THIS IS A VIRTUAL ON_LINE COURSE

E-mail: wolk@fordham.edu

Class Meets   Monday through Thursday 1PM-4PM ON-LINE VIA ZOOM CONFERENCING TOOL And also possibly via BLACKBOARD Collaborate. Note that that is the fully allowable time interval, but most likely the session should not exceed 2 hours, the remaining time would be set aside for asynchronous student review, submission and feedback and also individual “ZOOM” office meetings as needed.


Students will need a Safari, Internet Explorer, or Chrome Browser and a text editor such as Notepad to create and run local javascript/HTML. Eventually students will install XAAMP to run APACHE to access a client-side server on their PC/MAC so that they may run PHP applications and have access to mysql. The d3 library for visualization and SVG elements will be provided separately.

I will also be using a series of powerpoint slides based upon the detailed material, from two or more different sources (University of Washington, Stanford University), plus a portfolio of php and javascript application. These will be provided after the ZOOM meeting and be e-mailed directly and also provided on Blackboard

COURSE OBJECTIVES

This course is a more detailed and intensive version of CISC 2350 with extensions into more client/server side java based applications and scenarios as well as object-oriented web based processing and dynamic design with instantaneous web processing content (frequently using Document Object Model and Css)

This course provides a detailed exploration of the concepts of web programming, interactive processing, web designing and database management integrating different tools such as HTML, CSS, JavaScript, PHP and MySQL. Students will learn how to develop and manage an interactive and dynamic webpages and their embedded levels of content in tand-alone (static) and interactive using PC based resources and web browsers, dedicated client server embedded connections. The principal development and design lecture demonstration and interactive student participation will include: Design static web pages and interactive dynamic web based interfaces using HTML and CSS, javascript and php and java extensions. Design, create, manage and manipulate database using MySQL and maintain and create an interactive session using d3.

HANDS- ON CLASS PARTICIPATION IN ZOOM MODE – WORK ON AND DEMONSTRATE INTERACTIVELY Course content which will evolve from a demonstration of web-based fundamentals which will gradually develop the material, and there will be problems within the demos which will be assigned for homework. The objective is to build from the slides and use the text as a cook-book style reference for more in-depth development and other problem assignments.

The course assumes basic knowledge of a structured programming, systems programming, operating systems and web and network fundamentals. The techniques of interactive web design, client-server connections, network fundamentals, web operating environments, database connectivity and web page based scripting for interactive web object manipulation will be initially reviewed and extended into more sophisticated applications.
COURSE CONTENT- ORGANIZED INTO COLORED MODULAR CHUNKS FOR WEEK-BY-WEEK TOPICS

Introduction to the Internet and WWW - History of the Internet - Infrastructures of Internet - Web Server - Protocols - Web Pages

HyperTexts Markup Language (HTML) - Basic elements - Attributes - Headings - Paragraphs - Formatting - font - Links - Images - List, Tables, Tabs, div tags

HTML (Continuation) - Frame - Forms - Text - Select /Option - Button - Textarea - Checkbox - Radiobutton - Submit/Reset, embedded div containers, coordinate systems, embedded content, block model, block elements versus in line elements

HTML Web Projects, adaptive HTML objects, flexible containers

Cascading Style Sheet (CSS) - Introduction to CSS - Inline CSS - Internal CSS - External CSS - Syntax format - CSS Classes - CSS ID - Style properties - Background - Text Properties

CSS (Continuation) - Style Properties - More Div Properties - Div Position / Layout - Border - Margins - Padding - Animation /Effects, all of the class options, div tag options, id options, rules for conflicting css and levels of css elements- class names- for div elements and individual elements, html tags, id tags, multiple css names, strength and specificity

JAVASCRIPT - Introduction - Statements and Comments - Basic Syntax - Variables - Operators - Comparisons - If..Else statement - Switch Statement

JavaScript (Continuation) - Alert and Prompt - Functions - Objects - For Loop - While Loop - Break Loops - Event Handlers, Document Object Model, contrast methods eventListener versus Document.getElementById(" HTML id name").event (click image or button), accessing HTML elements this processing, defer loading

JavaScript (Continuation) - Working with Forms - Working with Images and Links - Document Objects - Array - Math, Numbers and Date object, Document Object Model, file processing, string processing, dynamic creation of HTML objects, css and javascript working together,

JavaScript Web Project – Aliasing and Linking HTML elements with javascript, variable scope

PHP(PHP Hypertext Preprocessor) - Introduction - Installation - Syntax - Variables - Strings – Operators

PHP (Continuation) - If.. Else statement - Switch - Arrays - While Loop - For Loop - Functions - Forms - $_GET - $_POST, file processing, interactive processing, embedded html, object-oriented processing, embedded php within HTML, all of the form elements and posting form elements to active php pages

PHP interleaved HTML with script, including php pages as embedded php, css, embedding variables in html

PHP form processing between pages or within pages, form posting, variety of HTML elements- input box, submit
Mysql Database - Introduction to Mysql - Installation - Manage User - Creating Database - Creating Tables - Creating Queries

CISC-3300 -- Summer 2020 Internet and Web Programming Professor Larry Wolk, page 3

Mysql Database (Continuation) - Mysql GUI - More sql commands - Insert - Update - Delete - Joins - Unions - More sql functions


D3- Visualization via dynamic SVG objects- install library and investigate static and dynamic HTML objects applications, scatter plots, bar plots, embedded data modes, color scales

Determination Of Course Grade:
LAB-WORK/HOMEWORK, ATTENDANCE ON ZOOM 30% ,5 % respectively
MID-TERM Exam – 30% --Given on Blackboard
FINAL EXAM – 35% Same format as Mid-Term, Comprehensive- Given on Blackboard

LAB WORK and project assignments will appear on BLACKBOARD
As well as archived applications which are based on the slides presented in ZOOM or also Contained within my extended portfolio of applications
Assignments are usually extensions and modifications to add capability to the applications reviewed on ZOOM

Attendance and Class Participations Taken Into Consideration in Borderline Cases.
Academic Integrity Policy and Procedures:
Students are required to conform with Fordham University’s Academic Integrity Requirements regarding appropriate student conduct in pursuit of academic objectives in the classroom, conducting research in preparation of papers, development of original work, proper quotation of external sources of research in all prepared writings and problem solutions, class attendance and professionalism.
Statement of Academic Integrity:
“As a student of Fordham University, I recognize that I am part of a community dedicated to the disciplined and rigorous pursuit of knowledge and communication of truth. I therefore commit myself to the University Code of Conduct and upholding the highest standards of academic integrity. Any work that I claim to be my own will be my own; I will give appropriate credit where credit is due; I will be fair and honest in all of my interactions with members of the Fordham community.”

Attendance Policy: In accordance with Federal Law, attendance must be accurately recorded and monitored. Class attendance will be taken during each period. Leaving after the break shall be treated as ½ attendance. More than 2 full sessions of absence will have a major negative impact on your grade.

Final Exam Date: Will be announced during the semester. No alternate arrangements are permitted in accordance with University regulations. Most likely a short answer exam will be given through Blackboard -- multiple choice questions/ True False questions will be based on illustrated HTML, modified HTML, and other conceptual questions.