CMSC 22200 1 - Computer Architecture - Instructor(s): Yanjing Li

Project Title: **College Course Feedback - Spring 2023**

Number Enrolled: **38**
Number of Responses: **14**

Report Comments

Opinions expressed in these evaluations are those of students enrolled in the specific course and do not represent the University.

Creation Date: **Tuesday, October 24, 2023**

What are the most important things that you learned in this course? Please reflect on the knowledge and skills you gained.

Comments
Details on instruction set architecture & microarchitecture of a computer; how to build a simulator of a microprocessor
I learned a lot about how computer processors are structured, as well as how exactly computers perform work, and the many ways in which computer performance has been optimized.
ISA, the CPU pipeline, how to think constructively about computer architecture and the tradeoffs between efficiency and cost as well as hardware and software.
We learned the basics of microarchitecture, ISA's, pipelining, parallel processors, out–of–order.
Pipelined processors, caches, virtual memory.
ISAs, uarchs, pipeline design, OoO (incl. control logic, reordering, buffer tables, etc.), cache design, etc.
How a CPU works!
Pipe line stages

Describe how aspects of this course (lectures, discussions, labs, assignments, etc.) contributed to your learning.

Comments
Lecture introduced the materials, & lab assignments ensured we really understood the concepts. Lab didn't really cover some of the later material (which honestly makes sense, we do need time after learning the material to actually integrate it into our simulator). But exams covered all of the materials from lecture, so that made sure we reviewed everything
The slides are pretty informative on their own, but Professor Li also does a great job explaining concepts during the lectures themselves. The labs are difficult, but ultimately are rooted in what you learn in class and do a decent job in assessing how well you are able to synthesize what you learned into actual implementation.
The labs were very interesting and had a lot of content. The lecture and the slides are very clear.
Lectures were pretty helpful, and the times the professor had us discuss questions was useful. I liked that she would sometimes ask open–ended questions about the tradeoffs of a particular architectural choice.
Lectures are key for success in this course. While reading the textbook is a decent way to catch up if you miss a lecture or if you need to brush up on something, lectures are so much easier to understand (and you can ask questions if you don't understand anything to your very responsive and helpful Professor Li!). Labs are obviously very important when it comes to your grades, and I would recommend getting a reliable partner for them. Don't be afraid to switch your partner after the first project if it seems like you won't be working well together: the first lab is very easy compared to the subsequent labs.
The lectures were extremely helpful and were the most effective means available at elucidating the content covered. The labs were also very helpful, but only covered pipelining, logic control in a pipeline, and caching.
The pipelining and branch prediction lab were really helpful. The other ones felt more tedious than instructive.
Powerpoints
The lectures were most helpful

Please respond to the following:

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This course challenged me intellectually.	4.92	5.00	0.00%	0.00%	0.00%	7.69%	92.31%
I understood the purpose of this course and what I was expected to gain from it.	4.62	5.00	0.00%	0.00%	7.69%	23.08%	69.23%
I understood the standards for success on assignments.	4.46	5.00	0.00%	7.69%	7.69%	15.38%	69.23%
Class time enhanced my ability to succeed in graded assignments.	4.38	4.00	0.00%	0.00%	7.69%	46.15%	46.15%
I received feedback on my performance that helped me improve my subsequent work.	4.15	4.00	0.00%	15.38%	0.00%	38.46%	46.15%
My work was evaluated fairly.	4.62	5.00	0.00%	0.00%	7.69%	23.08%	69.23%
I felt respected in this class.	4.55	5.00	0.00%	9.09%	0.00%	18.18%	72.73%
Overall, this was an excellent course.	4.67	5.00	0.00%	0.00%	8.33%	16.67%	75.00%

Additional comments about the course:

Comments
This course will probably be pretty hard for those not too comfortable with programming in C, but contains very minimal busy work; the workload consists entirely of 4 big lab assignments and 2 open–note exams. Would recommend for those who prefer a relatively hands–free class that requests work on a biweekly basis rather than daily.
The tests can sometimes punish those that misunderstood what the professor takes as the "most important concepts". For example, the hardest questions on the midterm and finals were worth as low as 3 pts, but a single "core problem" can be worth up to 20.
I thought it was a very interesting course. Though, it seems like people who didn't like CMSC 15400 didn't like this either, so maybe look at other options if you are just looking for a way to fulfill your systems requirements?
Professor Li is amazing!
Essential class for anyone interested in how computers work

I would recommend this course to:

	No	Yes
Highly-motivated and well-prepared students	0.00%	100.00%
Anyone interested in the topic	25.00%	75.00%

Thinking about your time in the class, what aspect of the instructor's teaching contributed most to your learning?

