

# Washtenaw Community College Comprehensive Report

## WEB 210 Web Development II Effective Term: Fall 2023

### Course Cover

**College:** Business and Computer Technologies

**Division:** Business and Computer Technologies

**Department:** Digital Media Arts (new)

**Discipline:** Web Design and Development

**Course Number:** 210

**Org Number:** 14500

**Full Course Title:** Web Development II

**Transcript Title:** Web Development II

**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:** Updates are being made based on course assessment.

**Proposed Start Semester:** Fall 2023

**Course Description:** In this course, students learn advanced front-end coding and also are introduced to JavaScript and the DOM. The topics covered include media queries for responsive design, accessible web development using ARIA, CSS pre-processors, and front-end frameworks. Students will write valid, semantically accurate and accessible HTML5 code and will learn the basics of unobtrusive JavaScript.

### 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

**Prerequisite**

WEB 110 minimum grade "C"

## **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 HTML5 tags and attributes for page layout, with consideration given to proper document semantics, indexing, and performance.

### **Assessment 1**

Assessment Tool: Outcome-related portion of the relevant project

Assessment Date: Fall 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an average of 75% or higher in the rubric area relevant to this outcome.

Who will score and analyze the data: Departmental faculty

2. Implement CSS properties and values used in page layout, responsive design, and print-friendly output.

### **Assessment 1**

Assessment Tool: Outcome-related portion of the relevant project

Assessment Date: Fall 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an average of 75% or higher in the rubric area relevant to this outcome.

Who will score and analyze the data: Departmental faculty

3. Implement modern accessibility markup and techniques.

### **Assessment 1**

Assessment Tool: Outcome-related portion of the relevant project

Assessment Date: Fall 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an average of 75% or higher in the rubric area relevant to this outcome.

Who will score and analyze the data: Departmental faculty

4. Create valid graphical web page layouts that properly render cross-browser and cross-platform.

### **Assessment 1**

Assessment Tool: Outcome-related portion of the relevant project

Assessment Date: Fall 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an average of 75% or higher in the rubric area relevant to this outcome.

Who will score and analyze the data: Departmental faculty

5. Write unobtrusive JavaScript to modify document behavior and appearance.

**Assessment 1**

Assessment Tool: Outcome-related portion of the relevant project

Assessment Date: Fall 2025

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an average of 75% or higher in the rubric area relevant to this outcome.

Who will score and analyze the data: Departmental faculty

**Course Objectives**

1. Implement the HTML5 tags and attributes used in advanced coding. These include accessible forms and accessible data tables.
2. Create stylesheets using a CSS pre-processor.
3. Implement ARIA in web pages to enhance accessibility.
4. Implement JavaScript to control web page behavior and appearance.
5. Implement microdata to improve web page indexing, as well as other optimizations that improve search engine ranking.
6. Implement media-specific CSS for responsive designs and print-friendly output.
7. Implement code optimizations to improve performance / rendering speed.
8. Implement CSS animations using keyframes.
9. Implement CSS custom properties.
10. Implement layouts using flexbox.
11. Implement layouts using grid.
12. Implement layouts using a front-end framework.
13. Implement a JavaScript library.
14. Access the Document Object Model via JavaScript.
15. Add interactivity to a web page through event listeners.

**New Resources for Course**

**Course Textbooks/Resources**

Textbooks

Manuals

Periodicals

Software

**Equipment/Facilities**

Level III classroom

Computer workstations/lab

**Reviewer**

**Action**

**Date**

**Faculty Preparer:**

*Jason Withrow*

*Faculty Preparer*

*Oct 15, 2022*

**Department Chair/Area Director:**

<i>Jason Withrow</i>	<i>Recommend Approval</i>	<i>Oct 16, 2022</i>
<b>Dean:</b>		
<i>Eva Samulski</i>	<i>Recommend Approval</i>	<i>Nov 01, 2022</i>
<b>Curriculum Committee Chair:</b>		
<i>Randy Van Wagnen</i>	<i>Recommend Approval</i>	<i>Feb 08, 2023</i>
<b>Assessment Committee Chair:</b>		
<i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Feb 08, 2023</i>
<b>Vice President for Instruction:</b>		
<i>Victor Vega</i>	<i>Approve</i>	<i>Feb 09, 2023</i>

