

**Course Number:** IS218  
**Course Title:** Building Web Applications  
**Section:** 002  
**Semester:** SPRING 2017  
**Date & Time:** T / R 2:30PM – 3:55PM  
**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 / Thursday: 1:25PM – 2:25PM  
Monday: 4PM – 5PM  
Wednesday: 3:30 – 4:30  
Also by appointment and Slack

**Course Materials**

Murach, Joel, and Ray Harris. *Murach's PHP and MySQL: training & reference*. Fresno, CA: Mike Murach and Associates, 2014. 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.

**Course Description**

This course provides a critical, hands-on introduction to the design and development of Web-based Information Systems. In this course students learn how to develop applications using a server side programming language (PHP) and a relational database(MySQL). Throughout the course students develop a substantial project using PHP and MySQL that demonstrates the model view control (MVC) design pattern, within the the context of PHP and MySQL. Students gain an understanding of the challenges of modern software processes through readings and hands on activities that require problem solving and developing organization skills within the context of web application development. Students learn how to work in teams using the GIT source code management software (SCM) and use a multi-column task board used in agile development.

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 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**

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

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

## **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