Computer Programming Department
Business/Public Service Division
GREENVILLE TECHNICAL COLLEGE

COURSE SYLLABUS

Course Title: DHTML and JavaScript
Course Number: IST 239

Lecture hours per week: 3.0   **Lab/Clinic Hours:**   **Semester credit hours:** 3.0

Pre-requisite: IST 237

Catalog course description: This course includes concepts and skills for developing dynamic functionality and interactivity for websites using JavaScript. Variables, operators, conditionals, functions, objects (image and form), properties, methods, cookies, frames, and arrays. Note: Course taught via College Online only.

Purpose of the course:
1. To develop skills and methods for incorporating dynamic and interactive elements into websites using JavaScript.
2. To develop original and adapt existing JavaScripts to achieve the goals and purposes of a website.
3. To redesign a 2nd-generation website to incorporate third generation utility and 4th-generation interactivity using original and adapted JavaScripts and style sheets.
4. To test usability and accessibility for existing and newly created websites with interactive elements.

Required text(s) or other materials:
1. JavaScript: Complete Concepts and Techniques, Second Edition by Shelly, Cashman, Dorin & Quasney; Course Technologies: www.course.com; ISBN: 9780789562333
2. NOTE: Students in traditional classes must access Blackboard for course-related information. Students in hybrid and online classes will access their online content through Blackboard.

COLLEGE-WIDE STUDENT LEARNING OUTCOMES

1. Communication – Students will demonstrate the ability to use active reading and listening skills and to produce effective written and oral communication for varying audiences.

2. Information Technology and Technological Literacy – Students will demonstrate competency in using computer technology within a field of study.

3. Critical Thinking/Reasoning – Students will demonstrate the ability to apply the scientific method, mathematical processes, and research skills to analyze and solve problems/issues by using reflection and reasoning to justify conclusions.

4. Professional and Personal Responsibility – Students will demonstrate the ability to exhibit conduct, attitudes, and etiquette appropriate to the student's community and chosen career. Students will demonstrate the ability to manage time, to use effective interpersonal skills, and to display responsible behavior.

5. Diversity – Students will demonstrate the ability to recognize diversity and to demonstrate respectful conduct and attitudes toward all. Students will demonstrate the ability to explain how global issues impact life, work, and opportunities.

Approved March 26, 2009

COMPUTER PROGRAMMING PROGRAM STUDENT LEARNING OUTCOMES

Upon successful completion of the CPT/Programming program, the graduate will be able to:
1. Students will be able to analyze, design, develop, and document solutions that will satisfy the information needs of business users using established design methodologies and standards.
2. Students will be able to design, create, test, and document logical programming solutions to prescribed specifications following established standards and using current development environments and languages for application development and database management.
3. Students will be able to demonstrate the knowledge and ability to install and maintain microcomputer hardware and operating system software.
4. Students will be able to demonstrate the use of a minimum of three business application software packages.
5. Students will be able to demonstrate fundamental team building, project management, and presentation skills by participating in team projects that include team goals and values, a development methodology for documentation and coding, group presentations, and exposure to topics such as diversity, time management, and goal setting.
6. Students will be able to demonstrate the ability to take initiative, assume responsibility, and work under pressure with minimum supervision by successfully completing "hands-on" computer lab assignments.

IST 239 COURSE OUTCOMES

Students who successfully complete this course will have demonstrated the skills necessary to accomplish the following objectives with a minimum competency of 70 percent.

1. Students will be able to identify dynamic and interactive Web Site features.
2. Students will be able to analyze dynamic website elements best developed using JavaScript.
3. Students will be able to demonstrate knowledge and use of JavaScript syntax.
4. Students will be able to demonstrate knowledge of objects, properties, methods, events, frames, arrays, and attributes.
5. Students will be able to integrate JavaScript and HTML to gain user attention, display user-guidance messages, and reroute users automatically, to create continuously updating content, pop-up windows and scrolling messages.
6. Students will be able to demonstrate knowledge and skills to create dynamic, interactive and calculating webpages, responsive to user input.

