CS 321: Server Side Web Development

College of Arts and Sciences Syllabus
August 29, 2017

COURSE INFORMATION

Credit Hours: 3

Course Description: This course is an introduction to techniques and tools for designing server side web applications. Topics covered include web applications flow, object oriented programming, design of classes, dynamic content, scripting languages, implicit objects, and database accessing. Students will be expected to apply these concepts in the development of a website.

Course Prerequisites: CS207 and CS300 with a minimum grade of C

FACULTY INFORMATION

Instructor: Francisco Iacobelli

Office Location: Lech Walesa Hall 3060

Office Hours: T:1:30-3:00p & 6:30-7:00; W:1:30-4:30p

Phone Extension: x4728

email: f-iacobelli@neiu.edu

COURSE MATERIALS

List of Required Texts/Materials:

- Course Websites: desire2learn, piazza (`http://www.piazza.com`), and `http://cs.neiu.edu/~fiacobelli/courses/hci/www/`

- Time Expectations: Expect to spend an average of 10 hours a week in this course. Some weeks will take more time than others.

MAJOR COURSE TOPICS

- Introduction Server Side architecture

- C#

- ASP.NET

- SQL Server

- Node.js

- Angular.js

- Mongo Db

COURSE OBJECTIVES / STUDENT LEARNING OUTCOME

At the end of this course, students should be comfortable designing a basic web application in ASP.NET using C# as well as using Node.js with Angular JS and Mongo DB.

Students should also be comfortable with learning a new programming language and installing appropriate software.

Lastly, students should have a working understanding of the client server architecture and HTTP communications.

STUDENT TASKS/ASSIGNMENTS/REQUIREMENTS

Assignemnts

- Basic Programming Assignment

- C# assignment

- Buid a basic server side application with ASP.NET.

- Convert a website to MVC/Quiz on MVC.

- Build a REST interface

- Implement AJAX.

- Server Side application using a database

- Node.Js basics.

- NoSQL: DB Students experiment creating and querying a NoSQL Database.

- Final Project.

- There will be quizzes along the way after each assignment.

Grading Policies and Formulae

Item	Weight
Attendance	10%
Assignment Average	30%
Quizzes Average	20%
Project Related Work	40%

Weighted Average	Course Grade
90% or higher	A
80% – 89%	B
70% – 79%	C
60% – 69%	D
0% – 59%	F

Course Outline

Week by Week breakdown.

- Introduction

- Introduction to C#

- ASP.NET basics

- Model View Controller

- Using a Database

- RESTful websites

- AJAX

- Node.js

- Node.js events

- Getting started with MongoDB

- MongoDB + Node.js

- Introduction to Angular.js

COURSE POLICIES AND STATEMENTS

Absence Policy

Attendance will be graded. Attending a minimum of 13 sessions (81%) is mandatory to get an A on that item. Any less than 10 sessions will be graded proportionally.

Academic Integrity

By enrolling in this course, you are bound by the NEIU Student Code of Conduct:`http://www.neiu.edu/university-life/student-rights-and-responsibilities/student-code-conduct`. You will be informed by your instructor of any additional policy specific to your course regarding plagiarism, class disruptions, etc.

ADA Statement

Northeastern Illinois University (NEIU) complies with the Americans with Disabilities Act (ADA) in making reasonable accommodations for qualified students with disabilities. To request accommodations, students with special needs should make arrangements with the Student Disability Services (SDS) office, located on the main campus in room D104. Contact SDS via (773) 442-4595 or http://www.neiu.edu/university-life/student-disability-services.

Campus Safety

Web links to Campus Safety: Emergency Procedures and Safety Information can be found on NEIUport on the MyNEIU tab or as follows: `http://homepages.neiu.edu/~neiutemp/Emergency_Procedures/MainCampus/`.

Late Work Policy

There will be many assignments. All work MUST be submitted on their given due date or a grade of zero will be assigned. No late homework assignments will be accepted. Please begin assignments early to ensure that you finish them on time. All grades for each assignment will be posted online on D2L at most one week after the due date.

