

Computer Systems (Fall 2023)

Instructor: **Schedlbauer, Martin**

Subject: **CS**

Catalog & Section: **5600 01**

Course ID: **10684**

Objectives:

Enrollment: **74**

Responses Incl Declines: **43**

Declines: **0**

Instructor Related Questions: Martin Schedlbauer (60 comments)

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

- 1 I think he is a very nice person, we needed a lot more time and we were able to get it...instead of getting punished from not being able to meet the deadline
- 2 Professor is always on Teams and ready to help.
- 3 Lots of assignments which reinforced the learning of the material.
- 4 There is no time limit, so you can have enough time
- 5 The instructor had lots of reasons to miss his official hours (e.g., sick leave, ensnared in an airport)
- 6 The strengths of this course were its rigor in teaching a complex topic. There were a lot of modules/topics to cover and they often went in depth. While overwhelming at some times, I learned a lot from this course and see it being used in any career in CS.
- 7 The instructor was very understanding and responsive and also answered a lot of the questions.
- 8 The material and the instructor's attitude and tone in online responses were strengths.
- 9 I really enjoyed the lessons you recorded. I think you're better at describing some of the content than the videos in the modules. I think you should have held all the recitations and gone over the week's material for an hour or so.
- 10 the course was run well even through the challenges of an online async environment
- 11 lots of new OS basics for align students
- 12 very wide breadth of topics, but most modules built on each other. Satisfying to stack up knowledge and apply it.
- 13 super passionate/organized/helpful and engaged professor, most other profs at NEU need to take a page from Prof S's book. Good organization of course modules. In general, while the course material was okay, it could have been deeper. In undergrad at a different institution, I took a computer systems class based on the CMU professors' book "Computer Systems: A programmer's perspective", while challenging, I think this course/book gives a deeper look at computer systems than the one provided in this course. But more importantly, I think that the programming assignments could have been a bit more systems-focused rather than C-focused (with some systems concepts sprinkled in). For instance, I think it could have been more instructive to build, for example: a simple shell program (for exceptional control flow, processes), dynamic memory allocator (like malloc), maybe try a buffer overflow attack project, just some ideas. But overall, I think most of the concepts taught were applied in the assignments.
- 14 Well organized, easy to follow, extra material provided
- 15 Obvious passion and deep knowledge of the material, usually responded to questions in good time
- 16 As I previously said, Prof S is a major factor for me choosing to take this class. I had taken his database class on a whim (and was fully prepared to not like the database class because I didn't think data was interesting - I was not prepared for how much I would love databases and continue to recommend that class to anyone who will listen). I think he does a fantastic job of organizing materials and setting weekly expectations. I love that he puts time estimates on each module - it's so helpful. His recorded explanations of concepts are exceptional.

I loved that the homework combined written and coding exercises. It was a ton of work, but I also learned a lot and I could see how concepts we learned early came back into future lessons. I thought the variety of exercises we were asked to do was really great. Some homeworks took me forever, but through the struggle I felt like I gained a lot. I think Prof S sets up students really nicely to learn. In some classes, it's like, here's some code now go modify it to make something similar. He explains the concepts and the reasons why things work a certain way and encourages students to make their own designs. Sometimes learning was painful or stressful and it was difficult, but with every one of Prof S's classes, I feel like I've accomplished something.
- 17 very knowledge.
- 18 na
- 19 The intrustor is good at communicating with student.
- 20 -knowledgeable
-Enthusiastic
- Fairness
- 21 Homework design are pretty good for learning the knowledge.
- 22 Communication and the ability to help students in need.

