Instructor: **Tan, Cheng**

Subject: **CS**

Catalog & Section: **5600 01**

Course ID: **31172**

Objectives:

Enrollment: **56**

Responses Incl Declines: **24**

Declines: **0**

Instructor Related Questions: Cheng Tan (45 comments)

Q: What were the strengths of this course and/or this instructor?

1   Professor's excitement for the course and its material is very clear and apparent, which gives a strong beginning of the course. The first month of the course filled me with passion for Systems. I also enjoyed the no laptops in class rule, I felt that did help me focus when it came to lectures.

2   Adding the additional TA was helpful, but some TAs were more helpful than others. Having the office hours in person rather than online was also helpful.

3   Course was very interesting and applicable

4   I definitely learned a lot through this course. Tan is a good instructor and he gives out chocolate too, which is always nice

5   Well-prepared course material and lectures.

6   highly organized

7   Took great effort in making the course interesting and interactive. Overall a great learning experience.

8   The instructor is obviously very passionate and knowledgeable about systems, and cares about his students. The grading scheme also puts the emphasis on trying and learning with the labs, and less on the results. Meeting with Prof. Cheng in person is also very helpful.

9   The professor was receptive to students' questions and was very transparent about the the contents of the course, and what the expectations for all the assignments such as labs were.

10   Homeworks were graded very transparently, and in-class explanations gave a good overview of topics.

11   Very knowledgeable about the subject.

12   Professor Tan is clearly passionate about Computer Systems, Linux, and C. This made his lectures and assignments more interesting.

     I appreciate that Professor Tan puts his notes, handouts, and "scribble" on the website. Also releasing past exams was very helpful for studying.

     I also found the reading entertaining and informative!

     Also, I want to give a huge shout out to Brent, the TA. He was awesome! Very helpful and a life saver in this course. Thank you Brent!

13   Knowledgeable about the subject

14   Instructor was clear about the course expectations and difficulty and was always available to help clear our doubts.

15   Took a very organized approach to comprehensively cover the core systems concepts, and gave students opportunities to practice hands-on through detailed lab exercises.

16   Instructor was very motivated.

17   Came prepared to class and I liked his humor when explaining some concepts.

Q: What could the instructor do to make this course better?

1   I felt a lot of the labs were banging your head against the wall until your head or the wall broke. Concepts weren't always laid out well in the explanations of the lab, and TAs were often cryptic or straight up unhelpful in their assistance.

2   It would have been nice to see our graded midterm and final to see which questions we got wrong.

3   Maybe focus more on industry-standards instead of older or academic research.

4   the lottery attendance is interesting -- basically, names are randomly called, and if you aren't there, you get -1% on your final grade. but if you aren't called, that doesn't do anything. So it requires a lot of planning ahead if you want to miss a class, but overall i don't think it is the worst form of attendance.

5   Think about students!
     The rules are so goddamn strict. I was scared even after submitting my assignments, often wondering if I submitted them correctly. Make the course a bit student-friendly

6   A lot of times he makes mistakes because he goes fast, while he doesn't even realize the mistake he makes, leaving the concept very confusing.

7   I think it is perfectly designed as of now.

8   Sometimes in the interactions on Piazza Prof Cheng can seem a little short and not understanding with his answers. I do not think he is that way, but some students have gotten that impression. Increasing the amount of slack hours for students would also be beneficial and facilitate more flexibility for students who want to try and work hard on the labs and learn.

9   I'm not a fan of the no computer policy. I like to type my notes, and found myself less engaged in lecture due to not being able to reference my notes, or quickly look through past lecture notes. It was harder to focus in class as a result and often times I would study the lecture material before attending lecture, which diminished the value of attending lecture in the first place.

10   Exam grades were shown without seeing where points were deducted (with poor memory, wouldn't know where points were taken off) and class participation felt tricky if you were selected and still didn't fully understand a topic.

11   Be more receptive to students' feedback/responses. More office hours by the professor. Give us back our midterms/finals so we can actually see what we did wrong.

12   The exam regrade policy makes no sense.

     1) If we are allowed to see past exams, then there's no reason not to let us see our exams after they've been graded.
     2) If we cannot see our graded exams, it makes it difficult to know which question to ask for a regrade on.
     3) The policy seems to be in place just to prevent regrade requests.

     Personally, I don't think it's great that our grades can also go down after a regrade. Would ideally only be able to increase.

     The testing for Lab 3 was quite challenging. It would be helpful to do some non-concurrency testing in an earlier lab/homework as practice.

Q: What could the instructor do to make this course better?

13   Better time management for courses, so much time spent answering logistics questions instead of learning materials
Little transparency in grading, can't even see our exams
Too much work towards the later end of the course, every 2 weeks is a new lab
Lots of mistakes made in homework and exams and lab grading

14   Perhaps be more encouraging toward questions from students during class time, though it is probably also important to balance the time needed to cover all course content.

