California State University, Long Beach
Department of Computer Science and Engineering
CECS 451 – Artificial Intelligence
Course Syllabus – Summer 2020

Instructor: Arjang Fahim (Email: arjang.fahim@csulb.edu)
Lecture: TuWTh 9-10:40am, Online **Lab:** TuWTh 11-1:30pm, Online
Office: Online - link will be provided
Office Hours: Tu 1:30-2:30 pm – The zoom link will be provided in the class
Prerequisites: CECS 328
Required Textbook:

1- Artificial Intelligence: A Modern Approach 3rd Edition by Stuart Russell and Peter Norvig Pattern Recognition and Machine Learning, Christopher M. Bishop – Springer – ISBN: 978-0136042594
https://www.pearson.com/us/higher-education/program/Russell-Artificial-Intelligence-A-Modern-Approach-3rd-Edition/PGM156683.html

Course Description: Introduction to the history and implementation of artificial intelligence agents. Topics include search, constraint satisfaction, game-playing, logical agents, belief networks, optimal sequential decision systems. Project implementation.

Course Topics

- Intelligent Agents
- Solving Problems by Searching
- Beyond Classical Search
- Adversarial Search
- Logical Agents
- Quantifying Uncertainty
- Probabilistic Reasoning (+over time)
- Making Complex Decisions
- Learning from Example
    - Supervised Learning
    - Learning Decision Tree
    - Ensemble Learning

Course Labs

The course lab hour will primarily be used for completing programming assignments. Lab attendance is mandatory. A student is allowed to miss up to three lab sessions before losing a letter grade from his or her final programming grade.

Other Homework

Beside programming/Lab assignments, student may need to complete series of written homework related to mathematical parts of the lectures. The homework assignments can be done manually and can be submitted as a hard copy.

Attendance: Attendance is mandatory. You are responsible for all information and materials presented, in both the class and the lab.

Grading:

Midterm1	25%
Final Exam	30%
Quiz	10%
Projects	30%
Lab Activities	5%

Grade Scale:

90% above	A *
80% - 90%	B *
70% - 80%	C *
50% - 70%	D
Below 50%	F

***** Guaranteed to earn at least these letter grades when the corresponding performance range is achieved.

A student is required to successfully complete a sufficient amount of programming assignments in order to earn a passing grade.

Withdrawal Policy: The CECS Department will adhere to University policy as stated in the Schedule of Classes. In particular, withdrawal during the last three weeks of instruction are not permitted except in cases where the circumstances causing the withdrawal are clearly beyond the student's control, and the assignment of an Incomplete is not practical. Ordinarily, withdrawal in this category will involve total withdrawal from the university and requires approval of the instructor, the department chair, and the dean.

Statement Regarding ADA Accommodation: Students with a disability or medical restriction who are requesting a classroom accommodation should contact the Disabled Student Services at 562-985-5401 or visit Brotman Hall, Suite 270 during 8AM-5PM weekday hours. Disabled Student Services will work with the student to identify a reasonable accommodation in partnership with appropriate academic offices and medical **providers. We encourage students to reach out to DSS as soon as possible.**

Emergency Assistance with Food/Housing for Students in Need: Any student who is facing academic or personal challenges due to difficulty in affording groceries/food and/or lacking a safe and stable living environment is urged to contact the CSULB Student Emergency Intervention & Wellness Program. The website outlining the resources available is http://web.csulb.edu/divisions/students/basic_needs_program/. Students can also email supportingstudents@csulb.edu or call 562/985.2038. If comfortable, students may reach out to the professor as they may be able to identify additional resources**.**

Academic Honesty:

Cheating and plagiarism will not be tolerated in this course. Any individual caught cheating on quizzes, homework, lab projects, or the final exam will be punished to the full extent allowed under University regulations. Plagiarism on papers and assignments is not acceptable. Plagiarism is considered cheating.

Note: Any time another person's work is used without giving them proper credit, it is considered plagiarism and cheating. At minimum, any student caught cheating will receive no credit for the work concerned, and will receive a reduction of one letter grade from their final course grade. The official CSULB Policy on Cheating and Plagiarism can be found here:
https://www.csulb.edu/office-of-research-and-sponsored-programs/policy-cheating-and-plagiarism-ps-85-19