

Computer Programming Department
Business/Public Service Division
GREENVILLE TECHNICAL COLLEGE

COURSE SYLLABUS

Course Number: IST 239

Course Title: DHTML and JavaScript

Lecture hours per week: 3.0 **Semester credit hours:** 3.0

Prerequisite: IST 237

Catalog course description: This course includes concepts and skills for developing dynamic functionality and interactivity for web sites 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: This course introduces the student programming concepts that involve the integration of client-side and server-side scripts into web pages. The emphasis of the course is on client-side scripting where client-side scripts are used to create dynamic web pages that respond to user input. Client-side scripting topics will include script integration, language syntax, data storage, control structures, functions, and procedures. Server-side scripting topics will include Active Server Pages (ASP), request and response objects and the integration of databases.

Required text(s) or other materials:

1. JavaScript and Ajax; 2nd Edition; Carey & Canovatchel; Course Technology; ISBN: 978-1-4390-4403-2
2. Access to an Internet-capable computer system.
3. 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 LEVEL 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 demonstrate basic knowledge of HTML and XHTML as required for scripting.
2. Students will be able to demonstrate the ability to write, execute, and debug JavaScript for imbedding in web pages.

3. Demonstrate the use of basic JavaScript syntax including variable declaration and use, functions and constructor functions, loops statements, decision statements, and arrays.
4. Demonstrate the use of basic Document Object Model objects including window object, document object, retrieval of browser information, request and response objects, maintaining state between client and server, and passing values between client and server.
5. Demonstrate server-side JavaScript programming and how it is implemented using AJAX.

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

IST 239 – Main Topics

Tutorial 1: Programming with JavaScript
Tutorial 1 Lab Assignment

Tutorial 2: Working with Operators and Expressions
Tutorial 2 Lab Assignment

Tutorial 3: Working with Arrays, Loops, and Conditional Statements
Tutorial 3 Lab Assignment

Test 1: Chapters 1-3

Tutorial 4: Working with Objects and Styles
Tutorial 4 Lab Assignment

Tutorial 5: Working with Forms and Regular Expressions
Tutorial 5 Lab Assignment

Tutorial 6: Working with the Event Model
Tutorial 6 Lab Assignment

Test 2: Chapters 4-6

Tutorial 7: Working with Dynamic Content
Tutorial 7 Lab Assignment

Tutorial 8: Designing Rollovers and Slide Shows
Tutorial 8 Lab Assignment

Tutorial 9: Storing Data with Cookies
Tutorial 9 Lab Assignment

Test 3: Chapters 7-9

Tutorial 10: Designing Pop-Up Windows
Tutorial 10 Lab Assignment

Tutorial 11: Exploring Object-Based Programming (Optional)
Tutorial 11 Lab Assignment (Optional)

Tutorial 12: Programming with AJAX (Optional)
Tutorial 12 Lab Assignment (Optional)

COMPREHENSIVE FINAL EXAM

SPECIAL NOTE TO ONLINE STUDENTS: The final exam for online students will be administered on the Barton Campus and will be scheduled at a time determined by the department.

IST 239 – Course Specific Requirements

There are no specific course requirements other than attachment 1.

IST 239 – Evaluation and Grading Information

GRADING POLICY

Exams represent 50 percent of the final grade: 30 percent for chapter tests and 20 percent for the final exam project. Class participation is 10% of the final grade.

Lab assignments count 40 percent of the final grade.

1. Programming assignments will be assigned from selected chapters for 40 percent of the grade.
2. The following factors will be considered in grading assignments:
 - 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.

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
B	=	80 - 89
C	=	70 - 79
D	=	60 - 69
F	=	0 - 59

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 1:

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:



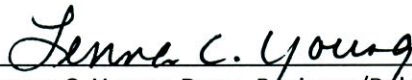
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27 Jul 11
Date

This syllabus will remain in effect until revised or reviewed no later than August 2012.