

**TSYS School of Computer Science  
Columbus State University  
CPSC 4175 – Software Engineering – Fall 2017**

**Catalog Course Description**

*Prerequisites:* CPSC 3175 with a grade of "C" or better. In this course, students are introduced to the basic principles of software engineering. The course focuses on the issues, methods and tools applied at every phase of the iterative development life cycle spanning from the conception of the actual requirements, through the analysis, design, development, testing, deployment and maintenance of the software product. Other subjects include project management and quality assurance. Students must complete a significant software project.

**Instructor**

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**Office Hours**

Tuesday and Thursday 2:00 p.m. to 4:00 p.m., Friday 8:30 a.m. to 10:00 a.m., and by appointment

**Textbook**

Object-Oriented and Classical Software Engineering, 8<sup>th</sup> Ed, by Stephen Schach, 2010, ISBN 10: 0073376183  
ISBN 13: 9780073376189

**Course Objectives**

The course will familiarize students with concepts in the field of software engineering. A broad view of the different ways in which software engineering is approached will be presented. Students will become familiar with the issues involved in large-scale software development, the software life-cycle and its stages, CASE tools, object-oriented design and analysis, interactive systems design, and software maintenance, among others.

**Course Learning Outcomes/Syllabus**

Understanding the software lifecycle  
Understanding iterative development  
Understanding different software processes  
Understanding requirements analysis  
Understanding software design  
Understanding software testing

Understanding version control  
Discussion of software economics  
Discussion of software ethics  
Discussion of soft skills

**Plagiarism or cheating of any type will not be tolerated.** This includes, but is not limited to, copying programs, projects, assignments, abstracts, documentation, wandering eyes/copying on tests, turning in previously submitted term papers or projects (in whole or part), using other person's computer accounts to do projects, programs, etc. Copying from the internet of any type is **not** allowed.

That said, students are expected to use technical references, user guides, software manuals, online resources (such as stackoverflow), mailing lists, and other available resources as learning tools. Quizzes are open book, open note. In general, you can use any available resource as long as you credit the resource by appropriate references.

### Grading Procedures

Homework	Due Mondays at noon	25% of grade
Quizzes	Daily quizzes	25% of grade
Exercises	Due Fridays at noon	25% of grade
Project	Due at end of term	25% of grade
Discussions	As assigned	Extra credit

A	$\geq 90\%$
B	$\geq 80\%$
C	$\geq 70\%$
D	$\geq 60\%$
F	$< 60\%$

### Project Presentation

Students will work in teams of 2 (unless a different assignment is made) to complete a term project. Written deliverables will include specification, design, source, testing, and documentation artifacts. Students will present projects at the end of the term. More details about the topics, grading metrics, detailed requirements about the presentation will be discussed in class.

### Dropping Policy

We hope that you will complete the course and benefit from it. If it is necessary for you to withdraw from the course during the semester, you must follow all official CSU procedures for

withdrawing. It is not sufficient to notify the instructor; you must use the ISIS system and withdraw officially. I would appreciate it if you would first consult with me. In some cases, we can agree on an arrangement that will allow you to complete the course with minor adjustments.

### **Attendance**

Class attendance is mandatory. Quizzes will cover material presented in class. Additionally, readings and exercises will be assigned during class time. I will not generally take attendance, but you will not do well in this course if you do not attend class.

### **Turning In Work**

Homework not submitted by the due date will receive a grade of zero. Missed quizzes will receive a grade of zero. Exceptions may be made in individual cases for sufficient cause --- I do not penalize students for failure to submit work due to circumstances beyond their control. Projects not submitted by the end of the term will receive a grade of zero with no exceptions. Even though there is a due date for exercises, there will be no penalty for late submissions, and students may submit the same exercises multiple times without limit.

### **Team Grading (Presentation)**

All team members of each team will receive the same numeric grade unless I can determine that there has not been equal participation by team members. If a team does not feel that a member(s) has participated equally, they should not include the member(s) name on the project when it is turned in for grading.

### **Electronic Devices**

Students are encouraged to bring their personal laptops to class. These must have sufficient processing power to support the tools we will use to build the projects. Internet devices (e.g., Chromebooks) or handheld devices will not be sufficient. Please exercise care that you do not disrupt class by other devices (e.g., cell phones.)

### **ADA Statement**

If you have a documented disability, as described by the Rehabilitation Act of 1973 (P.L. 933-112 Section 504) and the Americans with Disabilities Act (ADA) and subsequent amendments and would like to request academic and/or physical accommodations, please contact the Office of Disability Services in the Schuster Student Success Center (room 221), 706-507-8755, as soon as possible. Course requirements will not be waived, but reasonable accommodations may be provided as appropriate.

### **E-mail Addresses**

I will contact you via your Columbus State email address. PLEASE CHECK YOUR EMAIL REGULARLY!