

## STANDARDIZED COURSE OUTLINE

### SECTION I

**SUBJECT AREA AND COURSE NUMBER:** CST 200

**COURSE TITLE:** Scripting Language With Java+++

**COURSE CATALOG DESCRIPTION:**

This course concentrates on JavaScript, the programming language developed jointly by Sun Microsystems and Netscape to enhance WWW pages written in HTML (Hypertext Markup Language). After a review of the basic concepts of the WWW and HTML, students will learn how to use JavaScript to add dynamic content and interactivity to their web pages. JavaScript items such as scrolling messages, animation and dynamic images, data input forms, pop-up windows, and interactive quizzes will be studied and programmed in a sophisticated web site for the student's term project. An introduction to "full" Java programming will conclude the course. *Formerly listed as CIS 230, not open to students who have successfully completed CIS 230.*

**LECTURE HOURS PER WEEK:** 3

**CREDIT HOURS:** 3

**LAB HOURS PER WEEK (if applicable):** n/a

**PREREQUISITE(S):** CSA 163, CST 150, or demonstration of computer and web literacy

### SECTION II

#### **A. SCOPE:**

This course introduces students to JavaScript. This course is designed to expose students to examples of useful business-oriented web projects with an exercise-oriented approach that allows students to learn by example. Students will be encouraged to use creativity and concepts learned to create dynamic web pages suitable for course work, professional purposes, and personal use. The course topics include: Basic JavaScript concepts and skills; Integration skills between JavaScript and HTML; Operators and Expressions; Arrays, Loops and Conditional Statements; Objects and Frames; and Event Models.

#### **B. REQUIRED WORK:**

Will vary by instructor. Students will be expected to do all required readings, assignments, tests, and quizzes as outlined by their instructor.

#### **C. ATTENDANCE AND PARTICIPATION:**

Regular attendance, assignment submission timeliness, promptness and class/lab participation will be expected. Instructors will include specific attendance and participation policies requirements in their class syllabi.

#### **D. METHODS OF INSTRUCTION:**

Methods may include any of the following: lecture, lecture/discussion, small group, collaborative learning, experimental/exploration, distance learning, student presentations, computer demonstrations, or use of technologies such as audio-visual materials, and computer laboratory equipment. Emphasis will be on hands-on computer exercises and problems.

## E. OBJECTIVES, OUTCOMES, and ASSESSMENT

Students' grades will be based on achievement of learning the objectives and outcomes listed below as measured by the instructor's methods of assessment:

LEARNING OBJECTIVES	LEARNING OUTCOMES	ASSESSMENT METHODS
<b>To demonstrate an understanding of:</b>	<b>Student will:</b>	<b>As measured by:</b>
Basic JavaScript concepts and skills	a) Create, save, open, close, and print JavaScript projects b) Define and differentiate between HTML, JavaScript, and VBScript c) Enter, edit, and troubleshoot basic code using notepad d) Define and differentiate between variables, literals, expressions, decision statements and loops, functions, objects, properties, methods, events, frames, and arrays	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
Integration skills between JavaScript and HTML	a) Insert, edit, and troubleshoot JavaScript code in an HTML document b) Use <SCRIPT> tags, global and local variables, and user-defined functions	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
Operators and Expressions	a) Work with Event Handlers b) Work with arithmetic, conditional, and logical operators	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
Arrays, Loops and Conditional Statements	a) Create an array b) Work with array methods c) Work with For Loops and While Loops d) Use array, loops and conditional statements to create a table	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
Objects and Frames	a) Define DHTML and describe its uses b) Explain objects, properties, and methods c) Document the object model d) Create customized objects, properties, and methods	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>
Event Models	a) Explain different methods for applying event handlers b) Work with properties of the event object various both models c) Work with Keyboard events	<ul style="list-style-type: none"> <li>• Homework/Lab assignments;</li> <li>• Written and Oral activities;</li> <li>• Quizzes and Exams;</li> <li>• Projects and Presentations</li> </ul>

**F. TEXT(S) AND MATERIALS:**

An appropriate JavaScript Text, such as:

**Text:** *JavaScript: Complete Concepts and Techniques (current edition)*

**Author:** Shelly, Cashman, Dorin, and Quasney

**Publisher:** Thompson Learning, Course Technology

**G. INFORMATION TECHNOLOGY:**

This course is an information technology course and will require extensive computer lab time both for teaching and performing assignments. Students will require network accounts with access to notepad and Internet Explorer as well as file storage space.