Comments
Professor was always good about answering questions during class & on Ed, which helped clear up confusion
Professor Li is clearly passionate and knowledgeable about what she teaches, and as such does so in a way that is easy to understand. The example problems that she gives also do a good job in demonstrating concepts that would otherwise be rather abstract without a concrete example.
Her way of explaining and understanding of the material, as well as the office hours.
Questions to the class were most helpful; lectures were good
Very clear and open to questions.
The open forum style her lectures had.
Professor Li was a very organized lecturer, which was very helpful in terms of connecting all the smaller topics into larger, more pertinent issues that were presented to us and situated the content with more relevancy. I really enjoyed this aspect of her teaching. Additionally, Prof. Li was also very willing to help answer questions at the end of lectures and on Ed, which were very helpful as well.

What could the instructor modify to help you learn more?

Comments
I sometimes felt the professor was moving through material rather slowly. Perhaps moving more quickly would allow for us to cover more material, such as security concerns.
Some of the structures or procedures near the end of the course were a bit more difficult to comprehend, and would've maybe been easier to grasp given a more concrete example of them in use (ex: MESI protocol).
Sometimes, the concepts can be explained a bit more clearly, especially how a specific concept might fit inside the big picture.
More questions in the second half of the class would help.
Not much, honestly.
More structured ways to practice the concepts mentioned in class.
Content–wise, I thought it might be nice if a little more time was spent on the paging section of the lectures. Style–wise, I liked everything about Prof. Li's teaching!
I wish we went faster in class/the pacing was more even. It felt like we spent equal time on each slide, whether that slide had a lot of hard content or not.

The Instructor . . .

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Organized the course clearly.	4.91	5.00	0.00%	0.00%	0.00%	9.09%	90.91%	0.00%
Presented lectures that enhanced your understanding.	4.73	5.00	0.00%	0.00%	0.00%	27.27%	72.73%	0.00%
Facilitated discussions that were engaging and useful.	4.55	5.00	0.00%	9.09%	0.00%	18.18%	72.73%	0.00%
Stimulated your interest in the core ideas of the course.	4.73	5.00	0.00%	0.00%	0.00%	27.27%	72.73%	0.00%
Challenged you to learn.	4.73	5.00	0.00%	0.00%	0.00%	27.27%	72.73%	0.00%
Helped you gain significant learning from the course content.	4.91	5.00	0.00%	0.00%	0.00%	9.09%	90.91%	0.00%
Was available and helpful outside of class.	4.64	5.00	0.00%	0.00%	0.00%	36.36%	63.64%	0.00%
Motivated you to think independently.	4.73	5.00	0.00%	0.00%	9.09%	9.09%	81.82%	0.00%
Worked to create an inclusive and welcoming learning environment.	4.73	5.00	0.00%	0.00%	0.00%	27.27%	72.73%	0.00%
Overall, this instructor made a significant contribution to your learning.	4.82	5.00	0.00%	0.00%	0.00%	18.18%	81.82%	0.00%

Please include the name of the TA/CA/Intern you are evaluating. What aspects of the TA's teaching contributed most to your learning? What could the TA modify to help you learn more? Please include any additional feedback for the TA/CA/Intern.

Comments
Joshua Ahn and David Wu. Joshua was great in explaining the concepts and identifying the key bugs in the conceptual understanding. David was a bit confusing at times... Some of the explanation was clearly incorrect.
Joshua Ahn was the TA I interacted most with. His office hours were very helpful, and I always felt comfortable asking him questions. Also, him and David Wu were stupid quick when it came to responding questions on Ed. I don't know how they were able to respond virtually instantly every question.
Joshua and David were both excellent and very helpful!
Josh was very helpful

The TA/CA or Intern. . .

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Facilitated discussions that supported your learning.	4.60	5.00	0.00%	0.00%	16.67%	0.00%	66.67%	16.67%
Gave you useful feedback on your work.	5.00	5.00	0.00%	0.00%	0.00%	0.00%	83.33%	16.67%
Stimulated your interest in the core ideas of the class.	4.60	5.00	0.00%	0.00%	16.67%	0.00%	66.67%	16.67%
Challenged you to learn.	4.60	5.00	0.00%	0.00%	16.67%	0.00%	66.67%	16.67%
Helped you succeed in the class.	4.67	5.00	0.00%	0.00%	16.67%	0.00%	83.33%	0.00%
Was available and helpful outside of class.	5.00	5.00	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%
Overall, this individual made a significant contribution to your learning.	4.67	5.00	0.00%	0.00%	16.67%	0.00%	83.33%	0.00%

How much did the following elements of the course contribute to your learning gains?