Learning Support Center

The Learning Support Center (LSC) provides peer-directed academic tutoring for individuals and groups in the following areas:

- General Education courses

- Writing

- Reading

- Math Development and college level math

- Academic Coaching

The primary emphases are promoting active learning strategies, encouraging student engagement, and providing content support. Academic support is provided to students who are seeking assistance with understanding course concepts and preparing assignments, along with developing an improved learning system for college which includes motivation, academic engagement, brain-based habits for college learning, and learning strategies for note taking, textbook reading, and test taking.

Tutors are graduate and undergraduate students who are carefully selected on the basis of their own academic achievement by faculty and given supervision, training, and support to serve as tutors, mentors, and academic coaches. Additionally, the LSC provides all NEIU students an area for learning groups and an opportunity to learn with other students. Appointments are strongly encouraged, and students are welcome to drop in to discuss their individual academic support needs.

For more information, visit the LSC website at www.neiu.edu/lsc or, to schedule an appointment with a tutor, call 773-442-4568.

Course Communication

All pertinent class communications between the instructor and students is conducted exclusively through NEIU e-mail. Thus it is the responsibility of students to check their NEIU e-mail account for all significant information and updates on class cancellations in the event of threatening weather conditions. Communication between the instructor and students via personal e-mail accounts (e.g., @gmail.com or @yahoo.com) will not occur.

Incomplete Grade Policy

An Incomplete ("I") grade is temporary and exceptional, and can be given only to students whose completed coursework has been qualitatively satisfactory but who have been unable to complete all course requirements because of illness or other circumstances beyond their control. An "I" grade is not to be awarded in place of a failing grade or when the student is expected to attend additional class meetings or to re-register to complete the course requirements. Additionally, an "I" grade is not a means for the student to raise his/her grade by doing additional work.

A request for an "I" grade must be made by the student to the faculty member before the last official day of the semester or term. The faculty member retains the right to make the final decision on granting a student's request for an "I" providing the student meets the provisions above, even though the student may meet the eligibility requirements for this grade. Students have up to one semester, excluding summer, to complete the work.

It is the responsibility of the student to complete and submit the remaining coursework before the assigned deadline. The faculty member will submit a grade change converting the "I" to a letter grade by or before the last day of the semester in which the outstanding coursework is to be completed. If the student does not meet the deadline, the "I" will be converted automatically to a final grade of an "F." Since the "I" grade is temporary, faculty may not issue a terminal "I" grade.

Upon receipt of the grade change, the Registrar Services Office will post the grade to the student's record and recalculate the GPA. Although students have up to one semester, excluding summer, to complete the work to change the grade of Incomplete, the student's academic standing will be reassessed only if the grade change is received by the Friday of the first full week of the semester immediately following the one in which the "I" grade was assigned.

Students will not be allowed to graduate with "I" grades on their records.

Extension of an Incomplete Grade: A request to extend the assigned deadline must be put in writing to the appropriate academic dean before the assigned "I" grade becomes a failing grade. The request must provide the reason as to why a deadline extension is requested, along with including appropriate documentation (e.g. medical documentation, etc.). A letter of support from the faculty member that includes a new deadline date is also required. The Dean or his/her designate will make the appropriate decision at his/her discretion and reply in writing to the student, faculty member, and the University Registrar within 14 working days. Requests that extend beyond one calendar year from the time the incomplete grade was assigned will not be honored.

These policies apply to "I" grades given in the Fall 2016 semester or later.

Late Work

Late work will not be graded. If you have an emergency and anticipate late work contact me at least 2 days prior to the deadline. Job related issues, Midterms for other courses, Common illnesses (cold, flu, fever, sore throat, etc.) and events that are clearly foreseeable (weddings, religious holidays, etc.) are not a valid excuse for late work.

Submission of Materials

Course activities and written assignments will be submitted electronically. Any student file submitted electronically that does not meet the requirements listed will not be graded. Please ensure that files are

- appropriately named (last name-Document title),

- submitted in PDF unless otherwise noted, and

- submitted to the corresponding Dropbox folder.

Please ensure your productivity applications are able to import/export into the compatible file formats