Cover Sheet: Request 10981

JOU 4XXX - Advanced Web Apps for Communicators

Info	
Process	Course New Ugrad/Pro
Status	Pending
Submitter	Spiker,Theodore D tspiker@jou.ufl.edu
Created	4/27/2016 8:47:46 AM
Updated	10/5/2016 8:58:59 AM
Description	Second course in development of two-course sequence in coding for
of request	journalists/media. Designed to teach advanced skills.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	JOU - Journalism 012304000	Spiker, Theodore D		4/27/2016
Deleted Web	Apps 2 syll	abus.pdf	1		4/27/2016
College	Approved	JOU - College of Journalism and Communications	Weigold, Michael Fredrick		4/29/2016
Deleted Web					4/27/2016
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Case, Brandon	Added to the September agenda.	6/1/2016
No document	changes				
University Curriculum Committee	Recycled	PV - University Curriculum Committee (UCC)	Case, Brandon	Please obtain a consult from Digital Worlds Institute and the Department of Computer and Information Systems and Engineering.	9/21/2016
Deleted Web	Apps 2 syll	abus.docx		· · · · · · · · · · · · · · · · · · ·	9/12/2016
College	Approved	JOU - College of Journalism and Communications	Weigold, Michael Fredrick	DW consultation complete, note indicating DW approval appended	10/3/2016
Added Web A		ous.docx			9/30/2016
Added DW re					10/3/2016
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			10/3/2016
No document	changes				
Statewide Course Numbering System					
No document	changes				
Office of the Registrar No document	changes				
no uocument	changes				

Step	Status	Group	User	Comment	Updated		
Student							
Academic							
Support							
System							
No document	changes						
Catalog							
No document changes							
College							
Notified							
No document	changes						

Course|New for request 10981

Info

Request: JOU 4XXX - Advanced Web Apps for Communicators Description of request: Second course in development of two-course sequence in coding for journalists/media. Designed to teach advanced skills. Submitter: Spiker,Theodore D tspiker@jou.ufl.edu Created: 9/30/2016 3:17:40 PM Form version: 2

Responses

Recommended PrefixJOU Course Level 4 Number xxx Lab Code None Course TitleAdvanced Web Apps for Communicators Transcript TitleAdv Comm Web Apps Effective Term Earliest Available Effective YearEarliest Available Rotating Topic?No Amount of Credit3

Repeatable Credit?No

S/U Only?No Contact Type Regularly Scheduled Degree TypeBaccalaureate

Weekly Contact Hours 3 Category of Instruction Advanced Delivery Method(s)On-Campus

Course Description This course adds server-side (back-end) Web skills to the clientside (front-end) Web skills students have developed, with the goal of developing Web apps that include a server-side component to support presentations of stories/data for media. Web scraping is also covered to enable journalists to gather open data **Prerequisites** Prerequisite: Introduction to Web Apps for Communicators

Co-requisites None

Rationale and Placement in Curriculum Coding to develop digital sites and interactive for media and communications companies is a desirable (and some would argue essential) skill for students. This class teaches students advanced skills for media- and journalism-specific projects.

Course Objectives 1. Use SQL (Structured Query Language) to create databases and to read/write data.

2. Scrape websites to collect public data that can be stored, analyzed and reused.

3. Write custom programs in Python.

4. Create server-side Web apps suitable for media industries using Flask, a Python framework. 5. Solve problems in setting up and using command-line tools.

Course Textbook(s) and/or Other Assigned ReadingWeb Scraping with Python:

Collecting Data from the Modern Web, by Ryan Mitchell (O'Reilly, 2015) ???Advanced Web Apps syllabus / McAdams 2

Flask Web Development: Developing Web Applications with Python, by Miguel Grinberg (O'Reilly, 2014)

Weekly Schedule of Topics Week 1 | Jan. 5

Introduction to the course. Tools, technologies and outcomes. Week 2 | Jan. 12 Introduction to SQL and databases. Introduction to XAMPP, an Apache Web server that runs on your computer. Week 3 | Jan. 19 SQL and databases, part 2. More advanced SQL queries; security issues. Week 4 | Jan. 26 Your own SQL database project. ?????Advanced Web Apps syllabus / McAdams 5 Week 5 | Feb. 2 Introduction to Python. Week 6 | Feb. 9 Introduction to Web scraping with Python and the BeautifulSoup library. Using PIP and virtualenv. Week 7 | Feb. 16 Web scraping, part 2. More Python. Week 8 | Feb. 23 Your own Web scraping project. Week 9 | March 1 Spring Break — class does not meet. Week 10 | March 8 Creating Web apps with Python; introduction to Flask, a Web framework. Week 11 | March 15 Flask: Basic application structure and templates. Week 12 | March 22 Flask for Web forms and databases. Week 13 | March 29 Your own Flask project. Week 14 | April 5 Student's individual Web project. Week 15 | April 12 Student's individual Web project. Week 16 | April 19 Student's individual Web project. Grading Scheme Quizzes: 20 percent Assignment: 50 percent Presentations: 10 percent Final project: 10 percent Attendance/participation: 10 percent

