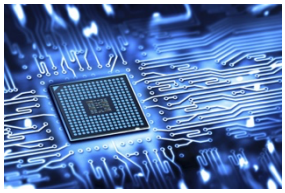

CS33

Computer Organization

Glenn Reinman (reinman@cs.ucla.edu)
Lectures: Mon/Wed, 10-11:50am in Broad 2160E
Office Hours: Mon/Wed 12-1pm in 371 E6

Welcome to CS33, Computer Organization!

Please take the time to familiarize yourself with the material below.

1. Course Organization

This quarter we will be doing a flipped classroom. I will assign videos with lectures each week - these will be hosted on the Bruin Learn system here. Students are expected to watch the videos before class and then I will use our lecture slots to discuss the material, go over what I think are the challenging parts, try and solicit questions from all of you, do example problems, etc. Discussion sections on Friday will be additional opportunities to ask questions and get help on the material from our excellent Tas and LAs (learning assistants). ***Attendance at discussion sections will be required***.

While tempting, please do not skip the step of watching the videos - you may be lost in lecture without that context. One of the benefits of using videos is that you can watch them multiple times if needed - and you can pause and take breaks, unlike real-time lectures. One of the drawbacks that some students perceive in a flipped classroom is that students think they are spending more time - not only do they have to attend lecture, but they also have to watch videos? But the reality is that this front-loading of video time will help with understanding the material, and should be more efficient in the long term. If you keep up with the videos that is!

2. Course Materials

Class text:

Bryant & O'Hallaron, "Computer Systems: a Programmer's Perspective", 3rd Edition.

In this class, the textbook is intended as a way of helping you understand the material that I present in videos and in lectures. Just reading the textbook alone and skipping lectures/videos is definitely not recommended as you are not focusing in on the topics that I emphasize (and will ultimately test you on) - and some material may not be covered as well (or at all) in the textbook. I will be assigning homework out of the textbook however.

Previous editions of the textbook have a lot of the material we will be covering, but I will be assigning homework from the 3rd edition, so you will need access to a 3rd edition textbook to get the questions. I

am not allowed to post material from the textbook due to copyright restrictions.

3. Grading

Grading in this class will be based on homework (5%), discussion section (10%), labs (35%), a midterm (20%), and a final (30%). One individual homework is not worth a lot, but that does not mean you should skip it - instead, the low weight is supposed to allow you to learn the material in a more forgiving way - the point is to learn the material through the homework so that you are ready to crush the midterm and final.

Lab and homework deadlines are firm. You should plan your time accordingly – do not wait until the last minute for these labs!

4. Tentative Course Schedule

Week #	Monday's	Wednesday's	Friday's
1	Intro + Bits and Bytes (1,2)	Integers (2)	Warmup Lab Due
2	Machine-Lvl Prog I: Basics (3)	Machine-Lvl Prog II: Control (3)	
3	Machine-Lvl Prog III: Procedures (3)	Machine-Lvl Prog IV: Data (3)	Data Lab Due
4	Machine-Lvl Prog V: Adv Topics (3)	Floating Point (2)	
5	MIDTERM EXAM	Program Optimization (5)	Bomb Lab Due
6	The Memory Hierarchy (6)	Cache Memories (6)	
7	Concurrency (12+handouts)	Concurrency (12+handouts)	Attack Lab Due
8	Linking + Exceptions (7,8)	Virtual Memory (9)	
9	I/O (10)	MIPS (handouts)	
10	**Holiday**	Review	Parallel Lab Due

Final Exam: Monday, June 6th, 11:30am-2:30pm

5. Academic Integrity

Each of you has worked very hard to be here and brings a multitude of valuable and unique skills to UCLA and to this course. Unfortunately, the structure of academia is often hyper-competitive, spurring anxiety, an "everyone for themselves" mentality, and a desire to "be the best". These pressures can make it seem like plagiarism is the only option. However, plagiarism does everyone a disservice: it negates the hard work of the person whose work is plagiarized, it creates an unfair balance of effort among students, and most importantly, when someone plagiarizes it represents a lost opportunity to learn and to grow. Please respect your classmates and yourself by not plagiarizing or cheating.

Cheating will not be tolerated. My job is simple - if I see cheating, I am supposed to report it to the Dean's office and they handle it from there. All of you have enough experience to know what cheating is - but just in case: copying from another student, a solution manual, or a web site are examples of cheating. Working together to discuss and solve a problem is fine - as long as everyone is taking an active role in the work. Unfortunately, that is not the case on exams - exams will be open book and open notes, but you cannot collaborate or share notes/books. No electronic devices allowed during exams.

Please note what the UCLA Student Conduct Code says about cheating:

> **102.01a: Cheating**
> Cheating includes, but is not limited to, the use of unauthorized materials (including online sources such as Course Hero, GitHub or Chegg), information, or study aids in any academic exercise; the alteration of any answers on a graded document before submitting it for re-grading; or the failure to observe the expressed procedures or instructions of an academic exercise (e.g., examination instructions regarding alternate seating or conversation during an examination).

To be perfectly clear – online sources such as Course Hero, GitHub, or Chegg are unauthorized materials and will be considered cheating. The use of exams or assignments from previous quarters (unless released by me) are unauthorized materials and will be considered cheating.

6. Academic Accommodations

If you are already registered with the Center for Accessible Education (CAE), please request your Letter of Accommodation in the Student Portal. If you are seeking registration with the CAE, please submit your request for accommodations via the CAE website. Students with disabilities requiring academic accommodations should submit their request for accommodations as soon as possible, as it may take up to two weeks to review the request. For more information, please visit the CAE website, visit the CAE at A255 Murphy Hall, or contact the CAE by phone at (310) 825-1501.

7. Other Campus Resources

Academic Counseling

Academic Advisors aim to collaborate with you to support your academic, professional, and personal development. Website: https://www.registrar.ucla.edu/Academics/Academic-Counseling

Title IX Office

Title IX prohibits gender discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking. If you have experienced sexual harassment or sexual violence, you can receive confidential support and advocacy at the CARE Advocacy Office for Sexual and Gender-Based Violence, 1st Floor Wooden Center West, CAREadvocate@careprogram.ucla.edu,

310.206.2465. In addition, Counseling and Psychological Services (CAPS) provides confidential counseling to all students and can be reached 24/7 at 310.825.0768. You can also report sexual violence or sexual harassment directly to the University's Title IX Coordinator, 2241 Murphy Hall, titleix@conet.ucla.edu, 310.206.3417. Reports to law enforcement can be made to UCPD at 310.825.1491.

Counseling and Psychological Services (CAPS)

CAPS provides counseling services to students who are in need of support in any way 24 hours a day, 7 days a week. Appointment can be made by contacting CAPS during their office hours Monday - Friday 9 am - 4 pm. Crisis support is available 24/7 by phone at 310-825-0768.
Website: www.counseling.ucla.edu
Phone Number: 310-825-0768
Campus Location: John Wooden Center, 221 Westwood Plaza