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

- 1 I find the written part of the canvas material very hard to understand...the wording is very weird...sorry to say this but I hope things can be easier to understand and the time estimated to finish was not very accurate for me. for some of the timed 20 mins one i took more than an hour...
- 2 maybe more video material or online classes.
- 3 Feedback for the assignments / assignment solutions could be more readily available and distributed in a more structured format.
- 4 Nothing
- 5 Organizing more lectures, recitations, and official hours to help his students achieve

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

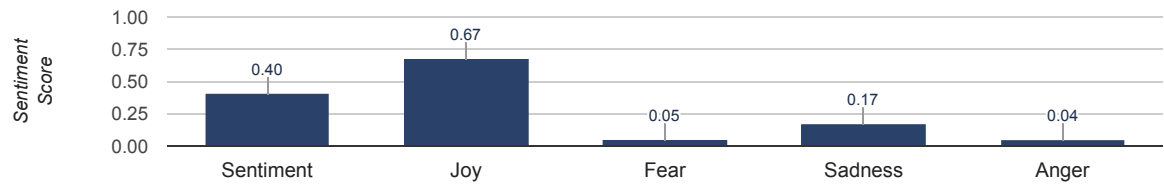
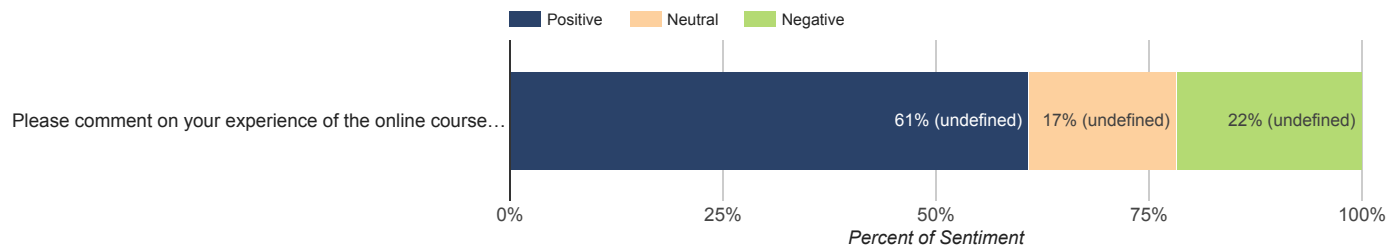
- 6 I felt like some of the written homework assignments questions were not covered by the module material. After taking detailed notes and taking my time with the material, when I got to the written homework, I was often confused about what it was asking or how I was supposed to figure it out. Maybe having another section in the module to better cover the topic in the homework or more detailed instructions in the written homework assignments would have been helpful.
- Regarding the Practicums, it felt a bit unfair that they could be done in pairs, or that there wasn't a better way to facilitate people finding a partner. People with friends in the course would be less stressed and produce a more robust assignment by working together while the stragglers were left to figure it out on their own.
- I'd recommend either (a.) making partners for the practicum, (b.) facilitating a find-a-partner event in Microsoft Teams so people who want a partner can better find them, or c. making it an individual assignment. Though, I felt I was graded fairly on this assignment even if working alone.
- 7 Same thing, provide some sample code to do some tasks. As a complete beginner, it is very challenging.
- 8 Having regular, scheduled classes that are scheduled to allow for full-time employees to participate would have been better.
- 9 Sometimes the material near the end of the semester was incredibly dense to read through. I would have benefited from hearing you discuss it during recitation.
- 10 n/a
- 11 Have real-time sessions to go through important materials of each module. TAs don't even know the answers to the assignments and could not help.
- 12 ^ see above
- 13 should make assignments and practicum requirements more clearly: what the sample inputs and outputs should be looking like. should upload sample solution for each homework as soon as possible.
- 14 Make TAs have more office hours to allow students to ask about assignments. Make course material more relevant to assignments. I had several assignments that I didn't know how to do because reading materials weren't helpful.
- 15 1. Make sure all assignments are fully and clearly explained up front, so that new information and changes aren't added close to the deadline. When clarifications are necessary, and made in conversation on Teams, add them to the assignment page. Checking Teams chats for meaningful alterations to assignments adds a lot of overhead.
2. Require TAs to grade assignments more rapidly, so feedback can be applied to future work. For example, receiving grades and comments on a number of assignments after the final exam due date is not very helpful.
3. Beta test the larger assignments (practicums and major homeworks) for appropriate size. Both practicums and one homework took 40-60 hours to complete.
- 16 I mentioned more recordings previously. With the available recordings, some of them expire within a week. I assume part of that is to encourage students to watch them immediately so that they don't fall behind, but it would be nice to have access to them again at the end of the class to study for the final.
- In addition to the homework videos, it would be great to have a code walk through or two. I understand not doing that with every assignment because there's more than one way of doing something, but I'd be curious to know some of the best practices.
- 17 it is good now.
- 18 na
- 19 -Add more video lectures
- Recitations
- 20 Good enough.
- 21 Maybe allow a bit of more time for the end of the year projects.

