Course Syllabus: IT 5443 Web Technologies and Applications
Kennesaw State University

Jack Zheng Spring 2019 - Last updated: Jan 7, 2019

Note: This syllabus provides a general guideline for the conduct of this course. However, deviations may be necessary and will be notified during the semester.

Course Overview

This course introduces World Wide Web as a fundamental information and application platform for today's information systems. Students will examine core aspects of web technologies and web applications, and will develop usable websites. Independent research on an assigned topic is also required.

This course is part of the MSIT foundation courses that aim to provide a quick coverage of fundamental IT knowledge that is needed for later MSIT studies.

Course objectives/learning outcomes

1. Explain different components and technologies of World Wide Web as a platform.
2. Design and develop websites using fundamental web languages, technologies, and tools.
3. Distinguish between server-side and client-side web technologies.
4. Describe various web technology and application development issues and trends.
5. Conduct independent research on a subject related to the course material.

Course features (spring 2019)

- Hands-on experience with Microsoft Azure cloud platform.
- Programming with JavaScript and PHP.

Prerequisites

- IT 5413 Software Design and Development

Class meet time and location

CRN 14359/01 M 6:30-7:45 J262 (Hybrid) CRN 14363/W01 (Online)

Instructor

Dr. Jack G. Zheng, Associate Professor, IT Department

Office: J-383   Email: gzheng@kennesaw.edu (**preferred**)   Phone: 470-578-5036

Office hours: M 2-6PM in office, online, or by appointment

Email Policy

1. Email is a great way of communication if you write the email subject like this:
IT 5443 – *[put your real subject here]*

Emails will be responded within the next business day if the subject line conforms to the format above, and directly sent to my KSU email account above.

2. Per FERPA regulation, please use your university email to communicate with instructors. This can verify you identity and protect privacy. I reserve the right not to reply any email that I cannot verify sender's identity.

Emails without proper subject line or unverified sender address are likely to be categorized as spam, and are NOT guaranteed to be replied.

Teaching style and belief

Generally I follow the principles of active learning, which emphasizes on learners' active participation and exploration. Please get more details here:

- http://jackzheng.net/teaching/teaching-belief.cshtml
- http://jackzheng.net/teaching/student-comments.cshtml

Course Conduct

Course content/topics

The course content is basically organized by learning modules. The following table is only a tentative overview of the course content and schedule. The more detailed and most updated schedule will be provided in a separate file in D2L.

Module #	Learning Module	Topics/Activities
1	Web Overview	Web as a platform and its components
2	HTML	HTML basics
3	CSS	Style sheets
4	JavaScript	JavaScript language basics
5	DHTML	Dynamic page using DOM, CSS, and JS
6	Forms	Form processing at the client side
7	UX	User experience, web usability
8	Server Side	Web server, server side processing, PHP basics
9	HTTP Request	PHP processing HTTP request
10	Web Security	Web security at different levels
11	Web 2.0	Web 2.0 ideas, applications, and technologies
12	Mobile Web	Mobile web

Each module provides a study guide which detailed learning objectives, readings, and tasks. It's critical to follow these study guides. The time to complete each module varies. Generally, modules are designed on an average of 8 to 12 hours to complete (for most of the people who have met the prerequisites), depending on individual background and prior experiences. Generally all module tasks should be completed within one week from the corresponding class date, however, some **required readings/research tasks** must be completed **by the planned class date**. Please follow the study guides closely.

Grading

Item	Points
Quiz (5)	50
Projects/Assignments (3)	30
Research	20
Total	*100*

Total Points	Grade
=>90	A
=>80	B
=>70	C
=>60	D

More details about each item will be provided in "**Student Works**" content sections in the D2L Brightspace. Generally all grades should be available within 10 days from the due date.

Course Materials and Resources

Official course websites: D2L Brightspace https://kennesaw.view.usg.edu

- Refer to this website for all official teaching and learning materials and activities.
- It's important to know how to use this learning management system for: following learning modules, submitting assignments, checking grades and feedback, downloading files, participating discussion boards, etc.
- Please check the course site regularly for important announcements and other issues.

Learning materials

- Open learning materials: http://it5443.azurewebsites.net - This course is part of the Affordable Learning Georgia Textbook Transformation Grants which aim to lower the cost of learning materials. All materials presented on this site are free to the public (but may not be most recently updated).

- Required textbook: none. There is no textbook assigned. All readings are assigned in each learning module.
- Recommended general learning resources:
  - https://www.w3schools.com
  - https://developer.mozilla.org
  - http://html.net

Required software/hardware

- Code editor: I recommend Notepad++ http://notepad-plus-plus.org/ or VS Code https://code.visualstudio.com
- Web hosting/server: Microsoft Azure/IIS https://azure.microsoft.com (basic tier free subscription)
- Other software: software that can open Word/Power Point/PDF files and ZIP files.

General Class Policies for all of Dr. Jack Zheng's Courses

‼ Please view the separate document online at https://goo.gl/G0Qd83 or request a copy by email.

University Policies

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