7. Students will be able to demonstrate knowledge of cookies, arrays and frames to customize webpage views.
8. Students will be able to demonstrate the skill to design and create a user-focused, user-responsive shopping cart application.
9. Students will be able to identify issues, dynamics and differences for international e-business.
10. Students will demonstrate the skill to debug dysfunctional JavaScripts, citing common types of errors and how to locate and correct them.

The objectives of the IST 239 course are intended to meet the CPT/Programming program competencies numbered 2 and 6 above.

IST 239 – Main Topics

Tutoring is now available in the Business Division Student Lab located on the Barton Campus in the Engineering Building (#103), Room 115. The hours for tutoring are posted in the lab (ET 115); no appointment is necessary. There are no fees required for this service.

Review of HTML and XHTML

Review of CSS

Test One, covers topics of week 1

Introduction to JavaScript, topics from the INTRODUCTION chapter

Test Two, covers topics of weeks 1 and 2

Introduction to JavaScript, topics from Appendix A.

Integrating JavaScript and HTML, Chapter: Project 1.

Test Three: covers topics of week 1 through week 7.

More Integrating JavaScript and HTML, Chapter: Project 1.

Pop-up Windows, Scrolling Messages and Input Forms, chapter: Project 2

Test Four: covers topics of week 1 through week 9.

Use of Image and Form Objects, chapter: Project 3.

Cookies, Arrays, and Frames; to Customize Web Views to User Interests, chapter: Project 4.

Use Objects to Create a Shopping Cart Application, chapter: Project 5.

Dynamic Web sites and Internationalization.

Comprehensive Final Exam / Final Project

IST 239 – Course Specific Requirements

Ability to install tutorial files from the textbook website

Access to an Internet-capable computer system

Notepad or other text software that does not insert formatting code

IST 239 – EVALUATION AND GRADING INFORMATION

GRADING POLICY

Fifty (50) percent of the final grade will be based on Assignments.
- A minimum of 10 programming assignments are required for the course.
- Programming assignments will be assigned from selected chapters.
- The following factors will also be considered in grading programs:
  - a. The program must work correctly and produce the desired results.
  - b. The program must be written in the style described in the text or described in class.
  - c. Write with compactness in mind.
  - d. Documentation should be clear and meaningful.

Twenty five (25) percent of the final grade will be based on midterm tests.
Twenty five (25) percent of the final grade will be based on the grade for the Final Project. The final project takes the place of the final exam for this course.

All assignments (i.e., labs, projects, research papers, etc.) for this course must be completed and submitted to the instructor by the due date established in order to receive credit for the assignment.

Final letter grades will be issued as follows:

A	=	90 - 100	points
B	=	80 - 89	points
C	=	70 - 79	points
D	=	60 - 69	points
F	=	0 - 59	points

READ THIS SYLLABUS CAREFULLY

You should read this syllabus carefully and ask your instructor about *any* aspects that you do not understand. The syllabus is an agreement between you and your instructor concerning course objectives, course content, grading, and other policies and procedures particular to this course. The above information is specific to the course. Three additional documents are provided as attachments and *are considered a part of this syllabus*:

Attachment I:

Each instructor will provide a supplement to this syllabus. The supplement will include: a week-by-week plan of instruction based on the section in which you are enrolled; your instructor's name, office hours and/or office location; and your instructor's contact information and recommended best methods to contact your instructor.
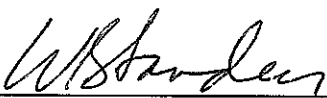
Attachment 2:

The Department responsible for developing and teaching has policies and procedures in place to assure quality instruction for all students. These are attached as "Departmental Policies and Procedures."
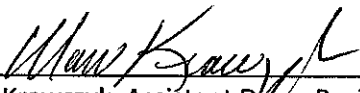
Attachment 3:

Please note that it is your responsibility to read the current Student Handbook included in Greenville Technical College's Catalog. (See website.) The Student Handbook addresses specific academic and student conduct policies and procedures. Excerpts from the Student Handbook representing the policies and procedures most often referred to in working with students are provided for your convenience as "Attachment 3."
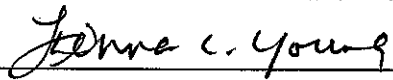
Approved by: _____

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13 Dec 10
Date

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This syllabus will remain in effect until revised or reviewed no later than August 2011.