PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

INTRODUCTION TO INTERNET SOFTWARE DEVELOPMENT
CSIT 2645 (formerly CSIT 2470)

Class Hours: 3.0   Credit Hours: 4.0

Laboratory Hours: 3.0   Revised: Spring 05

NOTE: This course is not designed for transfer credit.

Catalog Course Description:

The history, growth, and use of the Internet are explored, and major Internet protocols are discussed. Students learn the HTML language by creating their own Web pages. Students work in teams to create Web sites, using Dynamic HTML techniques, and learn about the “real world” of Internet software development.

Entry Level Standards:

The entering student should have a familiarity with the DOS PC operating system and the Windows environment. The entering student should be able to type at least 23 words per minute with 5 or fewer errors.

Prerequisites:

One programming course

Textbook(s) and Other Course Materials:

*Internet & World Wide Web: How to Program* by Deitel, Deitel, & Nieto. Prentice Hall; 2000

1. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction, History of Internet</td>
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<td>2</td>
<td>WWW and Internet protocols</td>
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<td>3</td>
<td>Basic HTML</td>
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<td>4</td>
<td>Intermediate HTML</td>
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<td>5</td>
<td>Exam 1</td>
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<td>6</td>
<td>Introduction to JavaScript</td>
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<td>7</td>
<td>JavaScript Control Structures</td>
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<td>8</td>
<td>JavaScript Control Structures II</td>
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<td>9</td>
<td>JavaScript Functions</td>
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<td>10</td>
<td>Exam 2</td>
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<tr>
<td>11</td>
<td>Cascading Style Sheets</td>
</tr>
<tr>
<td>12</td>
<td>DHTML Event Model</td>
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</table>
II. Course Objectives*:

A. Discuss the evolution of the Internet along with its structure, use, and importance. I III IV

B. Recognize the advantages of standardized protocols by examining the functionality of ones currently in use on the Internet. III

C. Describe the process involved in creating a set of pages on the World-Wide Web. I III

D. Discuss in detail the HTML language, along with how web pages are stored, transmitted, and processed on the Internet. III V IX

E. Discuss in detail the JavaScript language, along with how it is used to add interactivity to web pages. III V IX

F. Develop an interesting set of WWW pages utilizing HTML and Javascript. I II IV V VI IX XII

G. Work together to plan, develop, and integrate WWW pages with a high-level language CGI program. I II III IV V VI VII IX X XII

H. Discuss the integration of more advanced WWW constructs such as cascading style sheets, forms, CGI, and the DHTML object model. I IV IX

I. Discuss advanced WWW topics including network security and e-commerce. I II IV V X

*Roman numerals after course objectives reference goals of the CSIT program.

III. Instructional Processes*:

Students will:

1. Use professional tools to produce software components and documentation. *Technological Literacy Outcome, Personal Development Outcome, Transitional Strategy*

2. Create an individual web pages based upon their own interests. *Communication Outcome, Problem Solving and Decision Making Outcome, Technological Literacy Outcome, Information Literacy Outcome, Personal Development Outcome, Transitional Strategy, Active Learning Strategy*

3. Participate in a software development team to create a web applications. *Communication Outcome, Problem Solving and Decision Making Outcome, Transitional Strategy, Active Learning Strategy*

4. Practice elements of the work ethic such as punctuality, professionalism, dependability, cooperation, and contribution. *Personal Development Outcome*

5. Present finished products to the class. *Communication Outcome, Active Learning Strategy*

6. Participate in a peer review of individual and group projects. *Personal Development Outcome, Problem Solving and Decision Making Outcome, Communication Outcome, Active Learning Strategy*

7. Use professionally accepted methods and materials in completion of applications. *Technological Literacy Outcome, Personal Development Outcome, Transitional Strategy*

*Strategies and outcomes listed after instructional processes reference Pellissippi State’s goals for
strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should be able to:

1. Recognize basic protocols in use on the Internet. A B C
2. Utilize applications that implement basic Internet Protocols. B C
3. Recognize and use basic HTML tags. D E F
4. Use intelligent techniques to create, modify, and upload web pages. C D E F
5. Design and create a set of web pages. D E F
6. Participate as a group leader in the development of a complex web application. G H
7. Integrate application component modules into a complex application. H I

*Letters after performance expectations reference the course objectives listed above.

V. Evaluation:

A. Testing Procedures: 40% of grade

Exams will comprise 40% of the final grade. Two exams will be given during the course of the semester. Dates will be announced in class and each exam will count for 200 points of the final grade. There will be no make-up tests unless prior arrangements have been made with the instructor.

B. Laboratory Expectations: 10% of grade

Lab assignments will be made during the course of the semester. A late penalty will be imposed on any overdue assignment. Failure to satisfactorily complete all labs may result in a grade of F in the course. Labs will count for 100 points (10%) of the final grade.

C. Field Work:

N/A

D. Other Evaluation Methods: 50% of grade

1. Individual Project:
One project consisting of a set of WWW pages based upon individual student interests will be assigned. This project is intended to familiarize students with the basic HTML language and overall page layout and design. Failure to satisfactorily complete the individual project will result in a grade of F for the course. This project will count for 250 points (25%) of the final grade. A portion of the project grade will be determined by peer evaluation.

2. Group Project:
One extensive group project will be assigned to create a complete web application based upon instructor specifications. This project is intended to familiarize students with more advanced HTML features. It also provides an opportunity for participating in a group application development and integration effort. Failure to satisfactorily complete the group project may result in a grade of F for the course. This project will count for 250 points (25%) of the final grade. A portion of the project grade will be determined by class peer evaluation and another portion by project group peer evaluation.

E. Grading Scale:

900 - 1000   A
VI. Policies:

A. Attendance Policy:

Pellissippi State Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. [NOTE: No differentiation is noted for excused/unexcused absences. These will be treated as an absence.] (Pellissippi State, 2004-2006 Catalog, page 83)

B. Academic Dishonesty:

Plagiarism, cheating, and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions which may be imposed through the regular Pellissippi State procedures as a result of academic misconduct, the instructor has the authority to assign an F or a zero for the exercise or examination or to assign an F in the course. (Pellissippi State, 2004-2006 Catalog, pages 62-63)

C. Accommodations for disabilities:

If you need accommodation because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please inform the instructor immediately. Privately after class or in the instructor's office. To request accommodations students must register with Services for Students with Disabilities: Goins 127 or 131, Phone: (865) 539-7153 or (865) 694-6751 Voice/TDD.

D. Other Policies:

Computer Usage Guidelines:
College-owned or -operated computing resources are provided for use by students of Pellissippi State. All students are responsible for the usage of Pellissippi State’s computing resources in an effective, efficient, ethical and lawful manner. (Pellissippi State, 2004-2006 Catalog, pages 67-70)