CPSC 2310 Introduction to Computer Organization Course Syllabus and Policies

Instructor

Name: Dr. Yvon Feaster

Email: yfeaste at g.clemson.edu Office: 301 McAdams Hall

Meeting Times and Location

MWF 10:10 AM - 11:00 AM/ Eastern Standard Time

Location: ONLINE

Due to Covid-19 and the lack of space for 150 students to attend face-to-face, this course will be taught online. However, I will do my best to create an atmosphere as close to a face-to-face class as possible. This will mean we will use synchronous Zoom sessions for our meetings. I will lecture during the Zoom sessions, answer questions, present live code examples, etc. You can access the Zoom sessions through the course Canvas page.

Office Hours

Office hours will be Monday 1:00 PM - 2:30 PM and Wednesday 2:00 PM - 3:30 PM / Eastern Standard Time or by appointment

I will set up a separate Zoom meeting through Canvas for each office hour session.

If you have a time conflict with my office hours or something comes up that you need to discuss you are welcome to email me to request an appointment.

Textbook

Required:

Computer Systems - A Programmers Perspective 3rd Edition Bryant and 0'Hallaron

Lecture Notes, Assignments, other necessary documents, etc

I will do my best to post all notes, slides, etc., on Canvas, but there are no guarantees they will all get posted prior to class. My notes, slides, etc., are only references. It is your responsibility to take notes during class. If you miss a class you are responsible for the material covered during the missed class meaning you will need to ask a classmate for notes.

I will also do my best to post a recording of each Zoom session, again this is not guaranteed, it is your responsibility to attend the Zoom sessions each day.

All assignments (programming or written) will be posted on Canvas. There may be several assignments you will complete on Mimir. When an assignment is opened on Mimir an email is automatically sent to you from Mimir. It is your responsibility to make sure these emails are not overlooked.

Technology

You are required to have a functioning laptop computer with webcam and microphone for this course. For examinations, will be required to use proctoring software which will require use of your webcam to observe you while taking exams. Proctoring services, such as Remote Proctor Now, may require you

to pay a fee (approximately \$12 online or \$15 at the bookstore). Since Linux OS is not compatible with Respondous lockdown browser and/or the available monitoring systems you must have Mac OS, Windows OS, or some partition with one of these operating systems. You are also strongly encouraged to have a working set of headphones with microphone for engaging via remote technologies in situations where privacy may be warranted (such as discussing course grades with me). Headphones will not be allowed during exams. See section below on mid-term exams.

Reliable broadband internet connection is required. It is your responsibility to ensure you have a reliable internet connection.

Course Overview

According to the course catalog the course overview is as follows:

Study of the machine architectures on which algorithms are implemented and requirements of architectures that support high-level languages, programming environments and applications.

Prerequisites

CPSC 1020 or 1070 with a C or better. Coreg: CPSC 2311

Learning Objectives

At the end of the semester, students should be able to do the following:

- Describe the internal representation of non-numeric data, such as characters, strings, records, and arrays
- Interpret a simple program at the assembly/machine level
- Explain how instructions are represented at both the machine level and in the context of a symbolic assembler
- Explain different instruction formats, such as address per instruction
- Describe the principles of memory management and memory hierarchy

A brief list of topics that maybe covered (time permitted):

- 1. A Tour of Computer Systems compilation systems, hardware organization of a system, running a hello world program, cache memory, hierarchy of storage devices, how OS manages hardware, etc
- 2. Representing and Manipulating information information storage, integer representations, integer arithmetic, floating point
- 3. Machine Level Representation of Programs historical perspective, arithmetic and logical operations, control, etc
- 4. Optimizing Program Performance
- 5. Memory Hierarchy cache memories
- 6. Linking
- 7. Dynamic Memory Allocation
- 8. C review as well as advanced topics in C

There is no guarantee all of these topics will be covered

Grading

Performance in this course will be evaluated by labs, class activities/participation, programming assignments, mid-term exams, and a final exam

Grading	
Labs	10%
C Assignments	15%
Homework, Participation	10%
Midterm (3)	55%
Final	10%

These percentages are tentative. I reserve the right to adjust the percentages within each category by up to 20%.

Grading Scale	
90 - 100	A
80 - 89.999	В
70 - 79.999	С
60 - 69.999	D
Below 59.999	F

I will **NOT** curve grades. I may have 1 or 2 extra credit questions on each mid-term exam.

Letter grades will be based on a 10-point scale. (See Grading Scale Table)

I do **NOT** round up grades.

Grade Appeal

You may ask for a regrade of any assignments, exams, etc. The regrade request must be emailed to me within one week of the date the grade is available. DO NOT send a regrade request until the final grades have been posted on Canvas and a Canvas announcement has been sent stating the final grades are available. The subject line of the email **must** be "CPSC 2310 Regrade Request". In your email you must explain why you believe your assignment was graded incorrectly. In other words, make your case. It is not enough to say I thought this was the answer or could you look at this question again. You should understand a regrade request will result in the entire assignment being regraded, which could result in a lower grade than the original grade. This policy is not designed as a punishment, only that sometimes in addition to grading something incorrect that you actually did get correct, we may have incorrectly given credit for something that was actually incorrect and may be caught during the regrade. After one week, under no circumstances will I consider a regrade nor change a grade.