Quizzes

There will be several quizzes on the assigned reading. Quizzes are in Canvas and are open-book. On the Course Schedule page on the course website (see above), the readings covered on that week's quiz are listed under the same week as the quiz. Deadlines: In Canvas.

Assignments

Assignments are listed and LINKED on the Course Schedule page on the course website (see above). Exact deadlines: In Canvas. For many of the assignments, students will begin the work during class. Students will need to work on all assignments outside class to complete them. All students are encouraged to come to the scheduled workshop hours for help with the week's assignment. Students are encouraged to help one another on assignments but NOT to give solutions to others. Presentations

Twice during the semester, each student will be responsible for presenting an interesting Web app or website that uses back-end technologies. The student is responsible for finding and "deconstructing" the app/site and telling the class what is interesting,

admirable, especially cool, etc. The purpose of the presentation is to inspire the class and show how current Web technologies and techniques are used. Students are encouraged not only to view source but also to find "how we made this" articles or interviews about the app/site. Students might contact the makers of the app/site and interview them. Think of this as a show-and-tell that educates the whole class and offers creative inspiration.

Final project

In the final three weeks of the course, each student will produce and complete a Web project suitable for your professional portfolio. The project must include at least two of the following: Python, Web scraping, a SQL database, a Flask app. It may also include Web forms, JavaScript, Bootstrap and any additional technologies you desire. The project must be live and functional at your domain by the deadline.

Attendance and participation

Points will be subtracted if you miss more than one (1) class meeting, are chronically late, or repeatedly show inattention. Participation is expected; you will be working on assigned projects during class. Absences due to illness, serious family emergencies, special curricular requirements, etc., will be handled in accordance with UF policies, to which you will find a link on page 2 of this syllabus.

Additional Links and PoliciesWeb hosting

Students must acquire full-service Web hosting. The recommended provider is Reclaim Hosting. Your professor receives no kickbacks or other deals from Reclaim. Shared hosting costs \$25/year and includes registration for one domain. Domains must be renewed yearly or they will expire. Other hosting companies are acceptable if they provide SSH access and provide MySQL (or MariaDB) via phpMyAdmin.

> https://reclaimhosting.com/

Laptop

All students in this course must own a laptop they can bring to class with them. A tablet will NOT be sufficient for this course. Any operating system is okay, but Mac OSX is strongly preferred. For assistance with your operating system or hardware, please use the UF Computing Help Desk if you cannot solve a problem. Bring your power cord to class with you.

Headphones or earbuds

During class, you might find you need to watch or re-watch videos. For this reason, please be sure to always bring headphones or earbuds with you.

Students with Disabilities

Students requesting accommodations must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student, who must then provide this documentation to the instructor when requesting accommodations. UF Disability Resource Center

> https://www.dso.ufl.edu/drc/

Course Requirements

Read this entire document in the first week of classes. If anything is not clear to you, ask me for clarification no later than 24 hours after the first class meeting (or no later than 24 hours after your first class if you add during drop/add). This syllabus is a contract between you and me.

Please make sure to check the course website at least once a week. If you rely only on a printed or downloaded copy, you may miss a change in the schedule.

> WEBSITE: https://webappsplus.wordpress.com/

Course Evaluations

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online: https://evaluations.ufl.edu Evaluations are typically open during the final weeks of the semester. Students will be given specific dates when they are open. Summary results of these assessments are available to students: https://evaluations.ufl.edu/results/

Instructor(s) Mindy McAdams

Advanced Web Apps for Communicators

JOU 4930 | Spring 2016 | Section 1211 | 1070 Weimer Hall Tuesdays 11:45 a.m.-2:45 p.m. (periods 5, 6 and 7)

Instructor:	Mindy McAdams, Professor, Department of Journalism
Email:	mmcadams@jou.ufl.edu
Office:	3049 Weimer Hall
Office hours:	Wednesdays 1–3 p.m. And by appointment
Open workshop	: Fridays noon–3 p.m.
Office phone:	(352) 392-8456 (NOTE: Email is better. Much better.)
WEBSITE:	https://webappsplus.wordpress.com/

Course Description

This course adds server-side (back-end) Web skills to the client-side (front-end) Web skills students have developed in the preceding course, with the goal of developing Web apps that include a server-side component to support presentations of stories and data for media organizations. Web scraping is also covered to enable journalists to gather open data from the Web for analysis.

