ISM 6225 Application Development for Analytics

SYLLABUS

Office Hours : Hour before scheduled online class and by appointment

Pre-requisites : None

Resources : GitHub: https://github.com/. Visual Studio Code can also be used on Mac or Windows for additional learning: https://code.visualstudio.com/download

Textbooks : We will only use a few chapters from each book, but cover-to-cover walkthrough is recommended

1. The HTML and CSS Workshop [PDF] / ISBN: 978-1-83882-453-2, L. Coulson et. al., 2020, Packt Publishing, e-book available from the USF library
2. Beginning JavaScript [e-book] : Jeremy McPeak, 2015, John Wiley & Sons, Inc., e-book available from the USF library - https://ebookcentral.proquest.com/lib/usf/detail.action?docID=1895134
3. Foundation Dynamic Web Pages with Python: Create Dynamic Web Pages with Django and Flask [PDF], David Ashley, ISBN-13 (pbk): 978-1-4842-6338-9, 2020, Apress, e-book available from the USF library

Optional books (used for the OSI model section, power point slides are available on Canvas)

1. (AD) Business data communications and IT infrastructures (3rd Edition) / Manish Agrawal & Clinton Daniel

Course Objectives

This course will introduce distributed information systems including presentation technologies such as HTML, CSS, JavaScript, as well as data visualization frameworks. We will introduce students to popular web application development frameworks and the network stack so students can analyze, design, implement, and manage distributed information systems. In this process the student will develop skill in applying the principles of telecommunications and networks and explore how to bring their data science models to a wide audience.

Learning Outcomes

1. Develop proficiency in using html and css for web user interfaces
2. Introduce Java Script (JS) and JS frameworks for client-side user interaction
3. Introduce data visualization technologies
4. Introduce web application development frameworks

5. Introduce networking stack (ex. TCP/IP)
6. Understand networking technologies used to architect distributed systems from application components

Logistics

1. This is a synchronous Online class. All class meetings will take place via scheduled MS Teams sessions.
2. All students should have access to an installation of Visual Studio Code. If needed, please seek an appointment with the course instructor to complete the required setup.
3. Faculty teaching this class are creating video walk-throughs to help students with the hands-on components. These videos are designed to be viewed and followed before class assignments to help students overcome any technical challenges with implementing the concepts covered. Links to these videos are available on Canvas.
4. All assignments are Individual. There is no group work in this course.
5. Please use the term “ISM 6225” in the subject line of your email (no spaces) to help me filter emails.
6. Readings and assignment deliverables are specified on the course site on Canvas.
7. Deliverables are due by the end of day on the due date (usually this means 11:55pm).
8. Make up opportunities are not likely to be necessary in this class.

Business Continuity

In the event of an emergency, USF may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Teams, and email messaging and/or an alternate schedule. It’s the responsibility of the student to monitor Canvas for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

Presentation

To help build your communication skills, each student will be required to present a recording of the Python Flask application project in Assignment 3. Please use the instructions posted in Canvas for the recorded presentation details.

Grading

Activity	Default Type	Total weight
Assignment 1	Individual	30%
Assignment 2	Individual	30%
Assignment 3	Individual	30%
Module 1 Quizzes	Individual	9%
Feed forward	Individual	1%

Grading Policy

Total%	Grade	Total%	Grade	Total%	Grade	Total%	Grade
>=95	A+(max 10% of class)[1]	>=84	B+	>=74	C+	>=63	D+
>=90	A	>=80	B	>=70	C	>=60	D
>=87	A-	>=77	B-	>=67	C-	<60	F

USF Core Syllabus Guidelines

Details are available on the University's Core Syllabus Policy Statements page: https://www.usf.edu/provost/faculty/core-syllabus-policy-statements.aspx

Tentative course outline

See Canvas for Details.

[1] At instructor's discretion, among the top students in the class