# Washtenaw Community College Comprehensive Report

## WEB 210 Web Development II Effective Term: Spring/Summer 2015

### Course Cover

**Division:** Business and Computer Technologies

**Department:** Digital Media Arts

**Discipline:** Web Design and Development

**Course Number:** 210

**Org Number:** 14500

**Full Course Title:** Web Development II

**Transcript Title:** Web Development II

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

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

**Reason for Submission:** Course Change

**Change Information:**

**Course description**

**Outcomes/Assessment**

**Objectives/Evaluation**

**Rationale:** Course is being updated to reflect changing industry standards and the skillset required for entry-level Web developers.

**Proposed Start Semester:** Spring/Summer 2015

**Course Description:** In this course, students learn advanced front-end coding and also are introduced to JavaScript and the DOM. The topics covered include media queries for responsive design, accessible web development using ARIA, CSS pre-processors, and front-end frameworks. Students will write valid, semantically accurate and accessible HTML5 code and will learn the basics of unobtrusive JavaScript. This course contains material previously taught in INP 170.

### 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

**Prerequisite**

WEB 110 minimum grade "C"

or

**Prerequisite**

INP 150 minimum grade "C"

or

**Prerequisite**

INP 150 test minimum score of 70%

or

**Prerequisite**

WEB 110 test minimum score of 70%

**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. Identify the HTML5 tags and attributes used in page layout, accessible markup and media-specific implementation as it regards to HTML5.

**Assessment 1**

Assessment Tool: Final Project

Assessment Date: Fall 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an overall average of 75% or higher.

Who will score and analyze the data: Departmental faculty

2. Identify the CSS properties and values used in page layout and advanced styling.

**Assessment 1**

Assessment Tool: Final Project

Assessment Date: Fall 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an overall average of 75% or higher.

Who will score and analyze the data: Departmental faculty

3. Implement modern accessibility techniques.

**Assessment 1**

Assessment Tool: Final Project

Assessment Date: Fall 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an overall average of 75% or higher.

Who will score and analyze the data: Departmental faculty

4. Create valid graphical web page layouts that properly render cross-browser and cross-platform using a variety of techniques, including implementing some layouts in front-end frameworks.

**Assessment 1**

Assessment Tool: Final Project

Assessment Date: Fall 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an overall average of 75% or higher.

Who will score and analyze the data: Departmental faculty

5. Write basic JavaScript to modify document behavior and appearance.

**Assessment 1**

Assessment Tool: Final Project

Assessment Date: Fall 2017

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: At least 80% of the students will achieve an overall average of 75% or higher.

Who will score and analyze the data: Departmental faculty

**Course Objectives**

1. Implement the HTML5 tags and attributes used in advanced coding. These include: accessible forms, accessible data tables, and media-specific CSS for responsive designs.
2. Create web pages using a CSS pre-processor and also involving a front-end framework.
3. Implement ARIA in web pages to enhance accessibility.
4. Implement JavaScript to control web page behavior and appearance.

**New Resources for Course**

**Course Textbooks/Resources**

Textbooks  
Manuals  
Periodicals  
Software

**Equipment/Facilities**

Level III classroom  
Computer workstations/lab

**Reviewer**

**Action**

**Date**

**Faculty Preparer:**

*Jason Withrow*

*Faculty Preparer*

*Jan 08, 2015*

**Department Chair/Area Director:**

*Jason Withrow*

*Recommend Approval*

*Jan 09, 2015*

**Dean:**

*Kimberly Hurns* *Recommend Approval* *Jan 13, 2015*

**Curriculum Committee Chair:**

*Kelley Gottschang* *Recommend Approval* *Feb 10, 2015*

**Assessment Committee Chair:**

*Michelle Garey* *Recommend Approval* *Feb 11, 2015*

**Vice President for Instruction:**

*Bill Abernethy* *Approve* *Feb 16, 2015*