Prerequisite: Introduction to Web Apps for Media

Course Objectives

In this course, students learn how to:

- 1. Use SQL (Structured Query Language) to create databases and to read/write data.
- 2. Scrape websites to collect public data that can be stored, analyzed and reused.
- 3. Write custom programs in Python.
- 4. Create server-side Web apps suitable for media industries using Flask, a Python framework.
- 5. Solve problems in setting up and using command-line tools.

Attendance and Attitude

Students are expected to show respect for one another and for the instructor. Attendance and arriving on time for class are necessary. *Lateness and unexcused absences will result in a lower final grade* (see details below for point breakdown). If you have been absent, you are responsible for finding out about any missed material by consulting another student and/or going to the instructor's office hours. These matters will not be handled via email.

Mobile devices must be turned OFF and placed out of sight during class. Do not check text messages, social media, email, etc., during class, as your instructor considers this quite rude and therefore grounds

for disciplinary action. Give your full and undivided attention to anyone who is speaking in class, including your fellow students.

Students are expected to use a laptop computer during class. However, if you are seen checking social media or any other sites unrelated to the immediate topics being discussed in class, penalties may be imposed. Penalties range from a warning (first offense) to grade point deductions, starting at 10 points on one assignment for the second offense and up to half of a letter grade for the course for chronic issues. Please give your full attention to the class while you are in the classroom.

See Attendance and participation under "Course Requirements" below for grading specifics.

UF Attendance Policies

<u>https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx</u>

Course Deadlines and Makeup Work

Late assignments are not accepted unless an emergency can be documented. This means that an assignment submitted late is graded as a zero. Assignments are not accepted via email unless requested by the instructor. If an illness or a personal emergency prevents you from completing an assignment on time, advance notice and written documentation are required. No work for "extra credit" is accepted. If advance notice is not possible because of a genuine emergency, written documentation will be required.

NOTE: Assignment deadlines in Canvas are usually set for 11:59 p.m. If you submit after the deadline, your assignment is late.

Academic Dishonesty

Academic dishonesty of any kind is not tolerated in this course. It will be reported to the student's department chair AND to the university's Dean of Students—and if the student is found guilty through the UF adjudication process (6C1-4.042,

<u>https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/)</u>, it will result in a failing grade for this course. A formal report of the offense will be filed with the university's Dean of Students.

Academic dishonesty includes, but is not limited to:

- Using any work done by another person and submitting it for a class assignment.
- Submitting work you did for another class.
- Copying and pasting code written by another person in place of solving the assigned problem on your own. (Note: In some cases an assignment will instruct you to use code written by others. Those cases are exempt.)
- Sharing code written by you with another student.

UF Student Honor Code

> https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/

Required Books and More

Students are required to read several assigned chapters and complete exercises in these two books:

Web Scraping with Python: Collecting Data from the Modern Web, by Ryan Mitchell (O'Reilly, 2015)

Flask Web Development: Developing Web Applications with Python, by Miguel Grinberg (O'Reilly, 2014)

All students are expected to possess their own copy of each book, whether printed or electronic. Quiz questions are taken from the books and other assigned materials. Students might need to use the book during class. Ebooks (PDF, etc.) available at O'Reilly: <u>http://www.oreilly.com/</u> Printed books might be cheaper from Amazon.

Web hosting

Students must acquire full-service Web hosting. The recommended provider is Reclaim Hosting. Your professor receives no kickbacks or other deals from Reclaim. Shared hosting costs \$25/year and includes registration for one domain. Domains must be renewed yearly or they will expire. Other hosting companies are acceptable if they provide SSH access and provide MySQL (or MariaDB) via phpMyAdmin.

> https://reclaimhosting.com/

Laptop

All students in this course must own a laptop they can bring to class with them. A tablet will NOT be sufficient for this course. Any operating system is okay, but Mac OSX is *strongly preferred*. For assistance with your operating system or hardware, please use the UF Computing Help Desk if you cannot solve a problem. *Bring your power cord to class with you*.

Headphones or earbuds

During class, you might find you need to watch or re-watch videos. For this reason, please be sure to always bring headphones or earbuds with you.

Students with Disabilities

Students requesting accommodations must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student, who must then provide this documentation to the instructor when requesting accommodations.

