Course Syllabus

Jump to Today



ISMG 4400/6800 Spring 2017

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Course Description

Course covers modern website development using a contemporary languages like PHP and Python. Development skills include presenting and receiving information through a web site, validating entered information and storing entered information in text files or databases. Students develop an understanding of the principles of web page and web site design; standard object models, and the use of server-side programs for database and file access; testing, software quality assurance; and the process of publishing Web sites.

This hands-on PHP and Python programming course uses open source software (Apache, PHP, Python, JavaScript and MySQL) to provide the student with a fundamental programming background.

Course Objectives

Objectives of this course are to:

- Learn the basic structure and syntax of the PHP language
- Use PHP to build interactive Web sites
- Interface with MySQL databases
- Handle user input via form processing and URL tokens
- Understand how to work with the Python language.
- Understand hop Python is used for Web Informatics

Prerequisites

This course requires prior programming and database experience:

ISMG 2800 and 3500 (or equivalent)

Required Texts



PHP and MySQL.

Web Development

PHP and MySQL Web Development Luke Welling Laura Thomson ISBN-10: 0321833899 ISBN-13: 978-0321833891 Addison-Wesley Professional, Edition 5 © 2016



Python for Everybody Exploring Data in Python 3 Charles Severance ISBN-10: 1530051126 ISBN-13: 978-1530051120 CreateSpace Independent Publishing Platform; 1 edition © 2016

Python for Everybody (Free) 🔂 🐼

- PHP Documentation: http://www.php.net/manual/en/langref.php
 (http://www.php.net/manual/en/langref.php)
- Python tutorial: <u>https://docs.python.org/2.7/tutorial/</u> (https://docs.python.org/2.7/tutorial/)
 <u>https://docs.python.org/3/tutorial/index.html</u> (https://docs.python.org/3/tutorial/index.html)
- In addition, there are lecture notes available on the course module page.

Development Tools

- AMPPS (http://www.ampps.com/ (http://www.ampps.com/)) a bundle includes bundle of Apache, MySQL, PHP and Python.
- Eclipse Integrated Development Environment (IDE), with PHP development tools (<u>http://www.eclipse.org/pdt/downloads</u> (<u>http://www.eclipse.org/pdt/downloads</u>))
- PyDev plugin for Eclipse: <u>https://marketplace.eclipse.org/content/pydev-python-ide-eclipse</u> (<u>https://marketplace.eclipse.org/content</u>/pydev-python-ide-eclipse)

Computer Lab

• You can use tools in the computer lab in BUSB 2403.

Course Policies

Work Completion Policy

You should expect to spend between 8-12 hours per week on this course. This is an average time which includes the time you will need to complete the readings, videos, exercises, homework, quizzes and discussions that week. Do not expect to succeed in this course if you do not allocate minimum of 8-12 hours a week for this class!

I do not accept Assignments or tutorials late. There may be group/class discussions or solutions posted regarding the assignments immediately after they are due and thus it is imperative that work be complete ON TIME. You will lose 1% of the available points on an assignment or a tutorial for every 5 minutes it is late. Any assignment more than 8 hour and 20 minutes late will receive 0 points. It is your responsibility to have a working internet connection at the time of assignment submission.

Note: I do drop your lowest 3 tutorials/quizzes at the end of the term.

Academic Honesty

All tutorials, assignments, and tests are to be done individually unless otherwise specified. All work submitted should include citations or other indications when others' work is included with your own. *Academic Dishonesty is not tolerated* and will result in minimum of a zero on the assignment / a one letter grade reduction in the course and reporting of the incident to the Business School's Internal Affairs Committee. The following are considered Academic Dishonesty:

- Copying the work of current or past ISMG 4400/6800 students.
- Plagiarism of material found in books, magazines or on the Web.
- Work purchased from "paper mills" or a code writing service.
- Allowing anyone else to log into the course using your log in credentials and access materials on your behalf.
- Working collaboratively on individual assignments except to provide debugging/editing assistance.
- Providing assignment solutions (total or partial) to any other ISMG 4400/6800 student.

Cheating on an exam will result in an automatic *F* for the course! The penalty for subsequent academic dishonesty incidents can involve removal from the IS program and/or from CU Denver.

The instructor may make use of anti-cheating services to ensure that submitted work is original.

Finally, cheating diminishes the value of your learning. If you find yourself struggling in this course, please contact the instructor!

Contacting Me

My office hours are posted at the top of this Syllabus. I am also available on other days and times either in my office, phone or online all you need to do is contact me and find a time we can meet.

My courses can be difficult and often students get to places in their assignments where they do not know what to do next. I encourage you to ask questions in class, office hours and via email. Always include the course number (ISMG 4400/6800) and your name in the email.

