Introduction to Artificial Intelligence Section 01

CS 156

Spring 2025   In Person   3 Unit(s)   01/23/2025 to 05/12/2025   Modified 01/28/2025

👤 Contact Information

Instructor: Dr. Sayma Akther

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TuTh 1:15PM - 2:15PM (MH 213)

💻 Course Description and Requisites

Basic concepts and techniques of artificial intelligence: problem solving, search, deduction, intelligent agents, knowledge representation. Topics chosen from logic programming, game playing, planning, machine learning, natural language, neural nets, robotics.

Prerequisite(s): CS 146 (with a grade of "C-" or better); Allowed Majors: Computer Science, Data Science, Applied and Computational Mathematics or Software Engineering; or instructor consent.

Letter Graded

✳ Classroom Protocols

To ensure a positive and productive learning environment, here are some important points to keep in mind:

Materials and Updates

Find course materials on Canvas at http://sjsu.instructure.com.
Regularly check MySJSU and your email for updates.

Recording and Privacy

Recording any class activities, including lectures, is only allowed with the instructor's permission.
College of Science · Computer Science
You are not permitted to share or distribute class recordings.
Instructor-generated materials (like syllabi, lectures, and presentations) are protected by copyright.
Violation may result in referral to Student Conduct and Ethical Development office.

Respectful Behavior

Treat your fellow classmates with respect and kindness.
Avoid interruptive or disruptive behavior during class.
Limit electronic device usage to relevant learning activities.
The full code of conduct is available on Canvas.

Plagiarism and Cheating

If a student is found engaging in academic dishonesty on a homework assignment, they will receive a **zero** for that assignment. If a student is caught cheating on an exam, they will receive a **failing grade (F)** for the course. In accordance with **University Policy F15-7**, the instructor is required to report all instances of cheating or plagiarism to the university.

Program Information

Diversity Statement - At SJSU, it is important to create a safe learning environment where we can explore, learn, and grow together. We strive to build a diverse, equitable, inclusive culture that values, encourages, and supports students from all backgrounds and experiences.

Course Learning Outcomes (CLOs)

After studying "Introduction to Artificial Intelligence," a student should be able to demonstrate the following Course Learning Outcomes:
1. Understand AI Concepts: Gain a solid understanding of the fundamental concepts, principles, and methodologies related to Artificial Intelligence.
2. Problem Solving: Apply AI techniques to analyze and solve complex problems by designing algorithms and models.
3. Machine Learning: Comprehend the basics of machine learning, including supervised and unsupervised learning, and be able to apply them to real-world scenarios.
4. Knowledge Representation: Learn techniques for representing knowledge and reasoning, including logical frameworks and semantic networks.
5. Natural Language Processing: Grasp the fundamentals of natural language processing and its applications in tasks like sentiment analysis and language generation.
6. Search and Optimization: Develop skills in designing search algorithms and optimization techniques to find solutions efficiently.

7. Ethical Considerations: Understand the ethical implications and societal impacts of AI technologies, considering biases, privacy, and responsible AI development.
8. AI Applications: Explore various practical applications of AI, such as robotics, expert systems, and computer vision.
9. Critical Thinking: Develop the ability to critically evaluate AI solutions, algorithms, and their limitations.
10. Teamwork and Communication: Collaborate effectively with peers to solve AI-related problems and communicate findings clearly through presentations and reports.
These Course Learning Outcomes reflect the knowledge and skills a student is expected to gain from studying Introduction to Artificial Intelligence

📘 Course Materials

Artificial Intelligence: A Modern Approach" by Stuart Russell and Peter Norvig

This is a comprehensive text that covers a wide range of AI topics and is often considered a standard in university courses.

Deep Learning" by Ian Goodfellow, Yoshua Bengio, and Aaron Courville

This book is essential for understanding the fundamentals of deep learning, a key subset of AI.

✔ Grading Information

A+	97 and above
A	93-96
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	73-76
C-	70-72
D+	67-69

D	63-66
D-	60-62
F	Below 60

🏛 University Policies

Per [University Policy S16-9 (PDF) (http://www.sjsu.edu/senate/docs/S16-9.pdf)](http://www.sjsu.edu/senate/docs/S16-9.pdf), relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on the [Syllabus Information (https://www.sjsu.edu/curriculum/courses/syllabus-info.php)](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) web page. Make sure to visit this page to review and be aware of these university policies and resources.