

**Course Number:** IS601

**Course Title:** Web System Development

**Section:** 102

**Semester:** Spring 2019

**Date & Time:** M 6:00 PM -8:50 PM

**Location:** CKB 223

**Credits:** 3

**Delivery Mode:** Face-to-Face

**Instructor Information:**

Name: Xinyue Ye

Office: 5104 GITC

Phone Number: 419-494-7825

Email: [xye@njit.edu](mailto:xye@njit.edu)

**Office Hours:**

Wednesday, 9:15 AM-12:10 PM

And Email (Preferred)

**Tutoring:**

Please make an appointment with a tutor during their following office hours, or at a mutually agreeable time. Tutors are in 3100 conference room on the 3rd floor of GITC.

Baneet Kaur Juneja, [bkj6@njit.edu](mailto:bkj6@njit.edu); Monday 4pm-6pm.

Aditya Jadhav, [avj22@njit.edu](mailto:avj22@njit.edu); Wednesday 330-530pm.

Both TAs: Monday 8pm-850pm in the classroom

Rules:

1. Search google first (use at least 30 minutes before giving up);
2. Schedule an appointment with the TA for help;
3. If you are unable to have your problem resolved after the above two steps, then come to the professor's office hours. You need to make an appointment and state your questions in your email.

**Course Materials**

All course materials are provided online through recorded video lessons and hand-on projects. In additions, extensive online resources are provided.

**Catalog Description**

Students will gain experience in the development of Web based systems using an object oriented programming language and SQL. Students will learn to develop a web based system through an intensive hands-on project that requires students to apply real-world problem-solving skills to meet the challenge of developing a web based information system. Students will learn the basic principles of web based applications, MVC application design, how to apply object oriented design patterns,

design a relational database, and write SQL queries to create, retrieve, update, and delete information in a database.

Prerequisites: NONE

### Learning Outcomes

1. Students will be able to create an application using PHP and SQLite.
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) and other OOP design patterns
4. Students will be able to demonstrate the ability to collaborate using source code management software.
5. Students will be able to demonstrate through coding and project design concepts such as DRY, YAGNI, and basic OOP Design Patterns
6. Students will be able to use SQL create, retrieve, update, and delete (CRUD) queries

### Developing Technical Confidence

A major objective of this course is to expose students to current software development technologies, so that students develop problem solving skills that will help develop technical confidence. Students gain this through Internet research and developing a process to isolate, identify, and seek solutions to problems by using an Internet search engine.

### Grading Category Weights

3 Mini Projects: 45%  
Homework: 20%  
Final Project: 20%  
Class Behavior: 15%

### Grading Scale

**A:** 90 - 100                      **C:** 70 - 77  
**B+:** 88-89                        **F:** 0 - 59  
**B:** 80 - 87  
**C+:** 78-79

Incompletes are only given for documented medical or personal issues.

### Late Grading policy

- A. No free late days for projects. 20% off from full credits per day late. (e.g. if you were late for one day, the instructor would start grading your work at 80%).
- B. Quizzes will be graded to 0 automatically if you do not finish them on time.

### Attendance / Participation

Attendance in face to face classes will be taken for class meeting randomly. One miss will lose five points. Students who miss 3 or more attendance calls will receive a 'F'. Please only talk when you are allowed to, in order to respect the instructor and other students in the classroom. One violation will lose five points, until losing all 15 points. Two student tutors will be in the classroom. 8pm-850pm is hands-on tutoring time, and that is when you are allowed to talk with each other and with tutors.

## 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:

<https://www.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>

## TENTATIVE CLASS SCHEDULE – Subject to Change

Week	Topics	Assignments (Due)
21-Jan	Martin Luther King, Jr. Day (No Class)	
28-Jan	Setting Up Your Development Environment	
4-Feb	HTML Forms and Bootstrap	Code Academy Command Line
11-Feb	PHP Programming	
18-Feb	PHP Programming	Make a Bootstrap Webpage and Git
25-Feb	Installing Laravel	
4-Mar	Introduction to Web Applications	PHP online Quizzes
11-Mar	Laravel Heroku Database and Authentication and Unit Testing and Seeding	Mini Project 1
18-Mar	Spring Recess (No Class)	
25-Mar	Laravel Workshop	Create a 2 page website using Laravel and host it on Heroku; Thank you message
1-Apr	Laravel Workshop	Unit Testing and Seeding; Heroku Laravel Database and user Authentication
8-Apr	Laravel Workshop	
15-Apr	Laravel Workshop	Mini Project 2
22-Apr	Laravel Workshop	
29-Apr	Laravel Workshop	Mini Project 3
6-May	Laravel Workshop	
13-May	Final Exam Week	Final Project