

Course Number: IS218
Course Title: Building Web Applications
Section: 001
Semester: SPRING 2016
Date & Time: T / R 1:30PM – 2:25PM
Location: GITC 2315A
Credits: 3
Contact Hours: 3 Hours Face-to-Face

Instructor Information:

Name: Keith Williams
Office: 5114 GITC
Phone Number: 551-580-3989
Email (preferred): kwilliam@njit.edu

Office Hours:

Tuesday: 4:30PM – 5:30PM
Wednesday: 4:30PM – 5:45PM
Thursday: 11:30 – 12:45PM
By Appointment

Course Materials

Zandstra, Matt. *PHP Objects, Patterns, and Practice*. N.p.: Apress, 2013. Print.

Rosenberg, Scott. *Dreaming in Code: Two Dozen Programmers, Three Years, 4,732 Bugs, and One Quest for Transcendent Software*. New York: Three Rivers, 2008. Print.

Catalog Description

This course provides a critical, hands-on introduction to the design of Web-based Information Systems. We will explore and discuss emerging trends, capabilities, and limitations of web technologies used to capture, store, access, and disseminate information for both businesses and online communities. Students, working in groups, will design and develop different types of web applications, which will then be analyzed and critiqued by the students as to their usability in actual public and private settings. An open-source web content management system will be utilized throughout the course.

Prerequisites: CS 113 or CS 115 or other computing GUR

Learning Outcomes

1. Students will be able to create an application using PHP and MySQL
2. Students will be able to design and implement a user registration and management process for a web application
3. Students will be able to demonstrate fundamental concepts in web application development such as Model View Control (MVC)
4. Students will be able to demonstrate the ability to collaborate using source code management software
5. Students will be able to describe and implement basic design patterns found in PHP such as a singleton and factory pattern
6. Students will be able to demonstrate asynchronous client server communication using JavaScript and PHP.
7. Students will be able to use SQL to create create, retrieve, update, and delete (CRUD) queries

Grading Category Weights

1 Project: 30%
3 Exams: 45%
Homework & Quizzes: 15%
Participation: 10%

Grading Scale

A: 90 - 100	C: 70 - 77
B+: 88-89	D+: 68 - 69
B: 80 - 87	D: 60 - 67
C+: 78-79	F: 0 – 59

Incompletes are only given for extenuating and documented medical, or personal issues.

Project Rubric

3 – Above Average Performance – Thoughtful Visual Design and/or Technically Advanced

2 – Average Performance – Demonstrates all major project requirements

1 – Below Average Performance – Submitted with obvious technical and/or visual deficiencies

Homework Rubric

1 - Completed on time

0 - Not Completed on Time

Late Project and Homework Policy

All projects and homework must be turned in on time, or you will lose one point for each week that project or homework is late. **Note: A homework that is 1 week late loses all points.**

Attendance

Attendance will be taken for each class meeting. You are permitted one unexcused absence for the class; however, each subsequent absence will result in a 3 percent reduction in your final grade. Attendance is worth 10% of your final grade.

Academic Integrity Policy

My expectation is that each person will complete original work for this course and will not copy from fellow students or tutorials online. It is OK to refer to tutorials online; however, you will be considered in violation of the NJIT honor code by submitting work found online. Any violations of the honor code will be referred to the Dean of Students for investigation and possible disciplinary action. For more information about the NJIT honor code, you should refer to this document:

<http://www.njit.edu/academics/pdf/academic-integrity-code.pdf>

Calendar

All dates on the calendar are tentative, please refer to Moodle for any changes in due dates