When asking a question via email please do the following:

- Clearly give me a specific question.
- If you have an error message(s) you do not understand put a copy of the error message(s) in the email and attach your code so I can see where it occurs.
- If your code compiles but runs strangely describe the behavior and attach your code (e.g. I input the id and then nothing happens)
- If you do not understand what is expected explain what parts of the assignment you do not understand.
- If you are having difficulty deciding how to approach a problem describe to me what you think you should be doing and I will let you know what you have right & where you might be wrong.
- DO NOT email me and say here is what I have so far what do I do next.

As a general policy, I will respond to phone calls and emails within 24 hours. Typically, I can respond to emails within one to two hours during regular business hours and 4 to 5 hours during off hours. Face-to-face meetings can be scheduled by calling or emailing.

Course Design

This semester we are going to divide our class time between lectures, in class assignments and time to work on tutorials and larger assignments. In addition, I have recorded my lectures on video or found lectures recorded by other faculty that cover many of the weekly course topics and posted them in canvas.

- Monday's class: We will discuss the course topics for the week. I will go over the course material for all course topics. If you need more coverage of the topics, or you have to miss class you will want to *watch the video lectures* for the week.
- In Wednesday's class:
 - I will answer questions and we will begin the programming tasks together.
 - \circ We will plan to get most of the programs set up during class, and then you can finish them.
 - Also, in class, I will work through the prior week's assignment (as needed) and answer questions on issues that came up.
- Assignments will typically be due prior to class Monday the following week or in two weeks (depending on the assignment).
- If you are having difficulty understanding a topic, I have provided extra materials at the bottom of many topics that you can review to help you understand the concepts before moving on.

Assignments & Exams

Learning to develop websites and write programs that run on the web involves doing. Students cannot just listen to a lecture and know how to create a website. The course includes numerous short exercises and longer assignments that give students practice solving realistic business problems. These are graded and returned as soon as possible so students know how they are doing in my class.

- **Tutorials**: Following my lectures and the readings most weeks will have a tutorial. This will give them the opportunity to use the skills discussed that week. typically to be completed by Friday.
- Self-check Quizzes: We will have self-check quizzes typically to be completed by Monday evening.
 - Note: There is a maximum number of points a student can earn for the quizzes and tutorials (160 points or 20 quizzes/tutorials). The total number of points available to earn on these activities will exceed the possible number of points. The highest 20 scores will be used to compute your grade.
- Assignments: You will complete a short homework assignment most weeks. Some weeks you will have larger assignment (worth more points) that you will have 2 -3 weeks to complete. These assignments are largely coding assignments which allow students to be comfortable with creating and debugging PHP and Python code. It is important for students to try and hand in every homework assignment even if it does not work 100% correctly!
 - Compliance: Assignments will be evaluated to determine whether the submission meets all of the requirements set forth in the assignment. That is did the student implement a program that provides all of the information (or design elements) it needs to incorporate?
 Quality: Consists of several factors including:
 - Format: For Web programming courses format includes the layout and design of the visible Web page as well as the lay-out and formatting of the hidden HTML and embedded code (include comments!).
 - Modularity in Design: Avoid accomplishing too many tasks in one function/on one Web page.
 - Design Quality: The design chosen should be clear and concise. Is the solution chosen excellent, better than average, average or

worse than other ways of approaching the given problem?

- Performance: A good Web program needs to run and produce the correct output. A design that does not run will receive a zero for program performance.
- *Exams*: There will be one midterm exam and one final exam. The exams will be given only on the scheduled dates. Question Formats may include: multiple choice and multiple answer.

Failure to complete your exam during the scheduled time will result in a zero for the examination. In cases of extremely extenuating circumstances (i.e. documented circumstances clearly beyond the student's control) a make-up exam may be given. However, the student must request the make-up exam in writing within 24 hours of the original exam date.

If you know in advance that you will not be able to attend an exam because of extenuating circumstances beyond your control you may request a make-up exam. Requests for make-up exams must be made in writing at least 1 full week prior to the class section in which the exam is scheduled to be given. If the request for a make-up exam is approved, a make-up exam will then be scheduled.

24 hours prior to a scheduled make-up exam, it is the student's responsibility to confirm via email that they still plan on attending the make-up exam at the given date and time. If the student no longer needs to take a make-up exam - the student must cancel the make-up exam via email 24 hours in advance of the scheduled make-up exam time. Failure to attend a make-up exam will result in a 0 for the exam.