Labs

There will be at a minimal of 10 labs this semester. However, if we should have more than 10 labs your final grade will include the highest 10 lab grades.

Programming Assignments

You will have several programming assignments this semester. All programming assignments will be written in C. You are only allowed to use C. If you use any other programming language you will get an automatic 0 on the assignment. Some of these will be small logical thinking assignments, others may be larger assignments. For all programming assignments, it is your responsibility to thoroughly review the assignment documentation to ensure you follow all directions. Not following directions will result in a

substantial reduction of points for the assignment. If you do not understand the instructions it is your responsibility to come to office hours, make an appointment, or email me to clarify the instructions.

One or more programming assignments will be completed through Mimir. When an assignment is placed on Mimir you should receive an email from Mimir. For assignments on Mimir, occasionally, I will look at your code and provide comments to help you. You should make sure you do not delete any notices from Mimir. While I will post the programming assignments on canvas, it is your responsibility to check Mimir and Canvas often to determine if you have an assignment and to ensure you have completed the assignment before the due date.

Homework/Participation

As practice, periodically I will assign 1 or more worksheets during class for you to complete. These worksheets and class attendance will make up the participation portion of your grade. There will be no opportunities to make up the in-class worksheets. Because of covid, I will drop one of the in-class worksheet grades. I strongly suggest you attend class.

I will also periodically assign articles for you to read and summaries, or videos to watch and answer questions.

The actual percentage point split for the homework and participation grades will be determined by the number of assignments given in each category.

Unless otherwise explicitly stated, labs, assignments, and homework are to be your own individual, unaided work, and not to be shared with anyone. See the section below on Academic Integrity.

Midterm Exam

You will have 3 midterm exams. The **tentative** dates for Exams are Monday, February 8, March 8, and April 12.

Exams will be taken through canvas using lockdown browser and some monitoring system. During exams, you are not allowed to wear hats with a bill or hats of a hoodies pulled over your head. Hoodie shirts are fine as long as you do not cover your head. Beanie hats without a bill are acceptable. You are allowed to wear a head covering for medical or religious reasons. If the medical or religious head covering must have a bill you will need to provide documentation stating this. Basically, during the exam the camera should have full view of your eyes.

You are not allowed to wear ear buds or headphones during the exam. It is your responsibility to find a quiet and distraction free place to take the exam.

For each exam you are also required to do an environmental check for the monitoring system. You must **slowly** show your entire desk area, the walls around your desk, and the floor around your desk. You are required to have a completely clean desk with only one or two scraps of blank paper and one or two pencils or pens. You are required to show both sides of the scrap paper during the environment check. If you are using a laptop to take the exam and you have an external monitor you must turn the monitor around. If you are using a desktop computer you may have only one monitor in use. Other monitors must be turned off and turned around.

Canvas exams are prescheduled. If you are late starting you will not be given extra time to complete the exam.

It is your responsibility to take the exam in a location that has reliable internet service. If you have internet problems, prior to or during the exam, you should use your phone to email me ASAP, before the exam time ends.

If you must miss an exam for a university approved event you must inform me at least one week in advance and you must have a university issued letter.

If you miss an exam due to medical issues you must contact me, prior to the start of the exam. You must also provide a note from a doctor showing the date of your visit and approximately the length of time you will be out of commission. Upon recovery, we will discuss a plan to make up the exam.

If the University cancels classes on the day of a scheduled exam, the exam will be rescheduled.

Final Exam

In accordance with the universities' Modified Final Examination Policy, course instructor may allow students, regardless of their grade, to be excused from the final examination. Therefore, at the end of the semester, I will provide a "survey/quiz" in Canvas that all students will be required to complete. This survey/quiz will inform me of whether you plan to take the final exam or not.

Attendance Policy

Studies have found that the single most important factor that contributes to success in a course is class attendance. With this class, like others, each lecture builds upon preceding lectures. Missing even a single class can make it difficult to keep up with the course material. Regular and punctual attendance at all class sessions is expected.

Being absent does not change the responsibility for assigned work or material covered during the class. I will do my best to record and post the class lecture, but this is not guaranteed. It is up to you to attend regularly. If you miss a class it is your responsibility to get the notes, assignments, etc from a classmate.

If I am more than ten (15) minutes late, you should assume that I am dealing with an emergency and will not make it to class. Check your email in those circumstances for further explanation.

In the event the university should cancel classes, inclement weather, power outage, etc., any exam that was scheduled will be given at the next class meeting unless contacted by me. Students will be notified of extension or postponement of assignments or exams through Canvas.

Academic Integrity

"As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a 'high seminary of learning.' Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form."

