Instructor: **Shah, Michael**

Subject: **CS**

Catalog & Section: **5500 01**

Course ID: **11137**

Objectives:

Enrollment: **59**

Responses Incl Declines: **33**

Declines: **0**

Instructor Related Questions: Michael Shah (46 comments)

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

1   Prof. Mike teaches in a very interesting way.

2   have passions about teaching and want to students feel fun when learning computer science

3   There was always an answer to any questions asked, whether from students or instructors, everyone pitched in.

4   One strength of the course was that a lot of the online materials were helpful in aiding us with the assignments. Also, the in class lectures were very detailed, and taught us the things we needed to know for the assignment. The professor was also very helpful on Piazza whenever I had any questions.

5   Mike cares deeply about software engineering, teaching, and the outcomes of his students. Assignments are thoughtfully created.

6   Mike's awesome, nice guy and reasonable teacher. The course staff has been super helpful as well!

7   Charismatic, very knowledgeable about the subject. Made learning fun and follow up questions very valuable during the lecture

8   He is great in terms of teaching fundamental concepts. It is also really easy to interact with him to ask questions.

9   The teacher's lectures are very good, people can listen carefully and understand. There is always concrete understanding that helps us understand better

10   The final project taught me so much about how to work in a group, different people's coding styles, and the value of pair programming. Professor Shah's enthusiasm for the subject matter is infectious.

11   The instructor has thorough knowledge of D language and software engineering principles. The course covers the different aspects of software engineering like designing, testing, application building, graphics, etc.

12   Prof. Shah is an excellent lecturer and made the long class very tolerable, building in multiple breaks. He's responsive on Piazza, and keeps his course website extremely organized.

13   This course overview a lot of techniques and design principles used in industry software engineering roles. However, the content was more focused on the intricacies of Dlang instead of Agile, CI/CD, and software topics like networking or threading principles. The latter would have been very useful for the final project.

14   Prof. Shah is a fantastic lecturer whose curriculum is focused toward building a software engineering toolkit. He is very helpful when discussing questions in class and after class. The workload is not overwhelming but enough to have us practice all our skills.

15   So organized, knows so much, fun personality, easy to talk to, extremely helpful, kind, and enthusiastic about what he teaches :)

16   This is the best CS classes I've ever had! The professor clearly cares about the field and used a rich array of code demos, presentations, and guest lecturers to convey course concepts and provide an overview of the field.

17   Great instructor, good TAs and very manageable assignments with clearly outlined requirements

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

1   Teach it in a more widely used language, so that it is somewhat useful to us in our co-op search as well.

2   Maybe tell the student early the language that we will use in the class. For example, we use D in the class. It is interesting language, but I am not sure everyone students can have passion studying a language that less used in the working industry. It is fun, but maybe not suitable for every students, in particular, some students would like to learn useful skills in real work industry.

3   Some of the components necessary for use in the final project would've benefited from an assignment that made us practice using them. In particular, we would've benefited greatly from practice multithreading and networking rather than just seeing a lecture on it. If there isn't enough time for those practice assignments, restructuring the project so that one of those component requirements are dropped would be a good idea. The reason for this is because we spent more time self-learning how to use those things for the project than practicing good SDLC practices like SCRUM meetings, CI/CD, and test-driven development. All those fell to the wayside as we prioritized making our project functional first and foremost.

4   One thing that could be done to make this course better is using a different programming language. I had a lot of difficulty with DLang, mostly due to the fact that the language is not used by many people, so whenever I ran into an issue it was tough to find assistance. Also, DLang overall seemed to be a very unforgiving language, and the assignments would have been a lot more fun if they were in a language like C , however this is just my personal preference.

Another way the course could be made better is by guiding the groups a little bit more on the final project. I found myself lacking things to do throughout the project, and while I ended up being able to make a big contribution by the end, I think it would have been a better experience if we were given tasks to do by the instructor or TAs.

5   1) Project timing

I felt that the project should be introduced earlier in the semester. Many of the pre-project assignments were not too difficult, and although they helped us learn Dlang, I think 1 or 2 could be removed in favor of starting the project earlier. Doing so would have allowed us to try ideas and fail, without feeling the extreme time crunch that our group felt at the end.

That is in part, our fault, but the timing of Thanksgiving break did not help. All-in-all, I think introducing the project 2-3 weeks earlier would have helped groups get on their feet and organized earlier.

2) Dlang as a language choice

I feel that Dlang is not a bad language to learn, and it embodies many useful paradigms that are transferrable to other languages. The only issue I felt with Dlang was that there was not much help when running into technical issues due to the small community, and working on different machines results in different technical errors for the same code. While this is sometimes part of learning a language, it felt like it took me out of learning, and more into frustration sometimes. If Mike has considered these points and still believes in teaching D, that makes sense, but I wanted to bring up these points if they had not been considered.

6   I hate hate hate DLang so much. The lack of support and tools that enable it make it really difficult to get outside help, and in our project where no one had a networking background, we were dead in the water without a lot of inefficient time spent learning.

