

**Eastern Oregon University**  
**Course Syllabus**

**Number of Course:** CS 260

**Name of Course:** Data Structures

**Catalog Description:** This class introduces the analysis of algorithms and data structures commonly used in computer science, and the selection and design of data structures for the solution of specific problems.

**Credit Hours:** 4

**Required Texts or Suggested Materials:**

Are available at: <http://eou.bncollege.com/>

**Prerequisites:** CS 162, Foundations of Computer Science II.

**Learning Outcomes:**

Upon completion of this course, students will:

- 1 Define fundamental abstract data types (ADTs);
- 2 Describe several applications for each fundamental ADT;
- 3 Describe several different structures to implement ADTs;
- 4 Select data structures for specific situations;
- 5 Write object classes to implement basic data structures and programs to use them; and
- 6 Describe the performance of algorithms that operate on data structures, particularly best-case and worst-case performance.

**Course Requirements:**

Attendance in this class is important. The concepts covered in the text will be further explained in class, and revisions to assignments may be announced in class. Your contributions to class discussions will help you and your classmates better understand material.

Note-Taking is important in any class, but computer science classes details are critical. Many concepts will be introduced in lecture that are not explained in the text. Your translation of class lectures will be essential for your success. Take thorough notes, and review them (preferably with another class member) frequently.

Assignments: The link for assignment sheet for each project will be accompanied by its due date. Programs are due at the beginning of class on the due date. Late work will be penalized 20 percent for each class day it is late and may not be turned in at all once a sample solution has been posted (typically two days after the due date).

Except for code provided to all class members as part of an assignment, all work must be your own. No code may be "borrowed" from other sources, including sample solutions posted for previous terms. Do NOT browse the internet for inspiration. Failure to heed this rule will be treated as a violation of EOU's rules concerning academic misconduct (see below). Save all returned assignments.

Programming Style , Documentation & Formatting: Your programs should adhere to good software engineering principles. Document appropriately, choose sensible identifiers, format code for legibility, and divide code into logical procedures. A set of guidelines for programming style, documentation, and formatting are posted on the class web page. Programs that do not adhere to the standards established at that time will suffer a penalty of up to fifty percent.

#### CS 260 Syllabus Spring 2016

Occasional quizzes over lectures, homework problems, and readings will provide feedback to let you determine if you are assimilating enough detail in course topics. You may drop one quiz grade. Quizzes may be made up only if I deem the documented excuse valid.

If you have any questions, comments, concerns, or suggestions, please feel free to write them on a slip of paper and leave it on the lectern (or hand it to me) when the class breaks. Your feedback may help improve the course.

#### **Grading Policies:**

Your final grade for this course will depend on your completion of the assigned homework and programs, quizzes, and a midterm and final exams. All activities will measure your ability to apply the concepts introduced in the text and class lectures.

Distribution of credit is as follows:

Programming Problems:	35 percent
<i>Including documentation</i>	
Quizzes	15 percent
Research Paper	25 percent
Final Exam:	25 percent

Grade cutoffs will be no higher than 92 for A, 84 for B, 75 for C and 65 for D, but may be lower if statistical analysis of the distribution of scores indicates they should be.

#### **Means of Assessment:**

Quizzes will serve as formative assessment of student mastery of conceptual outcomes (outcomes 1-4, and 7) and a final examination will be used to assess student mastery of these outcomes. A paper developed over the course of the term will provide further in- depth assessment of conceptual outcomes. Programming assignments will be used for assessment of application of course concepts (outcome 5).

#### **Brief Outline of Course:**

*Describe the nature of the course (lecture and lab, workshop format, etc.), any specific course content not detailed in the catalog description, and brief schedule.*

#### **University Writing Requirement Outcomes:**

- Students will produce at least 3,000 words (including drafts, in-class writing, informal papers, and polished papers); 1,000 words of this total should be in polished papers which students have revised after receiving feedback and criticism.
- Students will practice the forms of writing and reflect upon the nature of the writing used by graduates and professionals in the discipline the course represents.

- Students will write at least one paper integrating information from at least one source, employing the appropriate documentation style for the discipline represented by the course.
- Students will draft, revise, and edit their formal written work.
- Students will seek assistance from a Writing Tutor in the Writing Lab when needed and when referred by the instructor.

Note that you must receive a C- or better to receive UWR credit.

The requirements for some assignments in this course may exceed the minimum requirements for UWR credit listed above.

Writing Center Statements:

***For on-campus courses***

The Writing Center provides a place — physical or virtual — where every EOU writer can find an interested, responsive reader. Writing tutorials are free of charge for EOU's undergraduate and graduate students who are writing for any course at any level, or who are writing resumes, job letters, graduate applications, and more. Go to [eou.mywconline.com](http://eou.mywconline.com) to schedule an appointment in the Writing Center (Loso Hall 234).

***For online or on-site courses***

The Writing Center provides a place — physical or virtual — where every EOU writer can find an interested, responsive reader. Writing tutorials are free of charge for EOU students writing for any undergraduate course. Go to [EOU's eTutoring page](#) to submit a paper to a writing tutor.

***For graduate courses***

The Writing Center provides a place — physical or virtual — where every EOU writer can find an interested, responsive reader. Writing tutorials are free of charge for EOU students writing for any graduate course. Go to [EOU's eTutoring page](#) to submit a paper to a writing tutor. Click on [Graduate Students How To](#) for information about tagging your submission.

**Classroom Decorum:**

**Academic Misconduct Policy:**

Eastern Oregon University places a high value upon the integrity of its student scholars. Any student found responsible for an act of academic misconduct (including but not limited to cheating, unauthorized collaboration, fabrication, facilitation, plagiarism or tampering) may be subject to having his or her grade reduced in the course in question, being placed on probation or suspended from the University, or a combination of these. (Please see the Student Handbook online at <http://www.eou.edu/sse/student-handbook/>).

**Accommodations/Students with Disabilities policy:**

Any student who feels he or she may need an accommodation for any type of disability, must contact the Disability Services Office in Loso Hall, Room 234. Phone: 541-962-3081.

**Disclaimer:**

This standard syllabus provides only general information on the course. For those enrolled in the course a detailed syllabus will be provided by the Instructor at the beginning of the term. Please keep in mind that not all courses are offered every year. Consult Webster for scheduling information.

**Date:**

2018