

# APC 460: Software Engineering Practices – Course Syllabus

**IMPORTANT:** This course syllabus document contains basic information about the course. A final syllabus with detailed guidelines, instructor information, project information, rubrics, course/university policies, and other course-related information will be provided to students upon course enrollment

## Course Description and Objectives

This course covers basic software development methodologies and tools. Methodologies include the waterfall, iterative, and agile approaches. Tools include integrated development environments (IDEs), unified modeling language (UML), and testing frameworks. Other topics include requirement analysis, object-oriented analysis, test-driven development, and design patterns. Students will work on a team software project.

Students successfully completing the course will be able to:

- Demonstrate understanding the basic methodologies of software development.
- Design, implement and analyze programs using multithreading, design patterns, and unit testing.
- Discuss pros and cons of using specific design pattern.
- Demonstrate the ability to develop software as part of a team.
- Use tools that enable software developers to work as a team.

## Prerequisites

- APC 370 – Systems Analysis and Design
- APC 390 – Object Oriented Programming

## Grading

### Evaluation Methods

Your final grade will be based on your performance on the following:

<b>Item(s)</b>	<b>Number of Items</b>	<b>Percentage of Final Grade</b>
Quizzes	6	50%
Individual Assignments	9	20%
Project Assignments	10	30%

## Grading Scale

The following grading scale is used to evaluate all course requirements and determine your final grade:

90–100%	A
80–89%	B
70–79%	C
60–69%	D
0–59%	F

## Workload

Students should expect to spend 144 credit hours per semester to complete the activities and assignments in this course. In a fall or spring semester, the time to dedicate per credit will range between 7-10 hours per week and in summer semester between 10-13 hours.