

ISCS 475: WEB PROGRAMMING

Semester: Fall 2022
Section/Days: 01, T/Th
Room/Time: Hiner G14, 8:00am – 9:15am
Credit Hours: 3
Final Exam: Thu Dec 8, Hiner G14
8:00–10:30am

Instructor: Robert Marmorstein
E-mail: marmorsteinrm@longwood.edu
Office: Stevens 109
Office Hours: T/Th 9:20–11:00am,
W 11:00-11:50am, 3:00-4:30pm
Office Phone: (434) 395-2185



BASIC COURSE INFORMATION

Required Course Materials:

1. A laptop capable of running Linux or connecting to a Linux server over the network (see course web site for recommendations).
2. This class has no text book. However, I will assign readings for each week from different web sites (see tentative course schedule below).
3. Linux, Mac OS X, or if you use Windows: MobaXterm (<https://mobaxterm.mobatek.net/>).

Recommended Course Materials:

None

Course Description:

An in-depth study of programming techniques used in Web page design. Topics can include HTML and derivative languages, server-side programming, client-side programming, Web server architecture, and Web security. Use of these programming techniques to create contemporary applications will be covered. These applications can include, but are not limited to, shopping carts, guest books, login validation, database access and manipulation, form processing, auctions, and chat rooms. Other applications and techniques may be covered that reflect current trends in Web design and use.

Prerequisites: **ISCS 272** or **CMSC 160** and one of the following: **ISCS 170**, **ISCS 370**, or **CMSC 362**; or permission of instructor.
3 credits.

Recommended Skills/Preparation:

You should be familiar with basic concepts of programming, such as variables, loops, and branches (if statements). You should be comfortable installing software on a computer and editing text files.

Writing Intensive:

No

Speaking Intensive:

No

Tentative Course Schedule

Date	Topic	Read	Source	Due
Aug. 23/25	Introduction Installing and Configuring Linux	Syllabus Installing Debian 11 Server Quiz 0	Website Website Canvas	Aug. 25 Aug. 26
Aug. 30/ Sept. 1	Exploring the Linux Command Line	Basic Linux Commands Quiz 1	Website Canvas	Sept. 1 Sept. 2
Sept. 6/8	Containers and Virtual Machines	What are Containers? Quiz 2	Website Canvas	Sept. 8 Sept. 9
Sept. 13/15	HTTP, Web Servers, and Databases	HTTP RFC Quiz 3 Project 1: Server Installation	Website Canvas Website	Sept. 15 Sept. 16 Sept. 27
Sept. 20/22	Introduction to HTML	Video Lecture: HTTP and HTML Quiz 4	Website/YouTube Canvas	Sept. 22 Sept. 23
Sept. 27/28	Advanced HTML	Video Lecture: HTML Structure Elements Quiz 5 Project 2: Web Site Structure and Content	Website /YouTube Canvas Website	Sept. 29 Sept. 30 Oct. 11
Oct. 4	Work Day / Catchup			
Oct. 6 – 7	Fall Break – No class			
Oct. 11/13	CSS Style and Layout	Video Lecture: Cascading Stylesheets Video Lecture: CSS Layout Quiz 6 Project 3: Web Site Navigation and Layout	Website/YouTube Website/YouTube Canvas Website	Oct. 11 Oct. 13 Oct. 14 Nov. 1
Oct. 18/20	Creating a Flask Server Using Jinja Templates	Video Lecture: Flask Video Lecture: Jinja Templates Quiz 7	Website/YouTube Website/YouTube Canvas	Oct. 18 Oct. 20 Oct. 21
Oct. 25/27	JQuery and AJAX	Video Lecture: AJAX Quiz 8	Website/YouTube Canvas	Oct. 27 Oct. 28
Nov. 1/3	Accepting Payments with Stripe	Quiz 9 Project 4: Form Processing	Canvas Website	Nov. 4 Nov. 15
Nov. 8/10	Introduction to SQL	Video Lecture: SQL Video Lecture: SQLite	Website/YouTube Website/YouTube	Nov. 8 Nov. 10
Nov 15/17	Information Storage and Processing	Video Lecture: PostgreSQL Quiz 10 Project 5: Information Storage and Processing	Website/YouTube Website Canvas	Nov 15 Nov 18 Nov. 22
Nov 22	Catchup and Review	Exam Review Packet	Website	Nov. 29
Nov 23-25	Thanksgiving – No class			
Nov. 29 / Dec. 1	Exam Review		Website	
Dec. 8	Final Exam (Comprehensive)		Hiner G14	Dec. 8

* Schedule subject to change.

