.

Cheating and Plagiarism:

"Cheating is the actual or attempted practice of fraudulent or deceptive acts for the purpose of improving one's grade or obtaining course credit; such acts also include assisting another student to do so. Typically, such acts occur in relation to examinations. However, it is the intent of this definition that the term 'cheating' not be limited to examination situations only, but that it include any and all actions by a student that are intended to gain an unearned academic advantage by fraudulent or deceptive means. Plagiarism is a specific form of cheating which consists of the misuse of the published and/or unpublished works of others by misrepresenting the material (i.e., their intellectual property) so used as one's own work." Penalties for cheating and plagiarism range from a 0 or F on a particular assignment, through an F for the course, to expulsion from the university. For more information on the University's policy regarding cheating and plagiarism, refer to the Class Schedule (Legal Notices on Cheating and Plagiarism) or the University Catalog (Policies and Regulations).

Computers:

"At California State University, Fresno, computers and communications links to remote resources are recognized as being integral to the education and research experience. Every student is required to have his/her own computer or have other personal access to a workstation (including a modem and a printer) with all the recommended software. The minimum and recommended standards for the workstations and software, which may vary by academic major, are updated periodically and are available from [Information Technology Services](http://www.fresnostate.edu/adminserv/technology/) (http://www.fresnostate.edu/adminserv/technology/) or the University Bookstore. In the curriculum and class assignments, students are presumed to have 24-hour access to a computer workstation and the necessary communication links to the University's information resources."

Disruptive Classroom Behavior:

"The classroom is a special environment in which students and faculty come together to promote learning and growth. It is essential to this learning environment that respect for the rights of others seeking to learn, respect for the professionalism of the instructor, and the general goals of

academic freedom are maintained. ... Differences of viewpoint or concerns should be expressed in terms which are supportive of the learning process, creating an environment in which students and faculty may learn to reason with clarity and compassion, to share of themselves without losing their identities, and to develop and understanding of the community in which they live . . . Student conduct which disrupts the learning process shall not be tolerated and may lead to disciplinary action and/or removal from class."

Copyright Policy:

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Tentative Course Schedule
Spring 2020
(Tuesday, Thursday Courses)

	Date	Topic	Reading Assignment
1	Tues., Jan 21	Intro	
2	Thurs., Jan 23	What is AI/History	Chapter 1
3	Tues., Jan 28	Intelligent Agents	Chapter 2
4	Thurs., Jan 30		
5	Tues., Feb 4	Machine Learning	Chapter 18

	Date	Topic	Reading Assignment
6	Thurs., Feb 6		
7	Tues., Feb 11	Machine Learning	Chapter 18
8	Thurs., Feb 13		
9	Tues., Feb 18	Machine Learning	Chapter 18
10	Thurs., Feb 20		
11	Tues., Feb 25	Machine Learning	Chapter 18
12	Thurs., Feb 27		
13	Tues., Mar 3	Midterm	
14	Thurs., Mar 5		
15	Tues., Mar 10	Search	Chapter 3
16	Thurs., Mar 12		
17	Tues., Mar 17	Search	Chapter 3
18	Thurs., Mar 19		
19	Tues., Mar 24	Adversarial Search	Chapter 5
20	Thurs., Mar 26		
	Tues., Mar 31	HOLIDAY – Cesar Chavez Day	
21	Thurs., April 2	CSP	Chapter 6
	Tues., April 7	Spring Break	
	Thurs., April 9	Spring Break	
22	Tues., April 14	Logic	Chapter 7
23	Thurs., April 16		
24	Tues., April 21	Probability	Chapter 13
25	Thurs., April 23		
26	Tues., April 28		
27	Thurs., April 30		

	Date	Topic	Reading Assignment	
28	Tues., May 5	Last Day of Instruction		
Finals week			**Days**	**Dates**
Final Exam Preparation & Faculty Consultation Days:			Thursday and Friday	May 7 – 8
Final Semester Examinations			Monday – Thursday	May 11 – 14
Final Exam in this course			Tuesday, 1:15p-3:15	May 12