CS 160 – Computer Science Orientation

Catalog Description:  Introduction to the computer science field and profession. Team problem solving. Introduction to writing computer programs.

Credits:  3  Terms Offered:  Fall

Prerequisites:  Wireless-enabled laptop required; no course prerequisites

Courses that require this as a prerequisite:  None

Structure:  Two 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/programming
• Problem-solving
• System and application software
• Computer professions
• Survival skills
• Resource discovery

Learning Resources:
  Wireless-enabled laptop required
  Lab equipment provided
  *Introduction to Computer Science Using Python*, Dierbach

Measurable Student Learning Outcomes:
At the completion of the course, students will be able to…
1. Gain experience writing computer programs, for those who have not been experienced to programming, i.e. at the completion of the course, students will be able to demonstrate an ability to create simple computer programs.
2. Explain what computer science is and what computer scientists do (Level 1; ABET Outcomes: e, H, 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. Produce a course of study leading to a B.S. degree at Oregon State University (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 (Level 3; ABET Outcomes: a, i, m)
10. **Use** some basic tools required for success in subsequent OSU Computer Science coursework (Level 3; ABET Outcomes a, I)
11. **Work in a team to design** a simple software system (Level 3; ABET Outcome: D)

**Evaluation of Student Learning:**

- Quizzes (10%)
- Labs (10%)
- Assignments (80%)

**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/studentconduct/code/index.php](http://oregonstate.edu/studentconduct/code/index.php)

Revised: Fall 2013