Syllabus - WEB 3200

Course Description

General purpose dynamic languages like Python become increasing popular and well suited for the creation of full stack web applications. This course will introduce students to the syntax and programmatic idioms of Python. The following topics will be covered: complex data types, loops, conditionals, command line applications, and the object oriented programming paradigm. The Flask Web framework (which is built on top of Python) will then be used to create and deploy a full stack web application to a cloud provider.

Course Outcomes

Upon successful completion of this course, the student shall be able to demonstrate the following skills:

- Create a Python CLI application that uses list, dictionaries, loops, and conditionals.
- · Create an Object-oriented Python application
- · Create a Python dynamic web application using the Flask framework.
- Create and style Flask templates and deploy a Flask Application to a cloud provider.

Contact Information

Email: Ifernandez@weber.edu (mailto:Ifernandez@weber.edu) Canvas Email: Click on Inbox

Office Hours

By appointment. Send me an email to set up a time and method (zoom or phone).

I'm free most days and sometimes in the evening. I am always available:

M,W: 12:45 to 1:15

Tues: 9 to 1

Textbook

Python in a Nutshell, 3rd Edition

By: Alex Martelli; Anna Ravenscroft; Steve Holden Publisher: O'Reilly Media, Inc. Pub. Date: April 24, 2017 Print ISBN-13: 978-1-4493-9292-5 (available for free online through the library)

Python for Everybody, Dr. Chuck

-free at https://www.py4e.com/book.php (https://www.py4e.com/book.php)

Flask Web Development, 2nd Edition

By: Miguel Grinberg Publisher: O'Reilly Media, Inc. Pub. Date: March 20, 2018 Print ISBN-13: 978-1-4919-9173-2

Tools

Python, Flask, IDE (IDLE, Visual Studio Code, Pycharm), Free account on Pythonanwhere, Github

Assignments

• There are aproximately 18 assignments in this course. Assignments range between 20 and 200 points. Most are worth 100 points.

Grade Scheme

100- 95 A

- 94 90 A-
- 89 87 B+
- 86 83 B
- 82 80 B-
- 79 77 C+
- 76 73 C
- 72 70 C-
- 69 67 D+
- 66 63 D
- 62 60 D-
- 59 0 E

Late Work

To do well in this course it's important to proceed at the pace that is suggested by the Canvas assignment due dates. This usually means doing one assignment every week. 5 points will be deducted for a late submission. This rule exists as an incentive to pace yourself appropriately. At the same time, 5 points is not a very large penalty. If you find that you can't complete an assignment by the deadline it's better to turn the assignment in late than submit something on time that isn't complete.

Time Commitment

Students are expected to spend 3 hours per week on study for each credit hour. Since this is a 3 credit class students should expect to spend at least 9 hours a week on the course

Tips for Success

One cannot learn all of the material by just reading the text. Practice is critical when learning new software and programming languages. Successful students read the upcoming material ahead of time. They participate actively in class. If you are struggling with any concept please come see me during my office hours. The number one thing you can do is ask questions when you don't understand something.

Technical Support

For assistance with Canvas or related technical issues, please call 626-6499. This phone is staffed Mon-Thurs from 8am - 5pm and Fridays from 8 - 4:30pm. A message can be left during non-business hours for a return call. Alternatively, students can send an email message to wsuonline@weber.edu

If you are having technical issues related to Canvas usernames/passwords, please call the Service Desk at 626-7777, or email <u>csupport@weber.edu (mailto:csupport@weber.edu)</u>.

Accommodations for students with disabilities

Any student requiring accommodations or services due to a disability must contact Services for Students with Disabilities (SSD) in room 181 of the Student Services Center. SSD can also arrange to provide course materials (including the syllabus) in alternative formats if necessary.

For more information about the SSD contact them at 801-626-6413, ssd@weber.edu, or departments.weber.edu/ssd

Ethical Conduct

Any form of academic dishonesty (cheating, plagiarism, etc.) will not be tolerated. Proof of academic dishonesty will result in a failing grade (E) for the course. The following is an explanation of cheating as stated in the student code.

A. Cheating, which includes but is not limited to:

- i. Copying from another student's test;
- ii. Using materials during a test not authorized by the person giving the test;
- iii. Collaborating with any other person during a test without authorization;
- iv. Knowingly obtaining, using, buying, selling, transporting, or soliciting in whole or in part the contents of any test without authorization of the appropriate University official
- v. Bribing any other person to obtain any test;
- vi. Soliciting or receiving unauthorized information about any test;
- vii. Substituting for another student or permitting any other person to substitute for oneself to take a test.
- B. Plagiarism, which is the unacknowledged (uncited) use of any other person's or group's ideas or work. This includes purchased or borrowed papers;

- C. Collusion, which is the unauthorized collaboration with another person in preparing work offered for credit;
- D. Falsification, which is the intentional and unauthorized altering or inventing of any information or citation in an academic exercise, activity, or record-keeping process;
- E. Giving, selling, or receiving unauthorized course or test information;
- F. Using any unauthorized resource or aid in the preparation or completion of any course work, exercise, or activity;
- G. Infringing on the copyright law of the United States which prohibits the making of reproductions of copyrighted material except under certain specified conditions.

CS Academic Cheating Policy

CS policy dictates that any verifiable evidence of student academic cheating, as defined and determined by the instructor, will result in: 1) an automatic failing grade for the class and 2) a report to the Dean of Students that will include the student's name and a description of the student's dishonest conduct.

Course Fee Statement

Course fees for the Computer Science major are designed to cover the costs of lab equipment maintenance and replacement including desktop and server computer systems and software; consumable materials and supplies; and support for lab aides, student tutors, and online instructional resources.

Student Expectations Related to Covid

<u>https://www.weber.edu/wsuimages/academicaffairs/Forms/StudentExpectations.pdf</u> (<u>https://www.weber.edu/wsuimages/academicaffairs/Forms/StudentExpectations.pdf</u>)