CS 160 – Computer Science Orientation

Catalog Description: Introduction to the computer science field and profession. Team problem solving. Social and ethical issues surrounding the use of computers.

Credits: 4

Prerequisites: Wireless-enabled laptop required; no course prerequisites

Courses that require this as a prerequisite: None

Structure: Three 50-minute lectures per week, and one 110-minute laboratory per week

Instructors: Jennifer Parham-Mocello

Course Content:

• Basic computer organization, data storage, and number representations

- Computer use
- Problem-solving
- System and application software
- Computer professions
- Ethical decision making
- Survival skills
- Resource discovery

Learning Resources:

Wireless-enabled laptop required No required textbook. Lab equipment provided

Course Learning Outcomes: (* indicates quantitative outcome—see Criterion 4)

At the completion of the course, students will be able to...

- 1. **Explain** what computer science is and what computer scientists do* (ABET Outcomes: E, H)
- 2. **Discuss** social and ethical implications of computer science* (ABET Outcomes: E, G)
- 3. Use computers for communication, research, productivity, etc. (ABET Outcomes: A, F, I)
- 4. **Discover/cite** sources of current computer science information (ABET Outcomes: H)
- 5. **Produce** a course of study leading to a B.S. degree at Oregon State University (ABET Outcome: H)
- 6. **Solve** problems using abstraction and modularization (ABET Outcomes: B)
- 7. **Identify** basic computer hardware components and **explain** their purposes (ABET Outcome: A)
- 8. **Differentiate** among types of software (open-source/proprietary, system/application, etc.) (ABET Outcome: A)
- 9. **Install/uninstall** software systems, and **deal** with viruses/spam (ABET Outcomes: A, I)
- 10. **Work** in a team to **design** a simple software system (ABET Outcome: D)

Students with Disabilities:

Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 737-4098.

Link to Statement of Expectations for Student Conduct, i.e., cheating policies http://oregonstate.edu/admin/stucon/achon.htm