

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

Visit <http://www.ecst.csuchico.edu/~juliano/csci224> for additional detail.

Prerequisites

- **CSCI majors:**
 - CSCI 51A (Assembly Language Programming)
 - CSCI 151 (Algorithms and Data Structures)
- **ECE / ME / MECA majors:**
 - ECE 86 (Processor Architecture and Assembly Language Programming)
 - ECE 90 (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.

TRACS Call #	Section	Days	Time	Room	Instructors
14412	CSCI 224-01	TR	9:30 am – 10:45 am	OCNL 431	Dr. B.A. Juliano Juliano@csuchico.edu
14976	CSCI 329-01				

Instructor Information

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

Office Hours: T.B.A.
 OCNL 222
 Tel 530 898-4619 / 6442 (dept office)
 Fax 530 898-5995
Appointments and walk-ins welcome.

Required Textbook

Boe-Bot Full Kit – EDU Discount.
 Stock Number EDU-28132.
 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 second week of classes

(week of February 2). Please note that the instructors negotiated with Parallax for a special volume discount for the *Boe-Bot Full Kit*. The kits will be available at this discounted price from the *ComputerWorks* section of the A.S. Bookstore.

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/csci224/>
<http://isl.ecst.csuchico.edu/>
<http://www.gotbots.org/>
<http://portal.csuchico.edu/>