Assignment Submission

Unless otherwise stated, students will be required to turn in tutorials and assignments using the Assignment link in Canvas. Each assignment will need to be submitted under the correct assignment link for the assignment being submitted. You also need to include your name inside every file. This will be considered your signature for originality of work turned-in for grading.

Assessment Design

We will use multiple grading measures to give you opportunities to do well in the course. Final Grades for this class will be based on your performance on weekly tutorials, homework assignments, two midterms and a final exam. Weightings will be applied as follows:

| A: Tutorials/In Class Exercises | 16% |
|---------------------------------|-----|
| B: Assignments | 44% |
| C: Exams | 40% |

Students can view their current grade inside side the course gradebook (see menu above).

Letter Grades are typically assigned as follows:

| А | (4.0) | 93% - 100% | superior/excellent |
|----|-------|---------------|--------------------------|
| A- | (3.7) | 90% - 92.999% | |
| B+ | (3.3) | 87% - 89.999% | |
| В | (3.0) | 83% - 86.999% | good/better than average |
| B- | (2.7) | 80% - 82.999% | |
| C+ | (2.3) | 77% - 79.999% | |
| С | (2.0) | 73% - 76.999% | competent/average |
| C- | (1.7) | 70% - 72.999% | |
| D+ | (1.3) | 67% - 69.999% | |
| D | (1.0) | 63% - 66.999% | minimum passing |
| D- | (0.7) | 60% - 62.999% | |
| F | (0.0) | 0% - 59.999% | failing |

Note: Grading policies of the CU Denver Business School state that the average GPA across all students in an undergraduate class should generally fall within the following range: 2.3 (C+) to 3.0 (B) on a 4.0 scale. Therefore, if necessary, the ranges above will be modified so the average GPA across all students in the class falls with in the recommended range.

Student Success

Be Prepared: It is assumed that you will read the assigned chapters each week and you should allow plenty of time for experimenting and practicing web design.

Email: My courses can be difficult and often students get to places in their assignments where they need assistance. I encourage you to ask questions in class, office hours and via email. Always include the course number (ISMG 4400) and your name in the email. When asking a question via email please give me a specific question and attach your html code so I can see your problems for myself.

Student Conduct Code

As members of the University community, students are expected to uphold university standards, which include abiding by state civil and criminal laws and all University policies and standards of conduct. Every student should review the <u>Student Code of Conduct</u> (http://thunder1.cudenver.edu /studentlife/studentlife/studentlife/studentLife/st

Students with Disabilities

"The University of Colorado Denver is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. Students with disabilities who want academic accommodations must register with Disability Resources and Services (DRS), North

303 556-3450Classroom 2514, phone: 303 556-3450, TTY: 303 556-4766. I will be happy to provide approved accommodations, once you provide me with a copy of DRS's letter."

[DRS requires students to provide current and adequate documentation of their disabilities. Once a student has registered with DRS, DRS will review the documentation and assess the student's request for academic accommodations in light of the documentation. DRS will then provide the student with a letter indicating which academic accommodations have been approved.]

Course Schedule

Assignments Summary:

| Date | Details | |
|------------------|---|----------------|
| Fri Jan 20, 2017 | Self Check 1 (https://ucdenver.instructure.com/courses/357954/assignments/370295) | due by 11:59pm |
| Sun Jan 22, 2017 | i <u>Introducing PHP: Tutorial (Code Academy) (https://ucdenver.instructure.com</u> /courses/357954/assignments/370316) | due by 11:59pm |
| Mon Jan 23, 2017 | I i <u>Self Check 2 (https://ucdenver.instructure.com/courses/357954/assignments/370299)</u> | due by 11:59pm |
| Wed Jan 25, 2017 | Bi <u>Strings and Functions: Tutorial (https://ucdenver.instructure.com/courses/357954</u> /assignments/370330) | due by 3:29pm |
| Mon Jan 30, 2017 | i Introducing PHP: Assignment (https://ucdenver.instructure.com/courses/357954 /assignments/370315) | due by 3:29pm |
| | Self Check 3 (https://ucdenver.instructure.com/courses/357954/assignments/370305) | due by 11:59pm |