COURSE STUDENT LEARNING OUTCOMES

Upon completion of this course, students will be able to:

1. Perform simple tasks (such as installing software and editing files) using the Linux command line
2. Create simple web pages in HTML, CSS, and Javascript
3. Write web applications using Python

BSBA DEGREE OUTCOMES

In this course students will:



Gain Core Business Knowledge



Integrate Concepts
Across Disciplines



Communicate Effectively

OVERVIEW OF COURSE FORMAT

In addition to attending lectures, I will expect you to spend about six hours each week working on projects, reading the assigned articles, and completing review quizzes. It is very important that you start the projects early and ask lots of questions.

STUDENT EVALUATION

Points possible

	<i>Points</i>	<i>Percent</i>
Final Exam	100	15%
Project 1	100	12%
Project 2	100	12%
Project 3	100	12%
Project 4	100	12%
Project 5	100	12%
Quizzes	140	20%
Participation	100	5%
Total	840	100%

Grading Scale

<i>Percent</i>	<i>Grade</i>	<i>Percent</i>	<i>Grade</i>
91 – 100	A	71-78	C
90	A-	70	C-
89	B+	69	D+
81 – 88	B	64-68	D
80	B-	< 64	F
79	C+		

* There is no grade of D- in this course. Anything below a 64% is a failing grade. Grades are rounded down to the nearest whole integer less than or equal to the grade.

Exams/Tests: There is only one exam in this class, a final exam. It will be closed book/closed notes and you will not be allowed to use a computer or any other resources (print or electronic). The final exam will take place on

Projects and Quizzes: There will be approximately four graded projects in this class. I will expect you to submit projects electronically through <https://marmorstein.org/~robert/submit/>. You will also be expected to complete graded quizzes through Canvas roughly every week (see tentative schedule above). Quizzes are to be completed entirely on your own, but you may discuss the projects with others as long as you cite any help you receive.

Participation: The entire class will earn participation points by filling out the course evaluation at the end of the semester. Your grade will be the percentage of the class that successfully completes the assignment by November 29th.

COURSE POLICIES

Protecting Intellectual Property: Content and materials for this course are for your learning only and should not be shared with others outside of the class without instructor permission. This includes the materials located within the learning management system, information sent to you through email, and/or content provided to you through webcasting with your professor. You may not share your course connection information (login or password), your content received through Canvas, or any videos sent to you that are specifically for this course. This includes sharing postings or recordings made by the instructor or students without permission of the originator.

When you are attending a course through web-conferencing (for example, Zoom), there should not be other persons interacting with the system or attending the session.

Any violation of this policy can result in disciplinary action. Faculty or students may report those who violate University policies regarding intellectual property to the Office of Student Conduct and Integrity.

Communication Policy: Slack will be the primary means of communication in this class. However, I also expect you to check your email at least once per day. During office hours, you can usually also reach out to me on my office number: (434) 395-2185 or in the Stevens computer lab (434) 395-4917.

Code of Conduct: “All students are expected to maintain professional behavior in the classroom setting, according to the Longwood University Honor Code, spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Student Handbook. The Student Handbook also specifies proscribed conduct that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc. Students should read the Student Handbook carefully and know they are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, and I will do so, beginning with verbal warnings and progressing to dismissal from and class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.”

Honor Code: Cheating in any form will not be tolerated in any form in the College of Business and Economics. If the instructor determines that a student has cheated on an assignment, the grade of “F” may be assigned for the entire course. “Cheating” is the use of unauthorized resources and/or the work of another including, but not limited to, homework, tests, papers, presentations, and exams. Unless specifically instructed otherwise, students are to assume that all coursework is to be the work of the individual student alone. If a student is unsure as to whether collaboration is permitted, the student should contact the professor in advance of performing the work.

Plagiarism: Plagiarism is an honor code violation that consists of taking credit for work that is not your own. Whenever you incorporate code that is not your own from ANY source (web site, book, magazine, or a web video) other than your lecture notes or the lab handout, you MUST cite your source. Furthermore, when you cite your source you MUST make it clear which material in your submission is not original. The best way to do this is by placing a comment with the URL of the

source on the line ABOVE the borrowed material. Failure to properly cite sources is an honor code violation that I take very seriously.

Computers and Cell Phones Policy: **CELL PHONES ARE PROHIBITED** at all times. Laptops are prohibited except during laboratory sessions (which I will announce in the previous class period). If a student is caught on his or her phone or laptop for non-educational purposes, the student will be asked to leave the class and will be awarded an unexcused absence. Please do not be a distraction to others trying to learn in our class.

Attendance Policy: According to Longwood University policy, an instructor may lower a student's grade by one full letter if 10% of the class is missed and fail the student if 25% of the class is missed. Students are expected to attend every class. I understand that illness and emergencies do happen, so if you miss a class, please explain your absence to me (either by Slack or e-mail) within twelve hours of the absence. If I determine that the absence is for a valid excuse (such as illness), I will mark your absence excused. Keep in mind that an excused absence does not grant you an extension on assignments.

