



# COMP 350: Introduction to Software Engineering

Spring 2018: Section 01  
Location: Sierra Hall 1242

Instructor: Jason Isaacs	Lab Instructor: Nick Stern
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## Course Description:

Concepts and techniques for systems engineering, requirements analysis, design, implementation and testing of large scale computer systems. Principles of software engineering for production of reliable, maintainable and portable software products. Emphasis on functional analysis and structured design techniques. Topics include unit, integration and systems testing, configuration management, and software quality assurance practices. Participation in group activities involving analysis, design and implementation of a software intensive system. Introduction to Computer Aided Software Engineering (CASE).

## Student Learning Outcomes

By the successful completion of this course, you will be able to:

- Create effective documentation for computer code.
- Organize and express ideas clearly and convincingly in oral and written forms.
- Construct project plans.
- Identify project life cycle components.
- Create a design document.
- Perform a requirements analysis.
- Create project review presentations.

## Learning Environment:

Each week will be a blend of lecture and lab. The first meeting of the day is a lecture and will cover new material. The second meeting period of the day will be devoted to the group term project. It is expected that students attend all class sessions and review the appropriate material prior to class.

## Grading:

The course grade will be determined by a weighted average of quizzes, exams, and project.

### Quizzes – 15%

- It is expected that you will prepare for each lecture by reviewing the reading assignments. Questions will be drawn from reading assignments and lecture material.

### Exams – 35%

- Midterm - 15%, Date: March 14, 2018 11:00 AM to 11:50 AM
- Final – 20%, Date: May 18, 2018 10:30 AM to 12:30 PM

### Project – 50%

- To emulate software development in a professional environment the largest percentage of your grade will come from a semester long group project. Details of the project will be provided in the first lab session.

## Instructor Communication Policy:

I will make every effort to respond to your email questions within 24 hours Monday through Friday. If for some reason, you have not received a reply after 24 hours, please feel free to email me again or call my office.

## Recommended Materials:

### Textbook Required

Title: [Clean Code](#)

Author: Robert C. Martin

Publisher: Prentice Hall

ISBN-13: 978-0132350884

### Textbooks Recommended

Title: [Software Engineering](#)

Author: Ian Sommerville

Publisher: Pearson

ISBN-13: 978-0133943030

Title: [Test-Driven Java Development \(Available on Proquest\)](#)

Author: Viktor Farcic; Alex Garcia

Publisher: Packt Publishing

ISBN-13: 978-0133943030

Title: [Android Programming: The Big Nerd Ranch Guide \(Available on Proquest\)](#)

Author: Bill Phillips; Chris Stewart; Kristin Marsicano

Publisher: Big Nerd Ranch Guides

ISBN-13: 978-0-13-470606-1

## Course Policies:

### Academic Dishonesty

- By enrolling at CSU Channel Islands, students are responsible for upholding the University's policies and the Student Conduct Code. Academic integrity and scholarship are values of the institution that ensure respect for the academic reputation of the University, students, faculty, and staff. Cheating, plagiarism, unauthorized collaboration with another student, knowingly furnishing false information to the University, buying, selling or stealing any material for an examination, or substituting for another person may be considered violations of the Student Conduct Code (located at <http://www.csuci.edu/campuslife/student-conduct/academic-dishonesty.htm>). Please ask about my expectations regarding academic dishonesty in this course if they are unclear.

### Disability Statement

- If you are a student with a disability requesting reasonable accommodations in this course, please visit Disability Accommodations and Support Services (DASS) located on the second floor of Arroyo Hall, or call 805-437-3331. All requests for reasonable accommodations require registration with DASS in advance of need: <https://www.csuci.edu/dass/students/apply-for-services.htm>. Faculty, students and DASS will work together regarding classroom accommodations. You are encouraged to discuss approved accommodations with your faculty.

### Course Policies Subject to Change

- It is the student's responsibility to check CILearn for corrections or updates to the syllabus. Any changes will be posted in CILearn.

## Tentative Schedule:

Date	Lecture (11:00 AM - 11:50 AM)	Lab (1:30 PM - 2:45 PM)
1/22/18	Discuss Syllabus Discuss Project Pitch	Survey and Discuss Project
1/24/18	Introduction to Software Development Processes	Project Idea Formation and Feedback
1/29/18	Introduction to Agile	Project Pitch Competition and Team Selection
1/31/18	<b>No Lecture</b>	1 <sup>st</sup> Team Meeting & Vision and Scope Document
2/5/18	Introduction to Scrum	Introduction to Trello
2/7/18	Introduction to Requirements (Use Cases)	Vision and Scope Document Due SRS Assigned Use Cases, Reports, and Data Dictionaries
2/12/18	Functional Requirements	Functional Requirements
2/14/18	Non-Functional Requirements	Non-Functional Requirements
2/19/18	Introduction to Design (Wireframes)	SRS due Functional Design Document Assigned Wireframes
2/21/18	Architectural Design and UML	UML and Flowcharts
2/26/18	Mockups, Prototypes, Look & Feel	Android Studio Workshop (XML)
2/28/18	Introduction to Project Management	Mockups
3/5/18	Introduction to Source Control Management	FDD Due Git Workshop
3/7/18	Project Planning	Android Studio Workshop (Coding)

3/12/18	Midterm Review	Android Studio Workshop (Coding)
3/14/18	<b>Midterm Exam</b>	Prototypes
3/19/18	<b>Spring Break</b>	<b>Spring Break</b>
3/21/18	<b>Spring Break</b>	<b>Spring Break</b>
3/26/18	Introduction to Test Driven Development	Start of Sprint 1
3/28/18	JUnit Tests	Sprint 1
4/2/18	Clean Code: Names and Comments	Start of Sprint 2
4/4/18	Clean Code: Refactoring Functions	Sprint 2
4/9/18	Clean Code: Refactoring Classes	Start of Sprint 3
4/11/18	Clean Code: Emergent Design	Sprint 3
4/16/18	<b>No Lecture</b>	Self-Paced Unit Test Workshop
4/18/18	<b>No Lecture</b>	Self-Paced Unit Test Workshop
4/23/18	Team Check In	Start of Sprint 4
4/25/18	Introduction to Design Patterns	Sprint 4
4/30/18	Structural Patterns	Start of Sprint 5

5/2/18	Behavioral Patterns	Sprint 5
5/7/18	Introduction to Lean Startup	Start of Sprint 6
5/9/18	Final Exam Review	Sprint 6
5/16/18		<b>Final Project Demo 1:00 PM to 3:00 PM</b>
5/18/18	<b>Final Exam 10:30 AM to 12:30 PM</b>	