

**Course Number:** IS218  
**Course Title:** Building Web Applications  
**Section:** 004  
**Semester:** SPRING 2019  
**Date & Time:** R 10:00AM – 12:50PM  
**Location:** GITC 2315B  
**Credits:** 3  
**Contact Hours:** 3 Hours Face-to-Face

**Instructor Information:**

Name: Keith Williams  
Office: 5114 GITC  
Phone Number: 551-580-3989  
Email: [kwilliam@njit.edu](mailto:kwilliam@njit.edu)  
Contact through Slack

**Office Hours:**

Slack and by Appointment  
Monday: 12PM-1PM)  
Tuesday: 1 PM – 2:00 PM  
Wednesday: 2:30 AM – 3:30 PM

**Course Materials**

Murach, Joel, and Associates. *Murach's PHP and MySQL 2<sup>nd</sup> Edition*. Fresno, Calif.: Mike Murach & Associates, 2014. Print. ISBN: 978-1890774790

**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**

3 Mini-Projects: 60%  
1 Final Project 30%  
Participation: 10%

**Grading Scale**

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

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

## **Project Rubric**

You are expected to complete milestones for your project. Each project is expected to have a project template and a mockup of the ui and/or flow chart for the application.

**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

## **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>

**Course Calendar – Subject to change – Notice will be posted in Moodle for any changes**

Week	Project Presentation During Class
1/20/2019	
1/27/2019	
2/3/2019	
2/10/2019	Project 1
2/17/2019	
2/24/2019	
3/3/2019	
3/10/2019	Project 2
3/17/2019	Spring Break
3/24/2019	
3/31/2019	
4/7/2019	
4/14/2019	Project 3
4/21/2019	
4/28/2019	
5/5/2019	
Finals	Final Project – Final Exam