

# San José State University

## Course and Contact Information

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| Instructor:      | Rula Khayrallah  |
| Office Location: | MacQuarrie Hall 218  |
| Telephone:       | (408) 924-5153   |
| Email:           | rula.khayrallah@sjsu.edu   |
| Office Hours:    | Drop-In: Monday 12-1 PM, Tuesday 10:30-11:30 AM<br>By appointment only (15-minute slots): Wednesday 3-5 PM<br>To schedule an appointment, please visit <a href="https://goo.gl/CXkgsE">https://goo.gl/CXkgsE</a> |
| Class Days/Time: | TuTh: 12-1:15 PM   |
| Classroom:       | MH 233   |
| Prerequisites:   | CS 146 and either CS 151 or CMPE 135 with a grade of C- or better in each  |

## Course Format

Class time will be spent in interactive lecture. You are required to bring your wireless laptop to class. Your laptop must remain closed except for designated activities. We'll use iClicker to gather your feedback and check understanding during the lecture. iClicker helps me understand what you know, gives everyone a chance to participate, and allows you to review the material after class. You must be in the classroom to participate in the iClicker activity.

## Canvas Course Site

Course materials such as syllabus, lecture notes, assignments, questions of the week and exams can be found on the [Canvas Learning Management System course website](http://sjsu.instructure.com) at <http://sjsu.instructure.com>. You are responsible for regularly checking with Canvas to learn of any updates.

## Course Description (Required)

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.

## Course Learning Outcomes

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

1. By code or by hand find solution nodes in a state space using the A\* algorithm.
2. Explain the advantages and disadvantages of breadth-first search compared to depth-first search.
3. Explain the advantages and disadvantages of informed search, compared to uninformed search.
4. Explain the advantages and disadvantages of hill climbing.
5. Explain the advantages and disadvantages of forward checking in constraint satisfaction.
6. Explain the advantages and disadvantages of alpha-beta pruning.
7. By code or by hand translate sentences in first-

9.



