Course Title: Agile Development Methods

Course Description:
Test Driven Development (TDD) is a modern Agile software development technique. It creates a unique partnership between the requirements for a software system and the system itself. Created to support Agile’s evolutionary approach to design, it can also be used in Waterfall development. This class will teach how to use JUnit to create tests before writing code, how to refactor existing code, how to apply principles of good design, and how to avoid design “smells.”

Course Prerequisite(s):
Java Core

Course Objectives:
- Hands-on experience with unit tests driving the development of production code.
- Refactoring as a design step.
- Understand Evolutionary Design.

Next Class Possibilities:
Design Patterns in Java

Textbook(s): OPTIONAL
Test Driven Development by Example
Addison-Wesley Professional; Beck; ISBN: 0321146530

Lesson Plan – by week or session
Session 1: JUnit, TDD & Class Project
Session 2: More Class Project Development
Session 3: Good & Bad Testing
Session 4: Refactoring as Design
Session 5: New Class Project Requirements
Session 6: Test Doubles and Mocks
Session 7: More Class Project Requirements
Session 8: Wrap Up and Miscellaneous Topics