## Montgomery County Community College CIS 140 Client-Side Web Development 3-2-2

## **COURSE DESCRIPTION:**

Students will learn the JavaScript programming language and how to use JavaScript to build dynamic web sites that take advantage of modern Web browser features. Topics will include the Document Object Model (DOM), XML and JSON data formats, Hypertext Transfer Protocol (HTTP) and the XMLHttpRequest object. Students will learn how to combine these and other technologies to build Ajax applications.

#### **REQUISITES:**

Previous Course Requirements

- \* CIS 111B Computer Science II: Object-Oriented Programming
- \* CIS 114 Web Design and Development

# Concurrent Course Requirements None

LEARNING OUTCOMES Upon successful completion of this course, the student will be able to:	LEARNING ACTIVITIES	EVALUATION METHODS
Design and develop interactive Web pages utilizing the JavaScript programming language.	Assigned Readings Demonstration and Practice Lecture/Discussion Hands-On Labs	Final Project Student Presentations Written Examinations Hands-On Labs
2. Design and develop dynamic, useable, and engaging Web sites that combine and leverage the unique features of JavaScript, the Document Object Model (DOM), and Cascading Style Sheets (CSS).	Assigned Readings Demonstration and Practice Lecture/Discussion Hands-On Labs	Final Project Student Presentations Examinations Hands-On Labs

LEARNING OUTCOMES	LEARNING ACTIVITIES	EVALUATION METHODS
3. Build interactive,	Assigned Readings	Final Project
browser-based, Web	Demonstration and	Student Presentations
applications that	Practice	Examinations
exchange information	Lecture/Discussion	Hands-On Labs
with a Web server using	Hands-On Labs	
the XMLHttpRequest		
object and demonstrate		
Ajax development		
techniques.		

4. Build complex browserbased applications that utilize popular Web services and Ajax frameworks.

### LEARNING MATERIALS:

Vodnik & Gosselin. (2014) JavaScript: The Web Warrior Series. Cengage, 6th edition, Cengage Learning, ISBN: 978-13050784444

Other learning materials may be required and made available directly to the student a) å/[ | çãæc@ C[ ||^\*^q Lãa| æð å • æ) å/[ | &[ ` | • ^ { ænagement system.

### **COURSE APPROVAL:**

Prepared by: Alan Evans Date: January, 2001
Revised by: Jason Wertz Date: February, 2010
Revised by: Kathleen Kelly Date: 7/14/2012

VPAA/Provost or designee Compliance Verification:

Victoria Bastecki-Perez, Ed.D. Date: 9/10/2013

Revised by: Patricia S. Rahmlow Date: 5/2017

VPAA/Provost or designee Compliance Verification:

Victoria L. Bastecki-Perez, Ed.D. Date: 8/21/2017

Revised by: Marie Hartlein

VPAA/Provost or designee Compliance Verification:

Date: 10/1/2019

Date: 2/12/2020



This course is consistent with Montgomery County Community College's mission. It was developed, approved and will be delivered in full compliance with the policies and procedures established by the College.