

## Washtenaw Community College Comprehensive Report

### WEB 230 Advanced JavaScript Effective Term: Winter 2019

#### Course Cover

**Division:** Business and Computer Technologies

**Department:** Digital Media Arts

**Discipline:** Web Design and Development

**Course Number:** 230

**Org Number:** 14500

**Full Course Title:** Advanced JavaScript

**Transcript Title:** Advanced JavaScript

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Time Schedule , Web Page

**Reason for Submission:** Three Year Review / Assessment Report

**Change Information:**

**Course description**

**Outcomes/Assessment**

**Objectives/Evaluation**

**Rationale:** Node.js has been added to the course and no information in the description states that. Also, after doing the course assessment it was clear that some outcomes had to be changed

**Proposed Start Semester:** Winter 2018

**Course Description:** In this advanced Web programming course, accessible, unobtrusive and standards-compliant coding techniques are stressed. Considerable emphasis is placed on JavaScript fundamentals, Node.js, AJAX, and MVC architecture. Students must be proficient in HTML5 and CSS and should have either successfully completed a basic programming class or have at least one year of prior programming experience.

#### Course Credit Hours

**Variable hours:** No

**Credits:** 4

**Lecture Hours: Instructor:** 60 **Student:** 60

**Lab: Instructor:** 0 **Student:** 0

**Clinical: Instructor:** 0 **Student:** 0

**Total Contact Hours: Instructor:** 60 **Student:** 60

**Repeatable for Credit:** NO

**Grading Methods:** Letter Grades

Audit

**Are lectures, labs, or clinicals offered as separate sections?:** NO (same sections)

#### College-Level Reading and Writing

College-level Reading & Writing

#### College-Level Math

#### Requisites

**Level II Prerequisite**

Need to have working knowledge of HTML5 and CSS and should have prior programming experience

#### General Education

**General Education Area 7 - Computer and Information Literacy**

Assoc in Arts - Comp Lit  
Assoc in Applied Sci - Comp Lit  
Assoc in Science - Comp Lit

## **Request Course Transfer**

**Proposed For:**

### **Student Learning Outcomes**

1. Implement event listening and event delegation techniques in Web applications.

**Assessment 1**

Assessment Tool: Programming project  
Assessment Date: Fall 2020  
Assessment Cycle: Every Three Years  
Course section(s)/other population: All sections  
Number students to be assessed: All students  
How the assessment will be scored: Departmentally-developed rubric  
Standard of success to be used for this assessment: 80% of students will score 70% or higher  
Who will score and analyze the data: WEB full-time faculty

2. Use the Document Object Model to interact with HTML elements.

**Assessment 1**

Assessment Tool: Programming project  
Assessment Date: Fall 2020  
Assessment Cycle: Every Three Years  
Course section(s)/other population: All sections  
Number students to be assessed: All students  
How the assessment will be scored: Departmentally-developed rubric  
Standard of success to be used for this assessment: 80% of students will score 70% or higher  
Who will score and analyze the data: WEB full-time faculty

3. Construct and execute CRUD (Create, Read, Update, Delete) operations on a database via command line and Node.js.

**Assessment 1**

Assessment Tool: Programming project  
Assessment Date: Fall 2020  
Assessment Cycle: Every Three Years  
Course section(s)/other population: All sections  
Number students to be assessed: All students  
How the assessment will be scored: Departmentally-developed rubric  
Standard of success to be used for this assessment: 80% of students will score 70% or higher  
Who will score and analyze the data: WEB full-time faculty

4. Retrieve and send data asynchronously via AJAX.

**Assessment 1**

Assessment Tool: Programming project  
Assessment Date: Fall 2020  
Assessment Cycle: Every Three Years  
Course section(s)/other population: All sections  
Number students to be assessed: All students  
How the assessment will be scored: Departmentally-developed rubric  
Standard of success to be used for this assessment: 80% of students will score 70% or higher  
Who will score and analyze the data: WEB full-time faculty

5. Construct web applications that use MVC architecture and templating.

**Assessment 1**

Assessment Tool: Programming project  
 Assessment Date: Fall 2020  
 Assessment Cycle: Every Three Years  
 Course section(s)/other population: All sections  
 Number students to be assessed: All students  
 How the assessment will be scored: Departmentally-developed rubric  
 Standard of success to be used for this assessment: 80% of students will score 70% or higher  
 Who will score and analyze the data: WEB full-time faculty

### Course Objectives

1. Apply the modern technique of event listening in Web application development.
2. Apply the modern technique of event delegation in Web application development.
3. Create anonymous functions that respond to events.
4. Find HTML elements using the document object model (DOM).
5. Change HTML elements using the DOM.
6. Create HTML elements using the DOM.
7. Remove HTML elements using the DOM.
8. Create database data using SQL commands.
9. Read database data using SQL commands.
10. Update database data using SQL commands.
11. Remove database data using SQL commands.
12. Send data to the server asynchronously using JavaScript.
13. Send data to the client asynchronously using JavaScript.
14. Create web applications using templating.
15. Utilize an MVC model in creating web applications.
16. Utilize an MVC controller in creating web applications.
17. Utilize an MVC view in creating web applications.

### New Resources for Course

N/A

### Course Textbooks/Resources

Textbooks  
 Manuals  
 Periodicals  
 Software

### Equipment/Facilities

Level III classroom

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
<b>Faculty Preparer:</b> <i>Scott Shaper</i>	<i>Faculty Preparer</i>	<i>Aug 03, 2018</i>
<b>Department Chair/Area Director:</b> <i>Ingrid Ankersen</i>	<i>Recommend Approval</i>	<i>Aug 06, 2018</i>
<b>Dean:</b> <i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Aug 07, 2018</i>
<b>Curriculum Committee Chair:</b> <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Aug 27, 2018</i>
<b>Assessment Committee Chair:</b> <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Aug 28, 2018</i>
<b>Vice President for Instruction:</b> <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Sep 03, 2018</i>