7   n/a

8   I feel that the programming language that he selected for this course made it more difficult in general. D language is really difficult to work with as we don't have any good IDEs for it or even material and discussion forums online. If we get stuck with some error then it is difficult to solve it due to lack of online resources.
Professor could pick another language for the course like Java or C# instead.

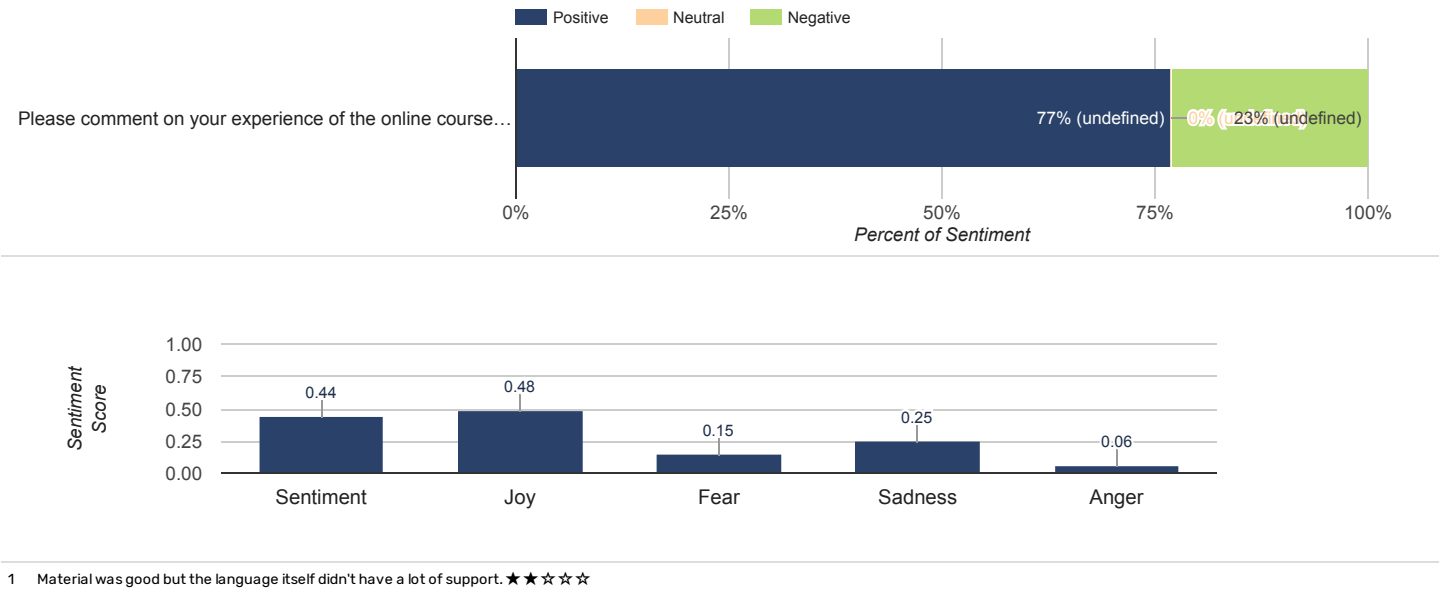## Q: What could the instructor do to make this course better?

9   It would be better if the course could teach us how to make husky town from scratch, and then allow us to recreate our own project based on what we have learned.

10   The daily lectures felt sort of disorganized to me, and I felt like the course was more about D than generalized software engineering. I would have been much happier with two shorter lectures in a week instead of a massive lecture which I'd usually find myself zoning out of around hour two.

11   I understand that we were put into random teams to simulate an actual workspace for a software engineering job, but not all students are motivated to work the same way (like in a workplace where there is more to lose if they don't work).

12   This course could probably be taught in other languages which might make it easier to navigate through environment setup issues.

13   In terms of course topics, I think the pacing of the course could be sped up a little pre-midterm, but I understand that if students aren't familiar with the content, it could feel overwhelming.

14   I would suggest releasing the final project earlier in the semester to give more time for groups to make a polished product. Or, I would cut out the networking portion of the assignment. Maintaining synchronicity between clients and server took up the majority of the work time. Especially when this topic wasn't thoroughly covered in class. Instead, requiring multiple features in a single-player game would have allowed us to incorporate all of our ideas and add polish.

15   I found myself often forgetting to do the in-class activity after class. I would appreciate a reminder from the professor at the end of lecture.

16   require the use of jira for project management, github's project board's capabilities are so limited and annoying to use. makes it much harder to organize project tasks. also, it would be good to require a log for project progress for accountability of teammates, and as a record for who did what.

17   Occasionally some of the course materials weren't updated properly (e.g. the final project materials occasionally referenced prior year projects). I would have appreciated having an independent assignment on networking prior to the final project, as for the final project the graphics team did not have to touch networking and ended up learning less of that content.

18   Switch from Dlang to a more established programming language. Most of my effort went towards learning dlang-specific knowledge that is not very transferrable or attractive on my resume. The instructor could also go into more detail about the theory behind most of the concepts covered.

