

SYLLABUS

DATE OF LAST REVIEW: 3/14/2023

CIP CODE: 11.0801

SEMESTER: Departmental Syllabus

COURSE TITLE: JavaScript

COURSE NUMBER: CIST0152

CREDIT HOURS: 3

INSTRUCTOR: Departmental Syllabus

OFFICE LOCATION: Departmental Syllabus

OFFICE HOURS: Departmental Syllabus

TELEPHONE: Departmental Syllabus

EMAIL:

Departmental Syllabus *KCKCC issued email accounts are the official means for electronically communicating with our students.*

PREREQUISITE(S): CIST-0137 HTML: Web Page Development

REQUIRED TEXT AND MATERIALS:

Please check with the KCKCC bookstore, <http://www.kckccbookstore.com/>, for the required texts for your particular class.

COURSE DESCRIPTION:

JavaScript examines client-side JavaScript programming techniques. Students learn how to seamlessly integrate JavaScript code with HTML and CSS to bring interactivity to web pages. Students will learn how to use the Document, Navigator, Window, Location and History Objects, set and read Cookies, create image rollovers, write functions, and validate forms. Students will learn to use JavaScript with Dynamic HTML. A basic introduction to AJAX will be included.

METHOD OF INSTRUCTION:

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:

- I. Introduction to JavaScript
 - A. Definition. Navigator, Location and History objects.
 - B. Syntax
 - C. Handling events
- II. Special Effects with Images and Arrays
 - A. Creating rollovers
 - B. Creating cycling banners
 - C. Building slide shows
- III. Functions and Programming with Windows
 - A. Opening and Closing Windows
 - B. Creating a control panel
 - C. Writing Functions
- IV. Frames
 - A. Crating and loading a dynamic frame
 - B. Keeping a page out of a frame and forcing a page into a frame
 - C. Using Variables, Expressions, Statements & Operator
- V. Forms and Form elements
 - A. Validating forms
 - B. Select menu items
 - C. Verifying passwords
- VI. JavaScript and Cascading Style Sheets
 - A. Dynamically updating a page
 - B. Moving an object
 - C. Modifying a CSS drop shadow and glow
- VII. Cookies and Security
 - A. Writing, reading and deleting cookies
 - B. Understanding State Information
- II. Debugging JavaScript
 - A. Understanding debugging
 - B. Error messages
 - C. Tracing errors
- V. Introduction to DOM
 - A. Creating Dynamic Pages
 - B. The document Object Model
 - C. Animation and the Image Object
- VI. Dynamic HTML
 - D. JavaScript and CSS
 - E. CSS Positioning
 - F. DHTML Menus
- VI. Using AJAX
 - D. Introduction to AJAX
 - E. AJAX and HTML
 - F. Requesting Server Data
 - G. Receiving Server Data

EXPECTED LEARNER OUTCOMES:

- A. The student will be able to define JavaScript.
- B. The student will be able to describe JavaScript syntax.
- C. The student will be able to define special effects with images and arrays.
- D. The student will be able to explain functions and programming with Windows.
- E. The student will be able to write simple Functions.
- F. The student will be able to summarize Frames.
- G. The student will be able to summarize the use of Forms.
- H. The student will be able to describe the use of JavaScript and Cascading Style Sheets
- I. The student will be able to explain key concepts of debugging JavaScript.
- J. The student will be able to distinguish different “cookies”.
- K. The student will be able to describe debugging.
- L. The student will be able to review the introduction to DOM.
- M. The student will be able to describe image caching
- N. The student will be able to describe Dynamic HTML.
- O. The student will be able to describe AJAX.

COURSE COMPETENCIES:

Upon successful completion of this course:

The student will be able to define JavaScript and describe JavaScript syntax.

- 1. The student will be able to define JavaScript.
- 2. The student will be able to describe JavaScript syntax.

The student will be able to define special effects with images and arrays.

- 3. The student will be able to create a rollover.
- 4. The student will be able to create an image array.
- 5. The student will be able to build a slide show

The student will be able to explain functions and programming with Windows.

- 6. The student will be able to write and use functions and programming in Windows.
- 7. The student will be able to create a control panel.
- 8. The student will be able, by programming, to update one window from another

The student will be able to summarize Frames.

- 10. The student will be able to summarize Frames.
- 11. The student will demonstrate the use of Variables, Expressions, Statements and Operator.

The student will be able to summarize the use of Forms.

- 12. The student will be able to describe the use of Forms.
- 13. The student will demonstrate the ability of validating a form and verifying a password.
- 14. The student will be the ability of using radio buttons and menu items.

The student will be able to describe the use of JavaScript and Cascading Style Sheets.

- 15. The student will describe the use of JavaScript and cascading Style Sheets.
- 16. The student will demonstrate the ability to move an object.
- 17. The student will demonstrate the ability to modify CSS in a web page.

- The student will be able to explain key concepts of debugging JavaScript.*
18. The student will be able to explain key concepts of debugging JavaScript.
 19. The student will be able to describe common errors and how to fix them.

- The student will be able to distinguish different “cookies”.*
20. The student will be able to demonstrate the ability to write, read and delete “cookies”.
 21. The student will be able to explain the use of saving state information.

- The student will be able to review the introduction to DOM.*
22. The student will be able to understand the concept of DOM.
 23. The student will be able to create dynamic pages.
 24. The student will explain the document Object Model.
 25. The student will be able to describe the image object.
 26. The student will be able to demonstrate the use of image object.

- The student will be able to describe Dynamic HTML.*
27. The student will be able to describe Dynamic HTML.
 28. The student will be able to identify the basic elements JavaScript and CSS.
 29. The student will be able to explain a DHTML menu.
 30. The student will be able to use CSS positioning in DHTML.

- The student will be able to describe AJAX.*
31. The student will be able to describe AJAX.
 32. The student will be able to demonstrate the use of simple AJAX.
 33. The student will be able to explain how to request and receive server data.

ASSESSMENT OF LEARNER OUTCOMES:

Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

SPECIAL NOTES:

This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student's progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college's policy on non-discrimination be

administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the disabilities services office at (913) 288 -7664.

All enrolled students at Kansas City Kansas Community College are subject to follow all rules, conditions, policies and procedures as described in both the Student Code of Conduct as well as the Student Handbook. All Students are expected to review both of these documents and to understand their responsibilities with regard to academic conduct and policies. The Student Code of Conduct and the Student Handbook can be found on the KCKCC website.