Thaddeus Stevens College of Technology

Course: CSET 170 - Security and Professional Ethics   **Semester: Spring 2019**
Classroom: Orange St, Basement, B37   **Schedule: Mon 12:00 - 4:30 pm**
                                                    Tue 12:00 - 4:30 pm

Instructor: Z. Fedor   **Email: fedor@stevenscollege.edu**
Office Location: Orange St, Ground Floor, #16   **Office Hours: Mon 10:30 am - 12:00**
                                                    Fri   10:30 am - 12:00

Catalog Description:

The course explores issues of security in software development. Students analyze security problems and learn how they can be minimized or controlled. Students will also cover Secure Socket Layer (SSL) protocol and learn how to apply it to their web applications. The course meets during the second six weeks of the semester.

Digital Description:

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

Prerequisites:	**Minimum Grade Required**
CSET 110 Web Development I	C
CSET 115 Technical Requirements and Data Structures	C

Learning Outcomes:

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

- Discuss the common web security concerns with a focus on the OWASP Top Ten
- Remain aware of security concerns which may exist throughout project development
- Demonstrate the best ways to mitigate each type of common security concern
- Discuss developer ethics and responsible practices
- Discuss SSL and its application on a website
- Explain why SSL is important
- Demonstrate SSL on a website

Planned Sequence of Learning Activities:

WEEK	ACTIVITY	COMMENTS
7	Intro to SSL. Adding SSL Certificates to Websites.	
8	Intro to Encryption. Hashing, Ciphers, and Salts.	
9	Session Management and Authentication.	
10	Handling User Input.	
11	Intro to Classical Ethics. Programmer Bias.	
12	Dark Patterns. The Uncertain Future. Exam.	

Required Tools:
13" MacBook Pro - 2.5GHz

Teaching Strategies:
This course is a lecture lab course. Concepts will be introduced via presentations and students will be provided time and guidance to develop projects, labs, and assignments in a workshop setting.

Grading:
25% - Labs
25% - Quizzes
25% - Exam
25% - Participation

Classroom Policies:
- Above all, be respectful.
- Check your school email frequently. The college, the administration, and myself will send out important information that you need to know about. Not seeing the email is not an excuse.

Attendance:
- Attendance is required. Your prepared daily attendance is critical to your success in this course. In the event that a student is unable to attend class, for any reason, it is the student's responsibility to contact the instructor, to make-up all missed work and to demonstrate a sound understanding of the subject matter. Any unexcused absence from any graded class activity shall result in a score of zero. Tardiness to class may be considered ½ an unexcused absence. The validity of an excuse for an absence is solely at the discretion of the instructor. As a courtesy to the instructor, it is advisable to provide notice in advance if a class absence is anticipated.
- Two unexcused absences will be reported to the Vice President of Academic Affairs. More than five unexcused absences may be reason for dismissal from the course.
- Late work will not be accepted without a documented excuse. It is your responsibility to hand in all assignments on time, even with excused absences.

Plagiarism:

- 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's work, or even small portions of it, as your own original work without proper attribution is grounds for disciplinary action.
- Tests and quizzes may contain open-book (or open-computer) portions. Using a computer or other outside help for closed-book portions is also grounds for disciplinary action.

Special Needs Accommodations:
Disabilities Accommodations: Under the Americans with Disabilities Act, and Amendment Act of 2009, students with learning, physical, or emotional disabilities that affect a major life activity are entitled to reasonable accommodations provided by the college. Students must provide documentation and meet with the Disabilities Coordinator prior to the accommodations being provided. For further information see, Debra Schuch, Counselor/Disabilities Coordinator, Hartzell 101 between 8:30 am -4:30 pm weekdays. Phone: 717-299-7408 or e-mail Schuch@stevenscollege.edu to schedule an appointment.
Rvsd 6-2012

Integrity statement:

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 3rd 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).

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.

- Students cannot withdraw from a course in which they have cheated and been given a failing grade by the course instructor.