Academic integrity is taken very seriously. The University's statement on academic integrity can be found at www.clemson.edu/administration/student-affairs/student-handbook/universitypolicies/academic_integrity.html. Unless otherwise instructed, you are expected to work independently on homeworks, programming projects, labs, and another assigned work. I may use automated tools to look for similarities in code which could indicate plagiarism. Instances of copying or sharing, or cheating in any way will result in an academic dishonesty charge, which can lead to an F in the course or expulsion from the university. Each student is responsible for protecting his or her files and work from access by others. Work that is essentially the same and submitted without proper attribution is considered to be a violation of academic dishonesty policies by all those submitting the work, regardless of who actually did the work.

For this course, unless otherwise stated it is considered cheating to do any of the following:

- discuss in detail the code in your program with another person (other than the instructor or the lab TAs)
- use code obtained from another student, or any other unauthorized source, either modified or unmodified (each student is responsible for protecting his or her files from access by others)
- use reengineering tools
- submit work of others, from the Internet or any other source
- use unauthorized aids such as the textbook or other individuals on assigned work or exams

A good rule of thumb if you are not sure if an action is considered cheating, ASK the instructor.

If it is determined that you have cheated the consequences will be substantial, ranging from -100 on the assignment to automatic F in the class.

Learning and Feedback

I expect to foster a nurturing learning environment based upon communication and mutual respect. I will give serious consideration to any suggestion as to how to further such a positive and open environment. I encourage you to give feedback on various aspects of the course, including but not limited to content, exams, style, and treatment. Please feel free to express your opinions, respectfully, during my office hours. Your feedback is important for improving the quality of this course. However, please do not approach me when you are angry. If you are angry or rude when bringing suggestions to my attention, I will ask you to approach me with your suggestions when you are calmer and/or have a better attitude.

Disability Access

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to a class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848or by emailing studentaccess@lists.clemson.edu. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student's responsibility to follow this process each semester. You can access further information here: http://www.clemson.edu/campus-life/campus-services/sds/.

Title IX

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity (e.g., opposition to prohibited discrimination or participation in any complaint process, etc.) in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972.

The University is committed to combatting sexual harassment and sexual violence. As a result, you should know that University faculty and staff members who work directly with students are required to report any instances of sexual harassment and sexual violence, to the University's Title IX Coordinator. What this means is that as your professor, I am required to report any incidents of sexual harassment, sexual violence or misconduct, stalking, domestic and/or relationship violence that are directly reported to me, or of which I am somehow made aware.

There are two important exceptions to this requirement about which you should be aware:

Confidential Resources and facilitators of sexual awareness programs such as "Take Back the Night and Aspire to be Well" when acting in those capacities, are not required to report incidents of sexual discrimination. Another important exception to the reporting requirement exists for academic work. Disclosures about sexual harassment, sexual violence, stalking, domestic and/or relationship violence that are shared as part of an academic project, a research project, classroom discussion, or course assignment, are not required to be disclosed to the University's Title IX Coordinator.

This policy is located at http://www.clemson.edu/campus-life/campus-services/access/title-ix/. Ms. Alesia Smith is the Executive Director for Equity Compliance and the Title IX Coordinator. Her

office is located at 223 Holtzendorff Hall, phone number is 864.656.3181, and email address is alesias@clemson.edu.

Specific COVID-19 related information for in person classes

While on campus, face coverings are required in all buildings and classrooms. Face coverings are also required in outdoor spaces where physical distance cannot be guaranteed. Please be familiar with the additional information on the Healthy Clemson website, such as the use of wipes for in-person classes. If an instructor does not have a face covering or refuses to wear an approved face covering without valid accommodation, students should notify the department chair. If a student does not have a face covering or refuses to wear an approved face covering without valid accommodation, the instructor will ask the student to leave the academic space and may report the student's actions to the Office of Community & Ethical Standards as a violation of the Student Code of Conduct. If the student's actions disrupt the class to the extent that an immediate response is needed, the instructor may call the Clemson University Police Department at 656-2222.

I posted this in the syllabus, but this does not really apply to our class since we are online.

Copyright Statement

Materials in courses should be considered to be copyrighted. They are intended for use only by students registered and enrolled in a particular course and only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Teach Act. Students must seek permission from instructors to record any class activity, including lectures, discussions, and presentations. Students should be reminded to refer to the Use of Copyrighted Materials and "Fair Use Guidelines" policy on the Clemson University website for additional information(link https://clemson.libguides.com/copyright).

Important Dates

Dates below are for the Spring 2021 Semester:

Date	Description
January 6, W	Classes Begin
January 12, T	Last day to register and add a class or declare Audit
January 18, M	Martin Luther King, Jr. holiday
January 20, W	Last day to drop a class or withdraw from Clemson w/o a W grade
February 26, F	Last day for instructors to issue mid-term evaluations
March 12, F	Last day to drop a class or withdraw from Clemson w/o final grades
March 15 - 19, M - F	Spring break
April 12, M	Registration for Fall and Summer terms begin
April 26 - 30, M - F	Exams

Final Exam Time:

Tuesday April 27, 3:00pm – 5:30pm

https://www.clemson.edu/registrar/student-menu/exam-spring.html