IT 411/Scripting for Interactive Systems Syllabus

Updated January 7, 2016

Course Description

From the course catalog: "Introductory scripting for developing interactive web pages. Overview of HTML and CSS. Elementary programming concepts using JavaScript for learning control structures, functions, arrays, and object use. User interface development concepts include event handling and use of JavaScript libraries such as jQuery. Review of web clients, servers and architecture. **Prerequisite: None**"

More specifically, we will discuss client-side scripting using the JavaScript language. Client-side scripting works in the context of documents whose structure is created with HTML and whose appearance is managed by CSS. Because all three of these languages are supported directly by browsers there will be no need to download any software.

Course web site

All course materials will be available on DePaul's [D2L web site](). If you are not registered in the course you will not be able to see them.

Textbook and tools

The required textbook is "JavaScript & jQuery: The Missing Manual (**3rd edition**)", David Sawyer McFarland, O'Reilly, 2014 (ISBN: 978-1491947074).

> To read an electronic copy of the book, please go to [the DePaul library web site](). On that page, find the heading "Library Tools" and beneath it click on the link "A-Z Databases and Journals". On the page that comes up click on the link "A-Z Database List". Next click on the letter "S" and finally on the link "Safari Books Online". In the search box appearing on the page that now loads type in "JavaScript & jQuery" and you should see a short list appear on which you will find the title of our text. Click on that. At some point in this process you may be asked to log in with your Campus Connect username and password.

The required classroom/online response system we will use for this class will be the Top Hat ([www.tophat.com]()) classroom response system in class and online. You will be able to submit answers to in-class questions using Windows, Apple or Android smartphones and tablets, laptops, or via text message (SMS).

An email invitation will be sent to you, but you can also visit http://tinyurl.com/THStudentRegistration for the Student Quick Start Guide which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

Top Hat will require a subscription. There are three options to choose from:
- $24 for 4 months of unlimited access
- $36 for 1 year of unlimited access
- $72 for 5 years of unlimited access

The required online discussion tool we'll be using in this course is the **Packback Answers platform.** It will be used for online discussion about our textbook, my mini-book JavaScript Decomposed, class topics and extra help outside of class.

To purchase Packback Answers:

1. **Check your school email inbox for an email from Packback**
2. **Click the "Get Packback Answers" link in that email**
3. **Select your purchase, and checkout**
4. **You'll be emailed your login information to your school email address**

To start started posting:

1. **Go to Answers.Packbackbooks.com**
2. **Select your class Textbook Study Group from the dropdown menu**
3. **Log in with the login info you received via email, and begin posting!**

The JavaScript Decomposed mini-book can be downloaded from TBD.

An optional textbook you might investigate is CSS3: The Missing Manual, David Sawyer McFarland.

Learning outcomes

By the end of this course students should be able to:

- develop interactive web pages using JavaScript
- make use of common control structures for developing simple programs
- use an API (application program interface) to create well-designed and responsive web pages
- generate layouts for an indeterminate number of display elements

Schedule of topics

This is an approximate version of the order of topics. Things will make a lot sense IF you read the chapters before coming to class or watching the lectures.

Week	Topic	Reading

		Chapter 1 Chapter 2 except the sub-section on arrays Chapter 3, the first sub-section and the first tutorial Chapter 4, the small sub-section on understanding the DOM
1	Overview of HTML and CSS; Introduction to programming and JavaScript; the DOM	
2	The grammar and semantics of JavaScript; basic jQuery	Chapter 2, pp. 59-69 Chapter 4 Chapter 15
3	Adding logic and control	Chapter 3
4	Deeper into jQuery	Chapter 4
5	Event programming with jQuery	Chapter 5
6	Animation and effects	Chapter 6
7	Common JQuery tasks (like improving images and navigation)	Chapters 7
8	Enhancing web forms	Chapter 8
9	Expanding the interface	Chapter 9
10	Forms Revisited and Introducing Ajax; Overview of server-side scripting	Chapter 10 and 11
11	Wrapping it all up	Chapter 13 and 14

Important dates

Our class meets every Thursday, 5:45pm to 9pm, with a 15-minute break at 7:15 to 7:30. At the moment the class is listed as meeting in room 216 of the CDM building (243 S. Wabash) but please check that shortly before the first class as room assignments sometimes change at the last minute. Validates these always refer to the academic calendar.

- First class: January 7th
- Last day to drop without penalty: January 17th
- Last day to drop: February 21st (no refund)
- Last class: March 17th
- Final project: March 17th

Assignments and grading

There will be mostly weekly programming assignments and a final project. There will not be a midterm or final exam.

Each assignment submission has a deadline and may lose points if not turned in on time. Unless otherwise stated or agreed, a program in an assignment loses 20% each day it is submitted past the deadline and so drops to zero on the sixth day. If you know a submission is going to be late, **let me know** as I sometimes will make an accommodation. A submission must be made through the D2L drop box for it; emailed assignment submissions are not accepted.

The homework assignments will comprise 70% of the grade, the final project the other 20% and attendance and Top Hat and Packback Answers participation the other 10%. The resulting total percentage will be translated into a letter grade as follows:

Letter	Percentage range
A	95-100
A-	90 - <95
B+	87 - <90
B	83 - <87
B-	80 - <83
C+	77 - <80
C	73 - <77
C-	70 - <73
D+	65 - <70
D	60 - <65
F	<60

Participation policy

For students in the in-class section, attending every class is required. Missing class may drop your final grade by a full letter. For in-class students, attendance is taken at the start of class using Top Hat. For in-class and online students participation will be measured via TopHat and Packback answers.

Academic Integrity Policy

This course will be subject to the academic integrity policy passed by faculty. More information can be found at http://academicintegrity.depaul.edu/. **I strongly recommend that you read this!** It explains both your rights and your responsibilities as a student on matters of academic integrity.

Communication

All communication will be done in one of three ways:

- **Announcements in class**. You are responsible for anything and everything I say in class.
- **Email from me. You can send email to me at mschray@cdm.depaul.edu**.
- **Announcements on the D2L web site**.

Feel free to email me.

Office location and hours

My office hours can be found on [my CDM homepage](#).

Plagiarism

The university and school policy on plagiarism can be summarized as follows: Students in this course should be aware of the strong sanctions that can be imposed against someone guilty of plagiarism. If proven, a charge of plagiarism could result in an automatic F in the course and possible expulsion. The strongest of sanctions will be imposed on anyone who submits as his/her own work any assignment which has been prepared by someone else. If you have any questions or doubts about what plagiarism entails or how to properly acknowledge source materials consult the instructor.

Incomplete

An incomplete grade is given only for an exceptional reason such as, for example, a death in the family or a serious illness. Any such reason must be documented. Any incomplete request must be made at least two weeks before the final and approved by the Dean of the College of Computing and Digital Media. Any consequences resulting from a poor grade for the course will not be considered as valid reasons for such a request.

Resources for Students with Disabilities

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter (preferably within the first week of class) and make sure that you have contacted either the PLuS Program, for Learning Disabilities and/or AD/HD, or the Office for Students with Disabilities, for all other disabilities, at:

Student Center, LPC, Suite #370
Phone number: (773) 325-1677
Fax: (773) 325-3720
TTY: (773) 325-7296