IE 584 Special Topics in Object Oriented Programming
Instructor: Mordo Shalom, TA: TBA                                Fall 2014
Prerequisite: IE 201

The course aims to familiarize the students with the principles of Object Oriented Programming, the Java programming language and the related technologies, the C# programming language and .NET technology, where the emphasis is on Object Oriented Programming and Object Oriented Design.

Topics
- Introduction: Java, C#, Java and .NET Technologies, Eclipse, Visual Studio
- Classes and Objects, Encapsulation.
- Exceptions.
- Unit Testing - Agile Methodologies, Source Control using SVN
- Inheritance, Polymorphism, Abstract Classes and Interfaces.
- Design Patterns, Creational Patterns, Structural Patterns, Behavioral Patterns
- Miscellaneous: Collections, Maps/Dictionaries, Packages/Namespaces, Generics, Events, Delegates/Listeners, Reflection, GUI, Logging,

Grading
Homework/Quiz: %20
Project: %60
Milestones:
- Specification %10
- Analysis %20
- Design %20
- Implementation %50

Final: %20
A grade of at least 50 from the final exam is required to pass the course.
Bibliography

1. Gamma, Erich; Richard Helm, Ralph Johnson, and John Vlissides *Design Patterns: Elements of Reusable Object-Oriented Software*. Addison-Wesley 1995.