

San José State University
College of Science/Department of Computer Science
CS 256, Topics in Artificial Intelligence, Section 1, Spring, 2026

Course and Contact Information

Instructor:	Dr. Teng Moh
Office Location:	MQH 411
Telephone:	408-924-5147
Email:	MyFirstName <dot> MyLastName <at> SJSU <dot> EDU
Office Hours:	M 11:55 to 12:55 and W 09:20 to 10:20 (in-person)
Class Days/Time:	MW 10:30 to 11:45 (in-person)
Classroom:	MQH 422
Prerequisites:	CS 156 or instructor consent.

Course Description

Introduction to topics in artificial intelligence such as problem solving methods, game playing, understanding natural languages, pattern recognition, computer vision and the general problem of representing knowledge. This section focuses specifically on generative artificial intelligence, anomaly detection, and association analysis, and their applications. Significant programming project is required.

Course Format

This is an in-person course. This class will be conducted in an atmosphere of mutual respect. I encourage your active participation and welcome both respectful discourse and reasoned debate. However, your language and conduct during the class period must demonstrate respect for everyone's race, gender identity, or expression, sexuality, culture, beliefs, and abilities.

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

- CLO 1 *Understand generative artificial intelligence.*
- CLO 2 *Understand anomaly detection.*
- CLO 3 *Understand association analysis.*
- CLO 4 *Design new tools for applications based on the above techniques.*

Required Texts/Readings

Textbook

- *TBA*

Other Readings [Optional]

- *TBA*

Other equipment / material requirement

- *Wireless laptop*

Course Requirements and Assignments

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class, participating in course activities, completing assignments, and so on. More details about student workload can be found in [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) at <http://www.sjsu.edu/senate/docs/S16-9.pdf>.

Homework is due typewritten (include source code, but not executable files) by class starting time on the due date. Each assigned problem requires a solution and an explanation (or work) detailing how you arrived at your solution. Cite any outside sources used to solve a problem. When grading an assignment, I may ask for additional information. A subset of the assigned problems will typically be graded.

Refer the course website for latest information of homework assignments.

NOTE that [University policy F15-12](http://www.sjsu.edu/senate/docs/F15-12.pdf) at <http://www.sjsu.edu/senate/docs/F15-12.pdf> states that “Students should attend all meetings of their classes, not only because they are responsible for material discussed therein, but because active participation is frequently essential to insure maximum benefit for all members of the class. Attendance per se shall not be used as a criterion for grading.”

Final Evaluation

One mid-term in-person exam and one final in-person exam scheduled, and a final project report scheduled on the Final week.

Grading Policy

Grading information:

- *I will determine letter grades for the course, including +/- grades based on*

Percentage	Grade
<i>92 and above</i>	<i>A</i>
<i>90 - 91</i>	<i>A minus</i>
<i>88 - 89</i>	<i>B plus</i>
<i>82 - 87</i>	<i>B</i>
<i>80 - 81</i>	<i>B minus</i>
<i>78 - 79</i>	<i>C plus</i>

72 - 77	C
70 - 71	C minus
60 - 69	D
59 and below	F

- *List of the percentage weight [or point value] assigned to various class assignments*
 - Homework: 20%
 - In-Person Midterm (Wednesday, September 14): 20%
 - Project: 30%
 - In-Person Final (Friday, December 11, 10:45 AM-12:45 PM): 30%
- **NO** make-up exams will be given and **NO** late homework will be accepted.

Classroom Protocol

- *Always start your email subject with [CS256] to get my attention.*
- *Wireless laptop is required. Your laptop must remain closed (preferably in your backpack and, in any case, not on your desk) until I inform you that it is needed for a particular activity.*
- *Cheating will not be tolerated, but working together is encouraged*
- *Student must be respectful of the instructor and other students. For example, but not limited*
 - Turn off cell phones
- *To encourage participation from students, **NO** recording is allowed.*

University Policies

Per [University Policy S16-9](http://www.sjsu.edu/senate/docs/S16-9.pdf) (<http://www.sjsu.edu/senate/docs/S16-9.pdf>), relevant information to all courses, such as academic integrity, accommodations, dropping and adding, consent for recording of class, etc. is available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) at <https://www.sjsu.edu/curriculum/courses/syllabus-info.php>. Make sure to visit this page, review and be familiar with these university policies and resources.

CS 256, Fall 2026, Course Schedule

The schedule is subject to change with fair notice and the notice will be made available in class.

Course Schedule

Week	Topics, Readings, Assignments, Deadlines
1	Overview of Artificial Intelligence
2	Responsible Artificial Intelligence
3	Large Language Models and Prompt Engineering
4	Context Engineering with Retrieval Augmented Generation
5	Agentic Artificial Intelligence
6	Heuristic Search Techniques
7	Statistical and Proximity-based Approaches
8	Clustering-based and Reconstruction-based Approaches
9	<i>In-Person Midterm Exam (Wednesday, September 14)</i>
10	One-class Classification and Information Theoretic Approaches
11	Association Rules & A-Priori Algorithm
12	Rule Generation and Compact Representation
13	FP-Growth Algorithm and Association Patterns
14	Applications of Generative Artificial Intelligence
15	Applications of Association Analysis
16	Applications of Anomaly Detection
17	<i>In-Person Final Exam (Friday, December 11, 10:45 AM-12:45 PM)</i>