	Mean	Median	No Gain	A Little Gain	Moderate Gain	Good Gain	Great Gain	N/A
Laboratory Experience	3.67	5.00	33.33%	0.00%	0.00%	0.00%	66.67%	0.00%
Field Trips	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Library Sessions	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Review Sessions	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Writing Seminars	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

Is this class a requirement of some sort?

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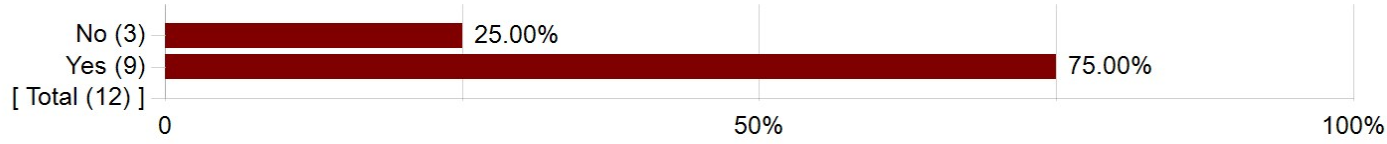

Prior to starting this class, your interest level was?

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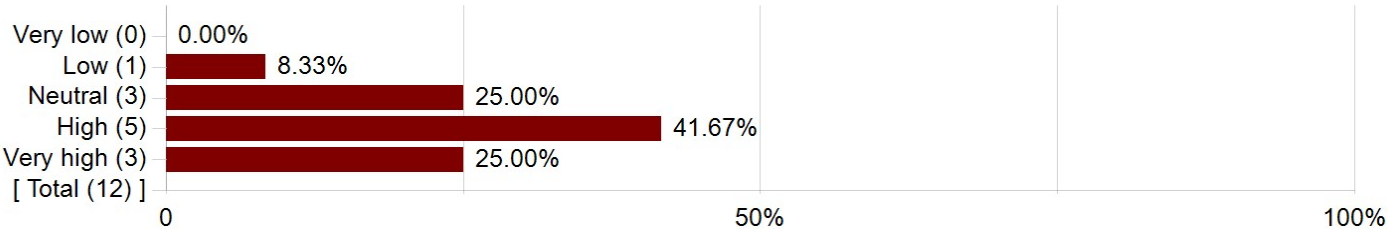
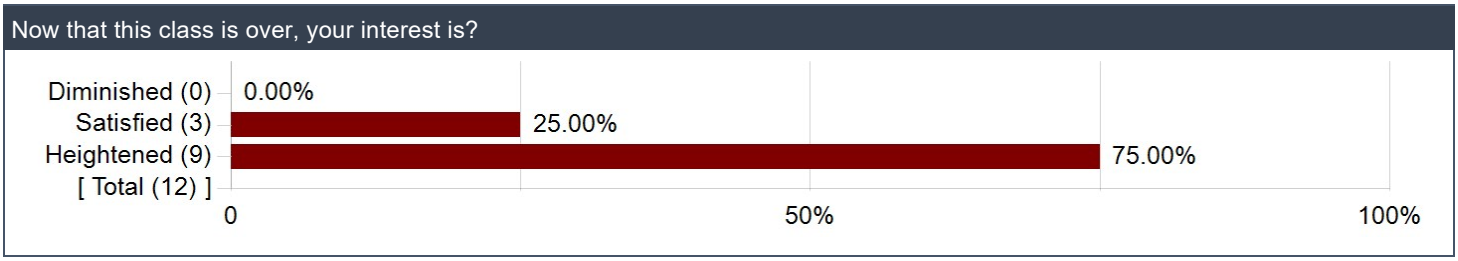
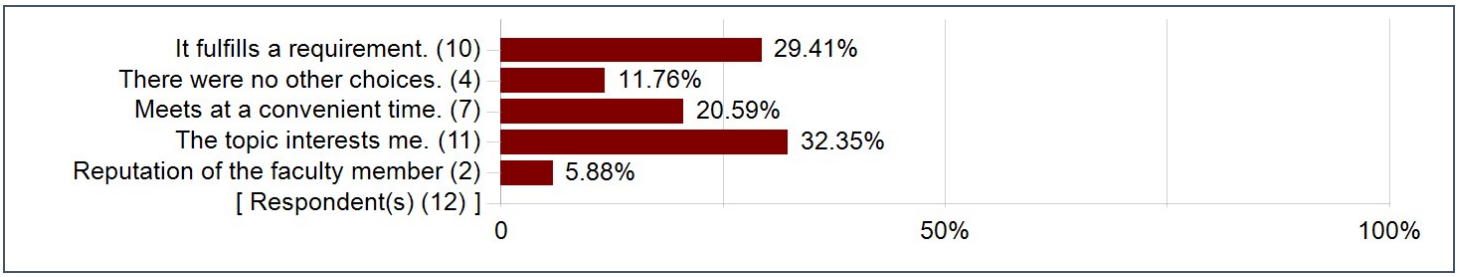