15   Be less condescending, allow collaborations

16   Outline the labs that would be released for the whole class. A new lab project was added compared to previous 2 iterations of his class so we had to complete 1 lab during Spring Break.

17   The professor does not return the graded midterm/final. Just the answer key and the score. The idea was that the students should internalize the material well enough to feel right to defend a regrade. However, the exams included non binary or multiple choice answer questions which leaves correct answers a little vague. Given the class average for both exams was a C this policy seems both arbitrary, unhelpful and unnecessarily stressful for the students.

Q: Please expand on the instructor's strengths and/or areas for improvement in facilitating inclusive learning.

1   I learned a lot from this class, but felt it wasn't from learning but walking a stressful tight rope of "Just get it right". More about the result than the process.

2   TL;DR, Professor Tan isn't a "bad" professor per se, but he has some weird course design choices and stubbornness that inhibit the class experience overall. Labs are almost copied from Eddie Kohler at Harvard, and we are not provided with Harvard-level learning to solve them. He refuses to return our midterm/final to us to see what we got wrong, and only allows for regrade requests if they happen publically on Piazza.

In my opinion, Professor Tan's CS5600 has two main issues. First, there is a large gap between what is taught in lecture and what is required of us for lab assignments. In lectures, we are taught more along the lines of computer theory. In labs, which are Harvard labs sort-of adjusted by Professor Tan, we are required to implement something that we are taught the theory of in class. We're missing the key part of HOW we should implement what we learn in lecture. The result is that labs end up being a mess of confusion, frustration, panicked Googling to find out how X works in C, and desperately asking TAs for help, of which one of them really knew what they were talking about (3 out of the 4 TAs were unable to help with the lab until halfway through the term, after they were required to try and do the lab as well). Couple all of this with the fact that labs are worth 50% of our grade, and it sums up into what feels like a problem that requires very specific tools and extensive knowledge of how to use them to solve, but we are only given basic knowledge and with only a bare minimum of what tools we need.

Second, Professor Tan's stubbornness in really confusing areas. The most glaring example is how he deals with assessments. He does NOT return our midterm and final to us. He does release the solutions to us, and allows us to argue for a regrade. But without seeing what exactly we got wrong, how are we supposed to argue for a regrade? Even if we manage to memorize what we answered for every question before submitting the midterm/final, there are times when our answer should get us points based on the grading criteria but didn't, and vice versa. This isn't even taking into account his weird regrading policy. For the midterm, regrade requests were split into private and public requests. Private requests would allow us to ask for feedback on questions we "think" we got wrong (again, since the midterm/final aren't returned to us so we can't be sure), but a regrade cannot actually happen. Public regrades would involve the professor posting our answer to a question publicly on Piazza, essentially challenging us to a debate on an open forum with our grade on the line. It's ridiculous; I'm almost fully convinced that the professor simply doesn't want to bother with scanning and sending out the graded version of every student's midterm/final, and doesn't want to bother with every student desperately asking for regrades on every question they can. I can understand the latter concern, but there's a pretty wide gray area between allowing students to challenge their grade as much as they want, and only allowing regrade requests to happen in a public debate.

3   Professor Tan uses "clustering" for grades, which is essentially a curve. I prefer being able to tell where my grade is throughout the course, instead of having to be in limbo waiting for the curve.

Also, to this point, it would be helpful if the Canvas grade page had the accurate weights in it.

As Professor Tan is a relatively young professor, I believe most of these issues will work out in the next few years as he gets more experience.

Overall, I enjoyed his class and learned a lot! It was challenging and rewarding. Glad I could learn C in more depth.

4   The labs/hws are really important and helped me understand everything. They are all meant to be independent, so it is a little hard to complete, but I enjoyed the success of finishing them all.

Also, don't worry about the length of the class because there is a little break in the middle usually where you can chat or go to the bathroom

5   Strengths:
Created a very well rounded OS Course
Areas of Improvement:
Empathy
Student-Friendly

6   He has a quota for questions per student for each lecture (sometimes you are allowed 1 question). This kills the enthusiasm for learning.

7   I think it was inclusive.

8   Prof Tan is very knowledgeable and willing to help out students in need. The course materials are clearly well prepared.
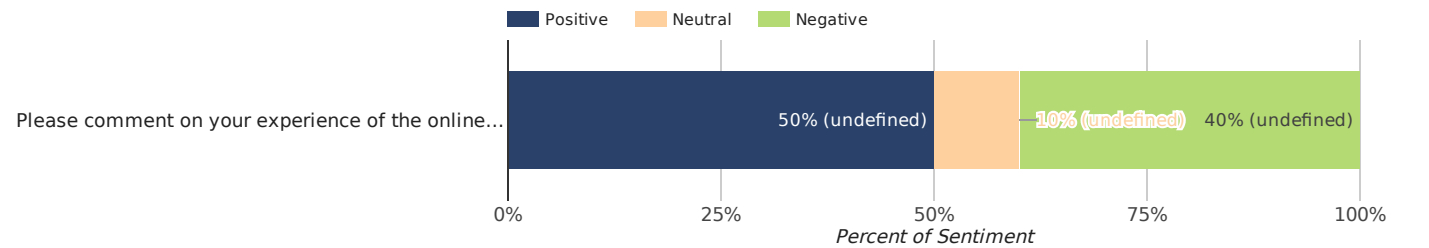
9   Instructor is very inclusive. No recommendations.