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

- 1 I think he's very nice and approachable
- 2 None.
- 3 Nothing
- 4 The instructor is clearly very knowledgeable on the subject matter and provided quick and thorough responses to student inquiries. If I was ever confused, even on a small issue, I felt I could get my question answered.
- 5 Again, I think his respectful and playful tone in online responses were refreshing. I like the fact that he prompted people to think for themselves and explain their thinking. Perhaps there could have been more prompts or encouragement of online discussion.
- 6 I would go through the contents of the homeworks and clean up some of the instructions; add more information to descriptions students were confused about. There were some assignments which mentioned Java or other languages we were not intended to complete the assignment in.
- 7 n/a
- 8 Prof Schedlbauer is clearly very intelligent, but also has a passion for the subject and a knack for breaking down subjects at an introductory level and meeting students where they are
- 9 great professor, can't think of anything other than some improvements to this particular course. could be perhaps a bit less harsh when it comes to, for example, failing the course if grade for final exam < 70 for example.
- 10 The course is good
- 11 As I said, Prof S is amazing. I love his classes. He teaches difficult material but organizes it so students learn a ton. I'd love to take more classes taught by him.
- 12 complex background
- 13 na
- 14 I learned a lot from this course, but honestly saying, are mostly based on my personal efforts. I would appreciate if there are more live lectures and interactions, instead of only videos and modules on canvas. I don't feel enough support from the prof and TAs
- 15 The professor was accessible, he created time out of his usual office hours to accommodate students schedules. Never felt rushed and questions were answered thoroughly. More group projects and recitations would have been good, especially for select topics.
- 16 Good enough.
- 17 See above.

Questions to Assess Students' Online Experience (23 comments)

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



- 1

I think potentially there can be more engagement if students have communicated by posting or commenting on other people's perspectives on topics in class. It was still hard to engage when u fell behind... ★★☆☆☆
- 2

I struggled a lot during this course, most of the material are reading web which is not that good for me to understand some concepts. ★★☆☆☆
- 3

I wish we had more than one recitation during the semester. ★☆☆☆☆
- 4

Good ★★★★★
- 5

More online sync lectures, instead of reading materials, are needed to help students better understand concepts in operating systems. ★★☆☆☆
- 6

Textbook online course. Recorded video lectures and readings, Microsoft Teams for communication. Nothing good, nothing bad. ★☆☆☆☆
- 7

good ★★★★★
- 8

Overall the course was good. I got to learn quite a lot. My only point to improve this would be to share some sample code on how to perform some of the tasks. Although I understand its open ended but sample code would be really helpful with the assignments. I am very new to C so it was really hard and taking a lot longer for some assignments. ★★★★★
- 9

It was generally good. Professor Schedlbauer was responsive and provided reasonable guidance. He often left questions open ended which allowed people to think for themselves and provide reasoning for their thinking. That was good. I would have preferred more "classes." Where material could have been presented and expanded upon. A couple of cancelled recitations early in the course kind of killed the momentum there, I think. Other online courses I have taken have a regular "class" time where material is presented in a lecture and question/answer format. I think that would have been beneficial. ★★☆☆☆
- 10

