

CSCI 585: Robotics and Machine Intelligence

CSCI 682: Topics in Artificial Intelligence

Abbreviated Syllabus for Fall Semester 2007

Visit <http://www.ecst.csuchico.edu/~juliano/csci585> for additional detail.

Prerequisites

- **CSCI majors:**
 - CSCI 221 (Assembly Language Programming)
 - CSCI 311 (Algorithms and Data Structures)
- **CIVL / CMGT / EECE / MECH / MECA majors:**
 - EECE 221 (Processor Architecture and Assembly Language Programming)
 - EECE 135 (Algorithms and Programs for Engineers)
- **Graduate students:**
 - Classified Status or Permission of Instructor

Description

3 units. This course introduces students to the field of robotics by emphasizing the task of endowing machines with intelligence. Topics include various case studies of robot architectures and algorithms that facilitate embodying a robot with behaviors that are traditionally associated with human cognition (e.g., perception, reasoning, intelligent navigation, vision, learning, etc.). Students will conduct robotics experiments and participate in robotics exhibitions.

Class #	Section	Act	Days	Time	Room	Instructors
7978	CSCI 585-01	LEC	R	0500-0750pm	OCNL 431	Dr. B.A. Juliano Juliano@csuchico.edu
7982	CSCI 682-01	LEC	R	0500-0750pm		

Instructor Information

Dr. Ben A. Juliano (a.k.a. Dr. J)
<http://www.ecst.csuchico.edu/~juliano>

Office Hours: MTWR, 3-4pm
OCNL 222
Tel 530 898-4619 / 6442 (dept office)
Fax 530 898-5995
Appointments and walk-ins welcome.

Required Textbook



Boe-Bot Robot Kit – USB Version
Stock Number EDU-28832.
Parallax Inc., Rocklin, CA.
<http://www.parallax.com>

2. Students are expected to have acquired their own *Boe-Bot Full Kit* early in the semester. Please note that the instructors will negotiate a special volume discount with Parallax for the *Boe-Bot Full Kit*, so do not purchase your own kit before knowing the details of this discount. Arrangements will be discussed in class early in the semester.

Grade Evaluation

This is a project-centered course. A total of at least three (3) projects will be assigned during the semester. Some projects will be individual projects while others will be group/team projects. Additionally, projects will involve participation in an exhibition with other individuals/teams in the class. Each project must be accompanied by a detailed written report and possibly a web-enabled version of the report. Students are expected to be ready to present their project(s) orally when asked to.

Additional Requirements

1. Students are expected to open and maintain a Chico State Connection (CSC) Portal (see <http://portal.csuchico.edu>) account in order to access up-to-date on-line calendar of events, current scores, discussion board, etc.

Additional Information

<http://www.ecst.csuchico.edu/~juliano/csci585/>
<http://www.ecst.csuchico.edu/~juliano/csci682/>
<http://www.gotbots.org/>
<http://portal.csuchico.edu/>
<http://vista.csuchico.edu/>