10   Improvement: allow collaborations, it is not like everyone knows everything. discussions help save time and reduce frustration
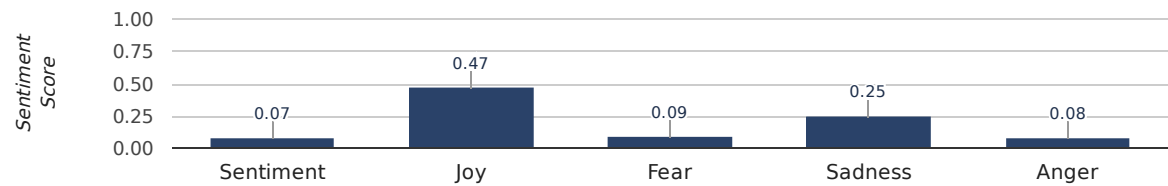
11   Professor's respect towards students on Piazza was a times questionable because he did not admit his mistakes, such as deducting points in the midterm for wrong multiple choice questions, although not verbally nor having written instructions of that.

Questions to Assess Students' Online Experience (10 comments)

Q: Please comment on your experience of the online course environment in the open-ended text box.

Legend: ■ Positive ■ Neutral ■ Negative

Please comment on your experience of the online...
50% (undefined)   10% (undefined)   40% (undefined)

0%   25%   50%   75%   100%
Percent of Sentiment

Q: Please comment on your experience of the online course environment in the open-ended text box.

1 Various students shared issues regarding environment configuration. Missing class was poorly accommodated as Zoom lectures occasionally lacked audio or checking the chat. ★ ☆ ☆ ☆

2 Online course environment was lacking. Class was mostly in-person involved. ★ ☆ ☆ ☆

3 Professor Tan provided an online preview session about Lab4 - Weensy OS which was kind and helpful!

Professor Tan and TAs were usually quick to respond on Piazza or via the Mailing List.

Online office hours were a nice addition, but the TA wasn't consistently helpful. Although I did appreciate how much time he would give when it was my turn. ★ ★ ★ ★ ★

4 it was fine, most of what we did was in person ★ ★ ★ ★ ★

5 If you attend the course online he doesn't care if you have any doubts, as he doesn't monitor the zoom chat. ★ ☆ ☆ ☆ ☆

6 a lot of notes, but we were not instructed on how to utilize them. ★ ★ ★ ☆ ☆

7 The teaching staff was cordial and quick to reply online. ★ ★ ★ ★ ★

8 Enjoyed the well-organized and comprehensive course content on the course website. ★ ★ ★ ★ ★

9 The course website is pretty well organized, but having all the resources on the schedule page is a little confusing. Having a "resources" tab containing the HWs, Solutions, Practice Exams, etc would be helpful. ★ ★ ☆ ☆ ☆

10 All online material was very well organized, from the course schedule to what information was outlined in the lab. The staff were very responsive whenever I sent questions to the staff mailing list. ★ ★ ★ ★

Student Self-Assessment of their Effort to Achieve Course Outcomes (13 comments)

Q: What I could have done to make this course better for myself.

1 Taken this class closer to the original C class I took. Having fallen out of C put me at huge disadvantage in the course.

2 I should have done the reading before class and reviewed the material learned after the class or before the next class. I should have also started the labs closer to when they were released.

3 Start assignments earlier

4 started the assignments earlier. It is through sheer luck and my own natural talent that I succeeded in all the labs having started them so late. they take a long time...

5 Study computer systems before taking the class so as to have a background in everything.

6 Worked better for the examinations.

7 Started labs earlier! It cannot be emphasized enough how much it helps to start early and attend OH regularly for help.

8 I think I prepared well for this course. It was very helpful to read and take notes on STEP before every lecture, but it is a time sink and I did not get to focus as much on my other classes as a result.

9 Had a stronger background in C programming.

10 Starting Lab assignments early was always important. At the end of the course, I didn't have time to complete all the reading because I had to dedicate so much time to the labs.

So I'd say managing time.

11 Ask for help more often.

12 Not taking the course.

13 Ensure that you have good foundations of C programming language. Learn basics of systems before this class, as an Aligner, I struggled a lot with concepts of this class.