UF Disability Resource Center

> <u>https://www.dso.ufl.edu/drc/</u>

Course Requirements

Read this entire document in the first week of classes. If anything is not clear to you, ask me for clarification no later than 24 hours after the first class meeting (or no later than 24 hours after your first class if you add during drop/add). This syllabus is a contract between you and me.

Please make sure to check the course website at least once a week. If you rely only on a printed or downloaded copy, you may miss a change in the schedule.

> WEBSITE: https://webappsplus.wordpress.com/

Quizzes

There will be several quizzes on the assigned reading. Quizzes are in Canvas and are open-book. On the Course Schedule page on the course website (see above), the readings covered on that week's quiz are listed under *the same week as the quiz*. Deadlines: In Canvas.

Assignments

Assignments are listed and LINKED on the Course Schedule page on the course website (see above). Exact deadlines: In Canvas. For many of the assignments, students will begin the work during class. Students will need to work on all assignments outside class to complete them. All students are encouraged to come to the scheduled workshop hours for help with the week's assignment. Students are encouraged to help one another on assignments but NOT to give solutions to others.

Presentations

Twice during the semester, each student will be responsible for presenting an interesting Web app or website that uses back-end technologies. The student is responsible for finding and "deconstructing" the app/site and telling the class what is interesting, admirable, especially cool, etc. The purpose of the presentation is to inspire the class and show how current Web technologies and techniques are used. Students are encouraged not only to view source but also to find "how we made this" articles or interviews about the app/site. Students might contact the makers of the app/site and interview them. Think of this as a show-and-tell that educates the whole class and offers creative inspiration.

Final project

In the final three weeks of the course, each student will produce and complete a Web project suitable for your professional portfolio. The project must include *at least two* of the following: Python, Web scraping, a SQL database, a Flask app. It may also include Web forms, JavaScript, Bootstrap and any additional technologies you desire. The project must be live and functional at your domain by the deadline.

Attendance and participation

Points will be subtracted if you miss more than one (1) class meeting, are chronically late, or repeatedly show inattention. Participation is expected; you will be working on assigned projects during class.

Absences due to illness, serious family emergencies, special curricular requirements, etc., will be handled in accordance with UF policies, to which you will find a link on page 2 of this syllabus.

Grades and Grading Policies

Quizzes	20 percent
Assignments	50 percent
Presentations	10 percent
Final project	10 percent
Attendance and participation	10 percent
TOTAL	100 percent

92–100 points	A	72–77 points	С
90–91 points	A–	70–71 points	С-
88–89 points	B+	68–69 points	D+
82–87 points	В	62–67 points	D
80–81 points	В—	60–61 points	D–
78–79 points	C+	59 points or fewer	Е

UF Policies about Student Grades

> <u>https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx</u>

UF Dates (Spring 2016)

Classes begin	Jan. 5	Jan. 18	MLK Jr. Day
Drop/Add	Jan. 5–11	Feb. 27–March 5	Spring Break
Classes end	April 20		
Final Exams	April 23–29		

Course Evaluations

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online: <u>https://evaluations.ufl.edu</u>

Evaluations are typically open during the final weeks of the semester. Students will be given specific dates when they are open. Summary results of these assessments are available to students: https://evaluations.ufl.edu/results/

Course Schedule and Required Readings

Please note that many important details are on the website (<u>https://webappsplus.wordpress.com/</u>) and do not appear herein. Assigned readings, links to videos, resources, etc., are on the <u>Course Schedule</u> page of the website. Quizzes are based on the assigned readings in that same week.

Week 1 | Jan. 5 Introduction to the course. Tools, technologies and outcomes.

Week 2 | Jan. 12 Introduction to SQL and databases. Introduction to XAMPP, an Apache Web server that runs on your computer.

Week 3 | Jan. 19 SQL and databases, part 2. More advanced SQL queries; security issues.

Week 4 | Jan. 26 Your own SQL database project.

Week 5 | Feb. 2 Introduction to Python.

Week 6 | Feb. 9 Introduction to Web scraping with Python and the BeautifulSoup library. Using PIP and virtualenv.

Week 7 | Feb. 16 Web scraping, part 2. More Python.

Week 8 | Feb. 23 Your own Web scraping project.

Week 9 | March 1 Spring Break — class does not meet.

Week 10 | March 8 Creating Web apps with Python; introduction to Flask, a Web framework.

Week 11 | March 15 Flask: Basic application structure and templates.

Week 12 | March 22 Flask for Web forms and databases.

Week 13 | March 29 Your own Flask project.