I would continue holding the recitations regardless of how many people show up. ★★☆☆☆
- 11

It was an adequate online course and the resources were well organized. ★★★★★
- 12

No regular real-time sessions for this course ★★☆☆☆
- 13

Probably the best online course I've ever taken. Learned a lot, I enjoyed the projects, it was well-sequenced, there was helpful, lively discussion and additional resources for essentially all modules, professor was engaged and responsive. ★★★★★
- 14

super organized, great online learning experience ★★★★★
- 15

Although materials of each module are clearly structured, they are simply the copy of content from textbook, which is not helpful. Some hard knowledge should contain more instructing videos, rather than just presenting text information. ★★☆☆☆
- 16

Online environment provide me all of the necessities to study and communicate with others like in person courses ★★★★★
- 17

I think Prof S does an amazing job of organizing and setting expectations on his online materials. I had taken his database course last year, and his skill in creating really excellent online modules and running an effective online learning environment was a huge reason why I decided to take this class. The subject matter for Computer Systems sounded truly terrifying to me, and I wouldn't have picked the class unless he was running it.

At the beginning of the class, we had weekly recitations. I couldn't make the first couple, but I did watch the recordings. I thought they were valuable. I totally understand cancelling them because of low live attendance, but I think Prof Schedlbauer explains things really wonderfully, so it would be nice to continue that in some capacity in future versions of this class. For instance, on Practicum II, he had an intro video in which he gave an overview of the project and talked through some strategies for success. I found this enormously helpful, so maybe that's something to incorporate on more of the homeworks/modules? Or have a recording of a hard concept or something he thinks should be highlighted each week?

I'd also love to have some of the older videos used in the modules that were sourced from other professors re-recorded. Some of them didn't seem to fit as nicely in the modules as others. ★★★★★
- 18

good, it is good for me since i have a full time job so I can make my time more flexible. ★★★★★
- 19

na ★★☆☆☆
- 20

It's a good online course. I really enjoy it. ★★★★★
- 21

TA's and the Professor where accessible and provided great feedback. ★★★★★
- 22

Pretty good. ★★★★★
- 23

Professor Martin was awesome. He really went above and beyond when it came to assisting us with additional resources when needed! ★★★★★

Student Self-Assessment of their Effort to Achieve Course Outcomes (17 comments)

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

- | | |
|----|--|
| 1 | i think my programming was not very solid so more time for that I think and more discussion for that |
| 2 | I should preview more pre-required tech or knowledge. |
| 3 | spent more time on reading the materials |
| 4 | Do more practical operations |
| 5 | I could have gone to more of the topic review sessions to solidify my understanding of the topics. |
| 6 | Not sure, there was quite a lot of work. Again, if sample code was shared for the assignments, it would've been a lot better. |
| 7 | I could have tried to engage more with other students, the TA's, and the professor and tried to spawn more online discussion. Online learning can be very isolating. |
| 8 | The amount of work described at the beginning of the semester was quite accurate. I made sure to give adequate time for the course and was able to understand the material well in that time. |
| 9 | blocked more time to complete assignments |
| 10 | Started each module earlier in the week. |
| 11 | asked more questions in teams, great discussions happening there which i could have been more a part of; could have done more in depth reading on different subject areas taught if i had time |
| 12 | I could be more active communicating with others to discuss about course materials |
| 13 | I fell behind early in the semester because of some family health issues and never quite caught up. I stayed afloat because of the very reasonable late policies but I was always running behind.

I also wish I had participated in the online Teams discussions more. I always read everything but I wish I had posted. I thought they were really helpful, and they're a good way to build community. |
| 14 | More knowledge for me to study. |
| 15 | Start assignments earlier and seek help earlier. |
| 16 | Doing more advanced design on homework. |
| 17 | N/A |