

Revised Fall 2016

# ITP140

## Client Side Scripting

### COURSE OUTLINE

#### Prerequisites:

ITD 110 and ITP100 or instructor permission

#### Course Description:

Introduces students to the principles, systems, and tools used to implement the client side of Web applications. Students will develop Web applications utilizing client-side scripting languages along with auxiliary tools such as Ajax needed for such applications. The follow-on course, ITP225 will concentrate on the server-side applications.

Client side scripting is a very important tool in Web programming. This course covers how to validate Web form input with JavaScript, how to integrate jQuery with the JavaScript, and an introduction to jQuery UI and jQuery Mobile. Although there is not enough time in the class to become totally proficient in these, the course will give the student the fundamentals to continue to pursue these topics on their own and in the follow up ITP225 class.

**Semester Credits: 3 Lecture Hours: 3 Lab/Recitation Hours: 0**

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## Course Outcomes

**At the completion of this course, the student should be able to:**

- Understand how to integrate JavaScript into HTML Web page code
- Be able to write and run JavaScript code
- Understand how to debug JavaScript
- Be able to utilize constructs including decisions, loops and methods
- Thoroughly understand the Document Object Model
- Work with JavaScript events
- Validate Web forms with JavaScript, providing feedback to the user
- Understand the different frameworks and toolkits available for Web scripting
- Work with simple jQuery applications
- Understand how to create and use plugins
- Be able to utilize jQuery UI
- Be able to write simple jQuery Mobile applications



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## Required Materials:

NetBeans Software (Open source – details supplied by the instructor)

## Textbook:

**Murach's JavaScript and jQuery** by Ruvalcaba and Murach, Mike  
Murach and Associates, 2012, ISBN 978-1-890774-70-7.

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The following supplementary materials are available:

1. Safari Online is available for students to view other Java books online for free
2. Internet searches are a fundamental source for auxiliary materials on Java
3. Video movies provided by the instructor.



## ITP140 Client Side Scripting

Topical Description: (Outline chapters and sections to be covered in the book – may include timeline)

DATE		READING
Week 1	Mod 0 Intro to Class	Ch 1
Week 2	Mod 1 JavaScript objects, functions, events	Ch 2-3
Week 3	NO CLASS Labor Day. Finish Mod 1	
Week 4	Mod 2 Test, debugging, arrays	Ch 4-5
Week 5	Finish Mod 2	
Week 6	Mod 3 Scripting the DOM	Ch 6
Week 7	Finish Mod 3	
Week 8	Mod 4 jQuery, effects and animations	Ch 7-8
Week 9	Finish Mod 4	
Week 10	MIDTERM EXAM	
Week 12	Mod 5 jQuery DOM and traverse methods	Ch 9
Week 13	Finish Mod 5	
Week 14	Mod 6 jQuery Forms, Data Validation, Plugins	Ch 10-11
Week 15	Finish Mod 6	
Week 16	Mod 7 jQuery Mobile	Ch 17-18
Week 17	Final Exam and Present Projects	



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## Notes to Instructors

(List information about optional topics, departmental exams, etc)

1. The depth of the Ajax and jQuery materials will be determined by a survey of student background. A midterm exam is required.
2. The project is designed to pull all of the topics for the course together.

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