

# Final Exam Guidelines

SWEN 6301– Fall 2019

# Exam Date, Time, and Location

- **Date:** On Saturday January 25<sup>th</sup> 2020.
- **Time:** 2:00 – 4:30 PM
- **Location:** Masri 106

# Exam Material

- **Module 5:** Software Construction and Creating High-Quality Code
  - *Reading:* Chapters 1, 4, 5, 6, 7, 8 from Code Complete 2 book.
- **Module 6:** High-Quality Variables
  - *Reading:* Chapters 10 and 11 from Code Complete 2 book.
- **Module 7:** Code Tuning and Refactoring
  - *Reading:* Chapters 24, 25, and 26 from Code Complete 2 book.
- **Module 8:** Software Testing
  - *Reading:* Chapter 8 from Software Engineering (Ian Sommerville) and Chapter 22 from Code Complete 2 book.

# Exam Guidelines

- Exam will be **150-minute** OPEN RESOURCES exam.
- That means Textbooks, notes, laptops, calculators, and Internet access are allowed. **Cell phones are prohibited!**
- Exam is worth **100 points** equivalent to **40% of the course grade.**
- There will be **4 sections**:
  - Software Construction Practices.
  - High-Quality Code.
  - Code Tuning and Refactoring.
  - Software Testing

# Software Construction Practices

- Tests your understanding of how a software construction activity affects the development team or the software development process your company is adopting.

# High-Quality Code

- Tests your ability to perform code reviews to improve the code quality.
- You will be presented with code snippets that a newly hired developer had written and your job is to write a series of clear steps on how to improve the code on the issues identified in the code.

# Code Tuning and Refactoring

- Tests your ability to tune and refactor code to enhance its design or improve its performance according to the techniques we have studied.
- You will be provided with code segments and you will be asked to perform a specific improvement operation.
- Code will have simple operations and it will present programming constructs that is common to all languages.

# Software Testing

- Tests your understanding of software testing concepts and its related coverage metrics.
- You will be presented with a faulty reasoning and your job will be to describe the misunderstanding or problems in that reasoning.