Week 14 | April 5 Student's individual Web project. Week 15 | April 12 Student's individual Web project.

Week 16 | April 19 Student's individual Web project.

All projects are due on Monday, April 25, at 11:59 p.m. This is the Monday of finals week.

Weekly topics are subject to change. Please check the Course Schedule page on the course website for the latest updates.

Signatures Signatures Hyperlink Ucw Priority Check Low Priority Check Che	Ae: course names Aign Priority Aign Priority Aign Priority Attach Image: Signatures Image:	Re: course names	All and the second number of the second n	r departe with edu	<	Names			ıks again.				iis respect as I tising, and public nave him or her
Signatures Signatures Signatures Signatures Signatures Isubmit this and proc	Ae: course names	Re: course names Re: course names Re: course names Reture Reine Reiner Reture Reiner Reiner Reiner Reture Reiner Reiner Reiner Reture Reiner Reiner Reiner Reiner Reture Reiner Reiner Reiner Reiner Reiner Reiner Reture Reiner Reine	Attach Re: course names Attach Attach	Re: course names B J J U Ame A Way of A Signatures B J J U Ame A Way of A Signatures B J U Ame A Way (Signatures B L Course name) Betting back to us. Please see replies below. Given your feedback, we will submit this and proc getting back to us. Please see replies below. Given your feedback, we will submit this and proc day, October 3, 2016 at 1:09 PM 1 Juan E' sjuan@uff.edu, "Kahveci,Tame" <tamer a="" manual="" manual<br="">Luan E' sjuan@uff.edu, "Kahveci,Tame" <tamer a="" manual<br="">t, Juan E' sjuan@uff.edu, "Kahveci,Tame" <tamer a="" manuu<="" td=""><td></td><td>High Priority Low Priority Check Names</td><td></td><td></td><td>eed with UCC. Thanks</td><td></td><td></td><td></td><td>e options are in this r nmunication, advertisin erested, we would have</td></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer></tamer>		High Priority Low Priority Check Names			eed with UCC. Thanks				e options are in this r nmunication, advertisin erested, we would have
	Re: course names Attach Attach Attach Attach Attach Attach Attach Attach Interductions in amer" <tamer@ci amer" <tamer@ci amer" <tamer@ci amer@ci amer (1 ar wn students (1 ar would take this cou would take this cou</tamer@ci </tamer@ci </tamer@ci 	Re: course names Re: course names Re: course names Attach Picture n E mer n E mer n E mer n e n e n e n e n e n e n e n e	Re: course names	Re: course names alibri Dotions B I U Ame A Mark Plate B Ranerjee, Arunava Gilbert, Juan E McAdams, Mindy Kahveci, Tamer Re: course names getting back to us. Please see replies below. Given your feedback, we wi refjee, Arunava ' <arunava@uff.edu> t, Juan E' <juan e<br="">McAdams, Mindy Kahveci, Tamer McAdams, Mindy Kahveci, Tamer FR: course names getting back to us. Please see replies below. Given your feedback, we wi rulan E' <juan e<br="">t, Juan E' <juan e<br="">t, Juan E' <juan a<br="">t, Juan A t, Juan</juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></juan></arunava@uff.edu>					ll submit this and proc	se.ufl.edu>	dations	journalism. munications.	n not sure what the eering course). ts (journalism, telecor rse, but if one was int

Message
Delete Anue Anue Anue Delete Anue Anue Anue Delete Anue Anue Anue Delete Anue Anue Anue
Re: course names
Oliverio, James Charles
Sent: Monday, October 3, 2016 at 12:20 PM
To: Spiker, Ted Cc: McAdams, Mindy
HI Ted and Mindy.
All Systems GO. No further concern with the courses your colleagues have titled:
Introduction to Web Apps for Communicators Advanced Web Apps for Communicators
Looking forward to working with both of you further in near future inter-disciplinary academic and research initiatives .
My Best Regards,
James
JAMES C OLIVERIO I EXECUTIVE DIRECTOR PROFESSOR of MUSIC I PROFESSOR of DIGITAL ARTS & SCIENCES DIGITAL WORLDS INSTITUTE P.O. Box 1158101 University of Florida I Gaineeville, Florida 32611-5800 Phone: +1 (352) 294-2000 I Fax : +1 (352) 294-2053 NOTE: This communication may contain information that is legally protected from unauthorized disclosure. If you are not the Informed recipient, please note that any dissemination, distribution or copying of this communication is strictly note: This communication may contain information that is legally protected from unauthorized disclosure. If you are not the Informed recipient, please note that any dissemination, distribution or copying of this communication is strictly note that any dissemination.