Cleveland State University
Department of Electrical Engineering and Computer Science

CIS 408: Internet Programming
IST 450: Web-Based Programming

Catalog Description: CIS 408 Internet Programming (4-0-4)
Pre-requisite: CIS 430
This course aims to equip students with the necessary knowledge to design and implement Internet applications. It introduces and utilizes current technologies such as HTML 5, Cascading Style Sheet, JavaScript, PHP and ASP.NET to provide practical working experiences.

Textbook:

References:
http://www.htmltutorials.ca/
http://it-ebooks.info/

Coordinator:
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Expected Outcomes:
Upon successful completion of this course, students will acquire concrete knowledge and skills on developing web-based applications. Specifically, they should be able to (i) organize, design, and develop fully functional websites using HTML, Java Script, PHP and ASP.NET, (ii) apply CSS for attractive and uniform presentation of web pages, (iii) implement interactivities with users and record/retrieve user or corporate information by backend database servers, (iv) analyze and solve both client-side and server-side programming issues, (v) validate, debug, secure, and publish websites on Internet.

Fulfillment of EE, CE and CIS Program Objectives and Outcomes:
Objectives:
1. Graduates will apply the concepts of the discipline including analysis, design, and implementation of information and computing systems.
2. Graduates will be employed in the computing profession, and will be engaged in life-long learning, understanding, and applying new ideas and technologies as the field evolves.
3. Graduates will be informed and involved members of their communities, and responsible engineering and computing professionals.

Outcomes:
1. An ability to apply knowledge of computing and mathematics appropriate to the program’s student outcomes and to the discipline
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3. An ability to function effectively on teams to accomplish a common goal
4. An ability to translate fundamental computing concepts to a variety of emerging technologies
5. An ability to apply design and development principles in the construction of software systems of varying complexity.

**Student Characteristics:**

(a) An ability to apply knowledge of computing and mathematics appropriate to the program’s student outcomes and to the discipline
(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
(d) An ability to function effectively on teams to accomplish a common goal
(e) An understanding of professional, ethical, legal, security and social issues and responsibilities
(g) An ability to analyze the local and global impact of computing on individuals, organizations, and society
(i) An ability to use current techniques, skills, and tools necessary for computing practice.
(k) An ability to apply design and development principles in the construction of software systems of varying complexity.

**Prerequisites by Topic:** None

**Topics:**

1. HTML and CSS  
2. JavaScript  
3. PHP  
4. ASP.NET  
5. Final Exam  

Total Weeks 16

**Computer Usage:**

HTML Text Editor, Free Web Hosting, Local Apache, PHP, MySQL Server, Microsoft Visual Studio Professional 2013