

# CSET 115 - Technical Requirements and Data Structures

**Semester:** Fall 2020

**Classroom:** Online

**Schedule:** M, T, Th, F 12:00 - 4:30 pm

W 12:30 - 4:30 pm

**Instructor:** Zach Fedor

**Office:** Greenfield Campus, West

**Email:** [fedor@stevenscollege.edu](mailto:fedor@stevenscollege.edu)

**Office Hours:** Th 9:00 - 12:00 am

## Catalog Description:

The course provides information regarding the process of disseminating specifications and managing a project, as well as data structures concepts. The course meets during the third quarter of the semester.

- Credit Hours: 3
- Lecture Hours per Week: 2.5
- Lab Hours per Week: 3.75

## Learning Outcomes:

Upon successful completion of the course, the student will be able to:

- Demonstrate how to gather, disseminate, and analyze requirements for a project
- Explain the strategies for prioritizing project requirements
- Manage project tasks
- Monitor project progress
- Understand fundamental concepts of data structures and representation
- Identify the best data structures to use in a given circumstance

## Prerequisites:

- None

## Minimum Grade Required

## Curriculum By Week:

1. JavaScript Data Structures
2. The Document Object Model
3. Waterfall Development Process
4. Agile Development Process

Each week will introduce a new unit of related concepts. Material will be presented in lectures, videos, and readings with supporting lab work to apply these concepts. This lab work will be the primary means of getting feedback. A graded project will be due at the end of each week, as well as a short assessment.

### **Grading:**

- Projects - 40%
- Participation - 30%
- Assessments - 30%

Projects are based on real-world application of concepts and graded according to professional standards of correctness, design, and style. Participation is tracked during lectures, discussions, and lab work to encourage you to be prepared, present, and proactive. Assessments gauge your ability to summarize, connect ideas, and communicate effectively. Rubrics and expectations will be provided in advance.

### **Required Tools:**

- MacBook Pro
- No textbooks are required, all necessary resources will be provided for free online

### **Classroom Policies:**

- Above all, be respectful.
- Check your school email daily. The college will send out important information that you need to know about. Not seeing the email is not an excuse.
- All course discussion will be held on Slack including announcements, assignment instructions, and lecture notes/slides.
- Be prepared for class every day with a notebook, writing instrument, and your laptop and charger. A failure to be prepared is not an excuse to miss course work.

### **Attendance:**

- This online course contains a mixture of synchronous and asynchronous work:
  - Synchronous activities include lectures, discussions, or other lab work over voice or video chat.
  - Asynchronous activities include videos, readings, or project or lab work that can be done independently. **Assume all class sessions are synchronous until told otherwise.**
- If you are unable to attend class or submit an assignment, it is your responsibility to alert the instructor **before** the class session or due date in order to be excused. The only exception is for medical emergencies, car accidents, or bereavement. Scheduled appointments are not excused.
- It is also your responsibility to schedule and make up any work missed during an absence. Failure to reschedule and submit missed work will result in a failing grade.
- Consistent absence or lack of participation will be reported to the Dean of Academic Affairs and result in a warning letter. Further absence or lack of participation could result in dismissal from the course and/or the college.

### **Plagiarism and Cheating:**

- Collaboration and pair programming are an integral part of the computer science field and will be encouraged in class.
- However, taking credit for someone else's work is not. Presenting someone else's work, even small portions of it, as your own original work without proper attribution is considered plagiarism.
- Quizzes may contain open-book (or open-computer) portions. Using a computer or other outside help for closed-book portions is considered cheating.

Students will receive **a grade of zero for the first instance of cheating or plagiarism** on any quiz or project. **A second instance will be grounds for dismissal.**

**Students with Disabilities requesting Accommodations:** The Americans with Disabilities Act and Amendment Act of 2009 states that students may be eligible for accommodations that do not alter the essential skills required for a course or program of study. Students must meet with the Accessibilities Coordinator to discuss their challenges and provide documentation from a qualified professional to be approved. For further information see, Debra Schuch, Counselor/Accessibilities Coordinator, Hartzel 101 between 8:30- 4:30 weekdays. Phone 717-299-7408 or email [schuch@stevenscollege.edu](mailto:schuch@stevenscollege.edu) to schedule an appointment.

#### **COLLEGE'S STATEMENT OF ACADEMIC INTEGRITY**

- Recognizing the importance of academic integrity to the Thaddeus Stevens College of Technology community, the College Academic Policies & Standards Committee adopted a new Academic Integrity policy, Spring 2007. The shared conviction, represented in the procedures that follow, is that academic integrity is best taught and reinforced by faculty as an element of the teaching and learning process. Only in the limited instances in which faculty believe that disciplinary, as well as academic, sanctions are called for should the process move to the Vice President of Academic Affairs.
- Definition and expectations: Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at Thaddeus Stevens College of Technology, and all members of the College community are expected to act in accordance with this principle. Consistent with this expectation, College's Code of Conduct demands that students conduct themselves in a responsible manner that corresponds to acceptable and mature adult standards of behavior and comply with all College regulations and directives. All students should act with personal integrity, respect other students' dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts.
- Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the College community and compromise the worth of work completed by others.
- To protect the rights and maintain the trust of honest students and support appropriate behavior, faculty and administrators should regularly communicate high standards of integrity and reinforce them by taking reasonable steps to anticipate and deter acts of dishonesty in all assignments. At the beginning of each course, it is the responsibility of the instructor to provide

students with a statement clarifying the application of College academic integrity policies to that course.

- Academic Honesty: Section 7324 of the Crimes Code of Pennsylvania makes it a misdemeanor of the 3<sup>rd</sup> degree to sell or offer for distribution any dissertation, thesis, term paper, essay, report, or other written assignment, or to sell or offer for distribution any assistance in the preparation of such assignments, for submission to an educational institution to meet the requirements for a degree, diploma, certificate, or course of study. (Assignment is defined as a written, recorded, pictorial, artistic, or other academic task. To prepare is defined as to create, write, or in any way produce in whole or substantial part any such assignment.)
- The law does not prohibit an educational institution or members of its faculty and staff from offering instruction or instructional services as part of its curricula or programs. Neither does the law apply to the sale of certain copyrighted materials described in Section 7324(f).

Plagiarism: Plagiarism is defined as ...

- Submitting an assignment claiming to be original work but which has been wholly or partially created by someone else.
- Allowing your work to be submitted by another student as if it were that student's own original work.
- Presenting as one's own the ideas (i.e., paraphrases or summaries of research), organization, or the wording (i.e., direct quotations) of another work without appropriate acknowledgement of the sources within the text of your work and a works cited page per the standards of an accepted academic documentation system (i.e., CBE, Chicago Manual of Style, APA, or MLA).

Disciplinary Sanctions

- Penalties that may be imposed include but are not limited to the following:
- Faculty may lower the grade or fail that particular assignment, lower the course grade, give a failing course grade and/or dismiss that student from the course. Additionally, Faculty may recommend further involvement from the Vice President of Academic Affairs.
- The Vice President for Academic Affairs may impose harsher measures within the context of the College.