| Date | Details | |
|------------------|--|----------------|
| Wed Feb 1, 2017 | Arrays & Foreach: Tutorial (https://ucdenver.instructure.com/courses/357954 /assignments/370310) | due by 3:29pm |
| Mon Feb 6, 2017 | Bi PHP Arrays: Assignment (https://ucdenver.instructure.com/courses/357954 /assignments/370320) | due by 3:29pm |
| | Bi Self Check 4 (https://ucdenver.instructure.com/courses/357954/assignments/370298) | due by 11:59pm |
| Wed Feb 8, 2017 | i <u>MySQL Tutorial (https://ucdenver.instructure.com/courses/357954/assignments</u> / <u>370318)</u> | due by 3:30pm |
| Mon Feb 13, 2017 | Database Driven Web Sites: Assignment Part A (https://ucdenver.instructure.com/ /courses/357954/assignments/370313) | due by 3:29pm |
| | Bi Self Check 5 (https://ucdenver.instructure.com/courses/357954/assignments/370294) | due by 3:29pm |
| Wed Feb 15, 2017 | i <u>Simple PHP/MySQL Page Tutorial (https://ucdenver.instructure.com/courses/357954</u> /assignments/370328) | due by 3:30pm |
| Mon Feb 20, 2017 | Self Check 6 (https://ucdenver.instructure.com/courses/357954/assignments/370300) | due by 11:59pm |
| Wed Feb 22, 2017 | Bi <u>Sessions Tutorial (https://ucdenver.instructure.com/courses/357954/assignments</u> /370327) | due by 3:29pm |
| Mon Feb 27, 2017 | Self Check 7 (https://ucdenver.instructure.com/courses/357954/assignments/370307) | due by 3:29pm |
| Wed Mar 1, 2017 | Gi <u>Creating Wordpress Plugins: Tutorial (https://ucdenver.instructure.com/courses</u> /357954/assignments/370312) | due by 3:39pm |
| Fri Mar 3, 2017 | Database Driven Websites: Assignment Part B (https://ucdenver.instructure.com /courses/357954/assignments/370314) | due by 11:59pm |
| Mon Mar 6, 2017 | Bi Midterm Exam (https://ucdenver.instructure.com/courses/357954/assignments/370301) | due by 5pm |
| Mon Mar 13, 2017 | Bi Self Check 9 (https://ucdenver.instructure.com/courses/357954/assignments/370302) | due by 11:59pm |
| Wed Mar 15, 2017 | Introduction to Python Tutorial (https://ucdenver.instructure.com/courses/357954 /assignments/370317) | due by 3:29pm |
| Mon Mar 27, 2017 | i <u>Self Check 10 (https://ucdenver.instructure.com/courses/357954/assignments/370309)</u> | due by 11:59pm |
| Wed Mar 29, 2017 | Bi Python Strings and Files: Tutorial (https://ucdenver.instructure.com/courses /357954/assignments/370325) | due by 11:59pm |
| Mon Apr 3, 2017 | Gi Simple Python Application (https://ucdenver.instructure.com/courses/357954 /assignments/370329) | due by 3:29pm |

| Date | Details | |
|------------------|---|----------------|
| | Self Check 11 (https://ucdenver.instructure.com/courses/357954/assignments/ /370308) | due by 11:59pm |
| Wed Apr 5, 2017 | i <u>Python Data Structures: Tutorial (https://ucdenver.instructure.com/courses/357954</u> /assignments/370322) | due by 11:59pm |
| Mon Apr 10, 2017 | i Python Data Structures Application (https://ucdenver.instructure.com/courses /357954/assignments/370321) | due by 3:29pm |
| | Self Check 12 (https://ucdenver.instructure.com/courses/357954/assignments/ /370303) | due by 11:59pm |
| Wed Apr 12, 2017 | i <u>RegEx: Tutorial (https://ucdenver.instructure.com/courses/357954/assignments/370326)</u> | due by 3:29pm |
| Mon Apr 17, 2017 | i <u>Python Informatics: Assignment Part A (https://ucdenver.instructure.com/courses</u> /357954/assignments/370324) | due by 3:29pm |
| | i Self Check 13 (https://ucdenver.instructure.com/courses/357954/assignments//370296) | due by 11:59pm |
| Wed Apr 19, 2017 | Bi Basic JSON: Tutorial (https://ucdenver.instructure.com/courses/357954/assignments /370311) | due by 3:29pm |
| Mon Apr 24, 2017 | Self Check 14 (https://ucdenver.instructure.com/courses/357954/assignments/ /370306) | due by 11:59pm |
| Wed Apr 26, 2017 | i <u>OOP Python: Tutorial (https://ucdenver.instructure.com/courses/357954/assignments/370319)</u> | due by 3:29pm |
| Mon May 1, 2017 | i <u>Self Check 15 (https://ucdenver.instructure.com/courses/357954/assignments/370297)</u> | due by 11:59pm |
| Fri May 5, 2017 | i <u>Python Informatics Application: Part B (https://ucdenver.instructure.com/courses</u> /357954/assignments/370323) | due by 11:59pm |
| Wed May 10, 2017 | i Final Exam (https://ucdenver.instructure.com/courses/357954/assignments/370304) | due by 4:59pm |