Inclement Weather Policy: Please see www.longwood.edu for the latest announcements regarding whether classes and the university will be open or not due to bad weather. In the event of inclement weather, I may decide to hold class online over Zoom. Please check Slack for such announcements.

ADDITIONAL RESOURCES

Accommodations and Disability Resources: If you have a disability and require accommodations, please meet with your instructor early in the semester to discuss your learning needs. If you wish to request reasonable accommodations (note taking support, extended time for tests, etc.), you must register with the [Office of Disability Resources](#), Brock Hall, (434)395-2391 prior to those accommodations being implemented. The office will require appropriate documentation of disability. All information is kept confidential.

Religious Accommodation: If an academic or work requirement conflicts with a student's religious practices and/or observances, the student may request reasonable accommodations. The request must be in writing, and the instructor or supervisor will review the request. The student and the instructor may also seek assistance from the Dean of Students (<http://www.longwood.edu/dos/>)

Writing Center: If a student wants help with writing, The Writing Center is very helpful. (<http://www.longwood.edu/academicsuccess/writing-center/>).

Computer Help: If a student has technical issues and needs assistance, please contact the Longwood Help Desk at (434) 395-4357 or helpdesk@longwood.edu. Please visit their webpage (<http://www.longwood.edu/usersupport>) for hours of operation and additional information.

*For Linux help, you will probably have more luck reaching out to me on Slack.

Mental Health Resources: Stress and anxiety are very typical reactions to college life and many students have experienced significant benefits from participating in counseling. Longwood's [Counseling and Psychological Services \(CAPS\)](#), located in the Health and Fitness Center, is available to all students at no cost. Appointments can be scheduled by phone (434)395- 2409, during the hours of 8:15 a.m. -5:00 p.m. Monday-Friday. **Resident Education Coordinators (RECs)** and **Resident Advisors (RAs)** are

additional resources to students. For emergency situations, please call (911) or contact the [Longwood University Police Department](#) at (434)395-2091.

Reporting of Crimes and Sexual Misconduct: In accord with its history and mission, Longwood University believes that each individual should be treated with respect and dignity and that any form of crime or violence is incompatible with Longwood's commitment to the dignity and worth of the individual. Longwood University is committed to providing a healthy living, learning and working environment which promotes personal integrity, civility and mutual respect. If you have been the victim of a crime or sexual misconduct we encourage you to report this. If you disclose this to a faculty member or employee (with the exception of our Limited Reporting and Confidential Reporting Resources; for example, the [Counseling and Psychological Services \(CAPS\)](#) staff), they are required by law to notify the appropriate University officials. The faculty member or employee cannot maintain complete confidentiality and is required to report the information that has been shared. Please know that all reported information is treated with discretion and respect and kept as private as possible. For more information about your options at Longwood: <http://www.longwood.edu/titleix>

CBE Academic Dishonesty Policy: Cheating in any form will not be tolerated in the College of Business and Economics. If the instructor determines that a student has cheated on an assignment, the grade of "F" may be assigned for the entire course. "Cheating" is the use of unauthorized resources and/or work of another including but not limited to homework, tests, papers, presentations and exams. Unless specifically instructed otherwise, students are to assume that all coursework is to be the work of the individual student alone. If a student is unsure as to whether collaboration is permitted, the professor should be contacted in advance of performing the work.

OTHER CLASS POLICIES AND INFORMATION

1. Let the instructor know as soon as possible if you have problems with material or projects. See me during office hours, message me on Slack, or drop me an e-mail. I am often available late into the evening, so even if it's 2am (or later), message me! I may be able to help you! (And if not, I'll get back to you as soon as possible in the morning)
2. Office hours are not just for getting help on projects and quizzes – they are a valuable way for me to get to know you. PLEASE swing by Stevens 109 and say hello from time to time!
3. Never ask, "**Will this be on the test?**" You are to assume that any and everything related to concept understanding will be asked on every exam.
4. Never remind me what grade you "**have to get**" in this course, or what your GPA is. These are both irrelevant to concept learning. Minimize your concern for grades and maximize your concern for learning. The latter takes care of the former.
5. My evaluation process concerning your work on exams, homework, and overall grade is **not open to debate** (but constructive suggestions are welcome).
6. It is my hope that you will continue to reach out to me after this semester. Every student who takes one of my classes is important to me and I really appreciate it when students update me on their progress (both academic and in their careers). I am happy to answer Linux questions or help you with job searching and networking. Of course, the better I get to know you, the more support I can be, so please stop by during office hours!