JEFFERSON COLLEGE

COURSE SYLLABUS

CIS165

PROGRAMMING FOR THE WEB

3 Credit Hours

Revised by: David McNair
Date: August 18, 2012

Revised by: David McNair
Date: March 5, 2015

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CIS165 Programming for the Web

I. CATALOGUE DESCRIPTION

A. Pre-requisite: CIS125 Computer Concepts and Applications with a Grade of "C" or Better
Pre- and/or Co-requisite: Reading Proficiency

B. 3 Credit Hours

C. Programming for the Web builds programming skills used to develop web pages and other interactive media. The class uses programming environments such as Java, PHP, and Dreamweaver to make an interactive interface for common business problem-solving. This includes such standard programming ideas as developing shopping carts for the web, customer interaction forms, security, and importing and exporting customer information. The student is challenged to develop technical coding examples that are intended for the medium used. These skills can be used for web, instructional development, graphics and user interaction. (S)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

Demonstrate effective coding practices and standards	Project Assignments Tests
Develop programming logic skills using various coding approaches, coding for graphics, and animation design	Class Participation Tests Project Assignments
Analyze common business and web development problems to effectively code and explain concepts	Student Presentation Class Participation Tests Project Assignments
Use Dreamweaver to develop web pages and write code for a web based structure	Class Participation Tests Project Assignments
Demonstrate the ability to "translate" technical information to non-specialists	Student Presentation Class Participation Tests Project Assignments
Investigate and examine various code design tools used to produce on-line instruction, common business problems, and other applications	Class Participation Tests Project Assignments

III. OUTLINE OF TOPICS

A. Introduction – Introductory Programming Scenarios
   1. Define business problems
   2. Understand basic syntax and structure
   3. Define and understand basic logic structures
   4. Understand the concept of debugging

B. Programming PHP
   1. Define basic techniques for problem-solving
   2. Develop variable construction
   3. Understand PHP essentials and the basics of object-oriented programming
   4. Create web pages with PHP with interactive forms
   5. Introduction to formatting using PHP

C. JavaScript and Dynamic Interaction Development
   1. Understand general template procedures
   2. Use debugging with JavaScript construction
   3. Make Ajax calls and turn your website into a highly dynamic environment
   4. Understanding calls using forms and displaying columns

D. Introduction to Dreamweaver interface formatting
   1. Techniques for Dreamweaver forms development
   2. Adding links and images to pages
   3. Develop best possible layout and navigation
   4. File organization
   5. Uploading to a server

E. Overall Web Design Programming Considerations
   1. Overview planning of project planning and design
   2. Planning the web structure
   3. Investigate web software considerations

F. Layout and Design
   1. Understand Instructor lead project - design
   2. Sorting and alternative algorithms
   3. Sorting and user defined comparisons

G. Advanced Dreamweaver methods and considerations
   1. Incorporating HTML code in Dreamweaver
   2. Using javascript in Dreamweaver
   3. Linking controls and forms to databases
   4. Server considerations

IV. METHOD(S) OF INSTRUCTION

A. Code Writing Examples for Class Discussion

B. Tutorial Video Demonstrations

C. Lectures

D. Case Study Examples

E. Interactive Group Projects

V. REQUIRED TEXTBOOK(S)

Paul J. Deitel, Harvey M. Deitel, and Abby Deitel; *Internet & World Wide Web: How to Program,* (Current Edition), Pearson

VI. REQUIRED MATERIALS

USB Storage Device (Flash Drive)

VII. SUPPLEMENTAL REFERENCES

None

VIII. METHOD OF EVALUATION

A.	Class Participation	20%	Students will have opportunities to question, present ideas and concepts, and respond to questions from other students and instructors
B.	Project Assignments	40%	Students will be assessed on individual code writing projects
C.	Tests	30%	Two written tests will measure student performance
D.	Student Presentation	10%	One student presentation project

IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Technology Center 101; phone 636-481-3169).

X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College Website http://www.jeffco.edu).

XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.