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

1   Remove d lang and this class is good, I just don't like d lang, this opinion is common i think in the whole class.

2   Professor is great!

3   The Piazza forum was well-moderated.

4   My instructor did a great job facilitating inclusive learning this semester.

5   Mike's great at inclusive learning.

6   n/a

7   Prof. Shah is very accommodating of all our circumstances, answering all questions thoughtfully. This is especially important in a class like this with a mix of experienced programmers and newer Align students. He takes care to have resources online in the form of recorded lectures, slides, and online OH.

8   I have nothing to complain about here.

9   Great understanding of software engineering principles.
     Good knowledge related to D language.

10   Prof. Shah did a great job with facilitating inclusive learning - always being mindful of students with different operating machines and creating a safe environment for all.

11   He is a very technically knowledgeable professor and is able to help with a majority of troubles a student can encounter. The teaching style is also effective as theory followed by example walkthrough. And the daily standup is welcomed as well.

Questions to Assess Students' Online Experience (13 comments)

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

Legend: Positive (dark blue), Neutral (orange), Negative (green)

Please comment on your experience of the online course… — 77% (undefined), 0% (undefined), 23% (undefined)

Percent of Sentiment

Sentiment Score bar chart: Sentiment 0.44, Joy 0.48, Fear 0.15, Sadness 0.25, Anger 0.06

1   Material was good but the language itself didn't have a lot of support. ★ ★ ☆ ☆ ☆

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

2   Course was well organized. We had a designated area to ask questions, another to hold TA meetings, and another to read up on assignments and prepare for class. There was no confusing mixed use of multiple different things to communicate. ★ ★ ★ ★ ★

3   This course is difficult for Mac users since a lot of the material focuses on Linux. I had access to a PC luckily, but it was very difficult to use linux via a Virtualbox on my Mac. ★ ☆ ☆ ☆

4   The online experience was sufficient when I was not able to go to class from time to time, but it's clear that this course was meant to be attended in person and I think that it is better experienced that way. ★ ★ ★ ★

5   Canvas was organized with the grades, the website had all the info and was clearly organized. ★ ★ ★ ★ ☆

6   This was mostly an in person course. The online portion experience was good, the recordings of the lectures were posted which made it convenient to review examples done in class. I greatly appreciated this. ★ ★ ★ ★ ★

7   Most of the class was offline, which is how I like it. ★ ★ ★ ★ ★

8   The online course environment was great. The professor as well as the TAs were really helpful both during and outside of the office hours. All the doubts and questions were answered comprehensively on piazza. The online course materials provided were also good. ★ ★ ★ ★ ★

9   The course website is really well put-together, and I didn't have trouble navigating it ★ ☆ ☆ ☆ ☆

10   The online course resources were very clear and well laid out. I would have preferred if the each week's class notes was open two days before, instead of one day before, class. ★ ★ ★ ★ ★

11   good ★ ★ ★ ★ ★

12   Materials are on the private Github and the professor's personal website, and questions are on Piazza. They are well organized, but you need to be proactive to keep track of everything. The group work is done mostly offline through Github and other methods, and it's a good chance to connect with classmates. The Dlang development environment might be a bit buggy with Mac computers, but course staff is great help. ★ ★ ★ ★ ★

13   Mike and the TAs are always present and available to ask questions to, either on Piazza or Teams. Also the course website is extremely organized and robust, which I appreciate. I wish all professors did that. ★ ★ ★ ★ ☆

Student Self-Assessment of their Effort to Achieve Course Outcomes (16 comments)

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

1   Teach it in a more widely used language, like C .

2   The course ran very smoothly for me. No complaints.

3   One way I could have made this course better for myself is by doing a better job studying the D language at the beginning of the course. This would have helped me later on when we started coding the game, since I sometimes ran into bugs that I would have avoided if I had paid better attention in the D tour.

4   Regarding the final project, we had the most trouble merging our disparate pieces because we had not sufficiently discussed architecture.

5   Start the project early - plan out the work to be done better, and start with a small target and build to a bigger one.

6   it went pretty well in my opinion

7   It was a great course. I just did not like the timing of the in-person class as I felt 6-9.30pm is too late to have a class. Due to this I missed a few classes but otherwise it was fun.

8   I feel like I would have benefitted from this course if I'd come in after having some experience on a co-op

9   I could have studied the D language documentation in depth. A better understanding of the concepts right from the beginning would have made this course a lot easier.

10   Listen to class.

11   I think I could have gone to more office hours - I spent a lot of the homeworks struggling by myself when I should've talked to TA's about my issues.

12   Eat food before class time.

13   There was a lull in the activity for the final project, leading to a big rush near the end. If I had been more active and checking in more on my project team, we could have had a more balanced workload.

14   I could've started developing the final project a week earlier, that'd have reduced the amount of load I had to carry through the finals week.

15   paid attention in class. also for the previous question, I spent 20-40 hours a week on this class after thanksgiving, while working on the final project.

16   Spend time working with the demo materials outside of class to fully understand code functionality, especially complex concepts and third-party libraries