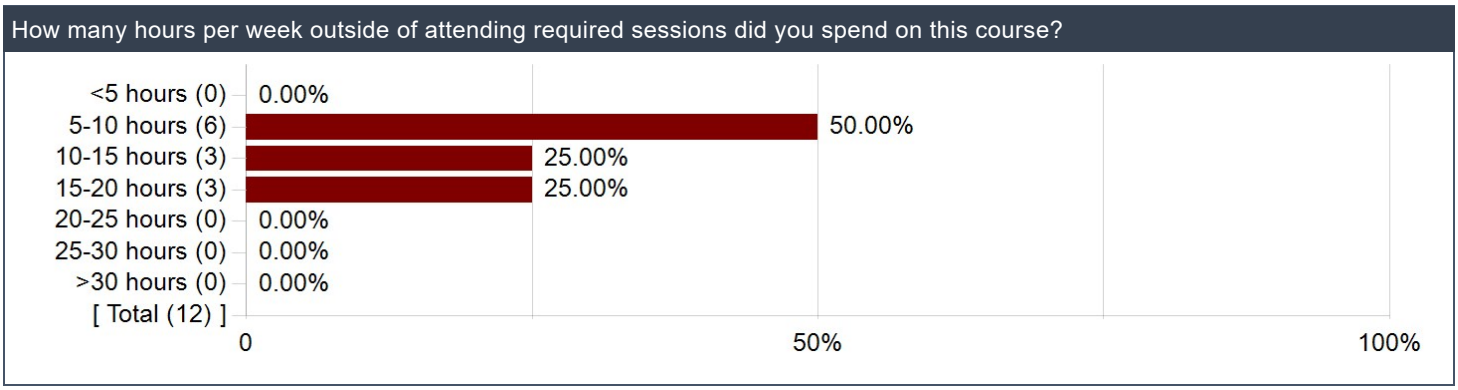
Now that this class is over, your interest is?



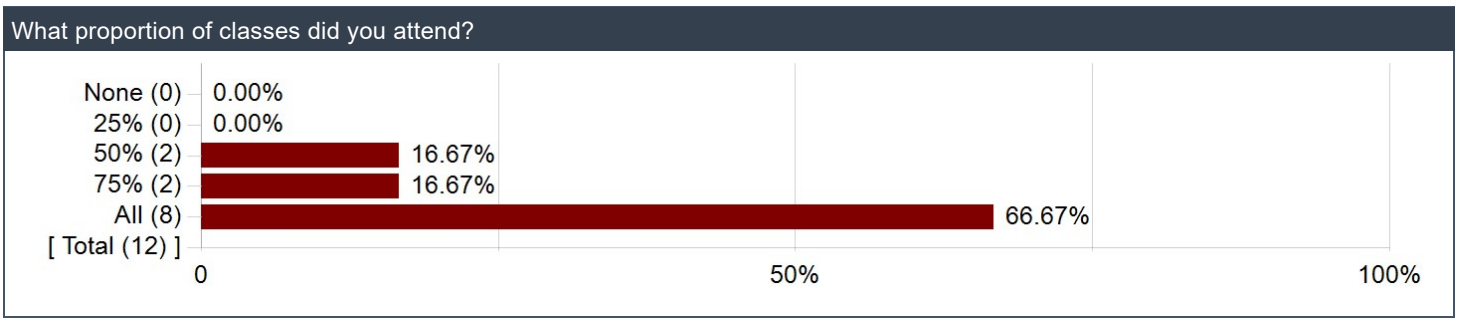
Why did you choose to take this course? (Select all that apply)



How many hours per week outside of attending required sessions did you spend on this course?



What proportion of classes did you attend?



Please comment on the level of difficulty of the course relative to your background and experience.

Comments
This is the last class I'm taking for the CS major. It was not terribly challenging, even with it being a while since I took 154 (though I imagine me having more CS experience in general did help). I did just fine working individually on the lab projects, but if you have less experience, you can do those with a partner
Given that I completed Intro to Systems 154 with a B, this course was easier to digest than the previous one, even though this class builds upon concepts discussed in that course (ex: caches, assembly code, C).
Not a very hard course except some bugs that can be annoying. With a trustworthy teammate (important in ALL CS COURSES), this course will be a very chill one compared to Networks/OS/Security.
This course was a good bit of work, but doable if you have a good background in C.
Just a little more difficult than CMSC 15400. Be prepared to do lots of debugging, though.
I took this course having only taken the introduction sequence and no other computer science classes before hand. Some topics were challenging but nothing outrageous, and the labs were completely comprehensible.
Nothing unreasonable
Reasonably difficult