

**CSCI 585(224)/682(329): Robotics and Machine Intelligence**  
**Abbreviated Syllabus for Fall Semester 2005**

*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)

**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
2085	CSCI 585-01	LEC	R	0500-0650pm	OCNL 431	Dr. B.A. Juliano Juliano@csuChico.edu
	CSCI 585-02	ACT	R	0700-0750pm		
6472	CSCI 682-01	LEC	R	0500-0650pm		
	CSCI 682-02	ACT	R	0700-0750pm		

**Instructor Information**

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

**Office Hours:** Wed, 9-11am and Thurs, 2-4pm  
 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>

**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.

2. Students are expected to have acquired their own *Boe-Bot Full Kit* by the middle of the semester. Please note that the instructors typically negotiate with Parallax for a special volume discount for the *Boe-Bot Full Kit*. 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, some projects may 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 Information**

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