

## 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                    **Terms Offered:** Fall

**Prerequisites:** Wireless-enabled laptop required; no course prerequisites

**Courses that require this as a prerequisite:** CS 161

**Structure:** Three 50-minute lectures per week

**Instructors:** Paul Paulson

### 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

### Measurable Student Learning Outcomes:

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

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

**Learning Resources:**

- [no assigned course text]

**Students with Disabilities:**

Accommodations are collaborative efforts between students, faculty and Services for Students with Disabilities (SSD). Students with accommodations approved through SSD 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 SSD should contact SSD immediately at 737-4098.

**Link to Statement of Expectations for Student Conduct:**

<http://oregonstate.edu/admin/stucon/achon.htm>

Original: 10/31/03

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