

Individual Instructor Report Spring 2024 Version A for C S 373 - SOFTWARE ENGINEERING (51175) (Glenn Downing)

Project Title: Course Evaluations Spring 2024

Courses Audience: **57** Responses Received: **56** Response Ratio: **98.2**%

Report Comments

Guide to the Interpretation of Course Evaluations at UT Austin

The goal of course evaluation process at UT Austin is to drive teaching excellence and to support continuous improvement in teaching and learning experiences. The two sets of scales used for core evaluation questions and the associated weights are:

Strongly Agree (5) Agree (4) Neutral (3) Disagree (2) Strongly Disagree (1)

Excellent (5)
Very Good (4)
Satisfactory (3)
Unsatisfactory (2)
Very Unsatisfactory (1)

The Mean is calculated by adding all of the weights for a single question and dividing by the number of respondents. The course workload question is not averaged.

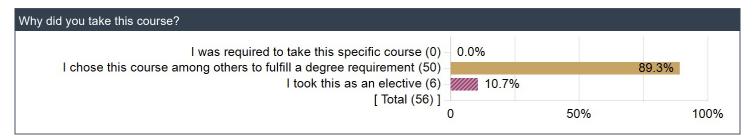
The number of students (e.g. respondents) marking each option is reported for each of the items. These frequency distributions provide information about the level of student ratings and the spread and shape of the class distribution of responses. The distributions thus provide a picture of student perception of a course.

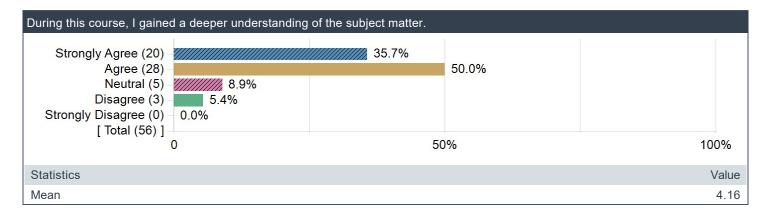
Course evaluations provide snapshots of student perspectives on their course-level learning experiences. Most experts on teaching evaluation advise that no individual method gives the complete picture of an instructor's teaching effectiveness; multiple and diverse measures, on multiple occasions, are advised to give a full picture of the teaching effectiveness of a particular instructor. Moreover, other factors, such as size of class, level of the class, and content of the course, can cause small variations in the ratings. Therefore, student perspectives for a particular instructor or course should be interpreted as a snapshot, and not as providing complete information on the teaching effectiveness of that instructor.

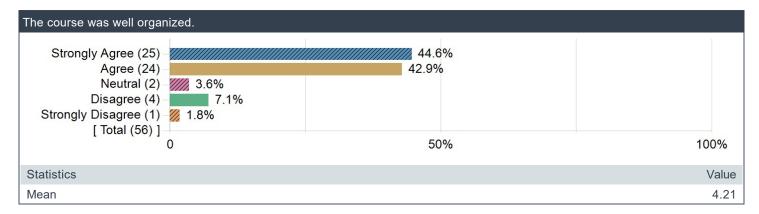
Creation Date: Sunday, May 19, 2024

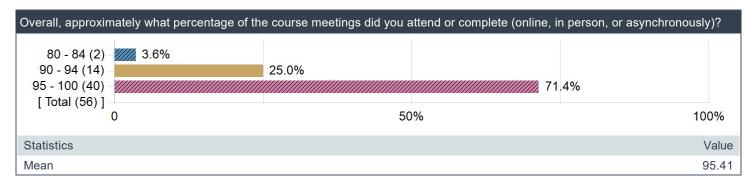


Course Questions

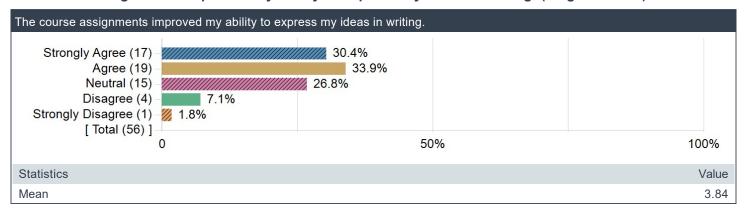








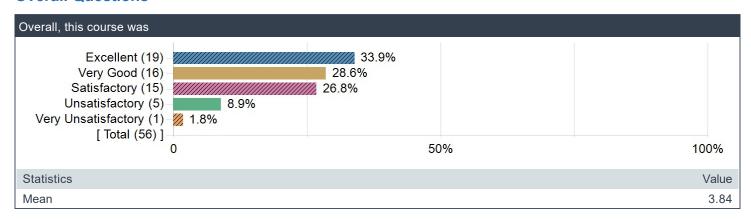
The course assignments improved my ability to express my ideas in writing. (Flag Question)

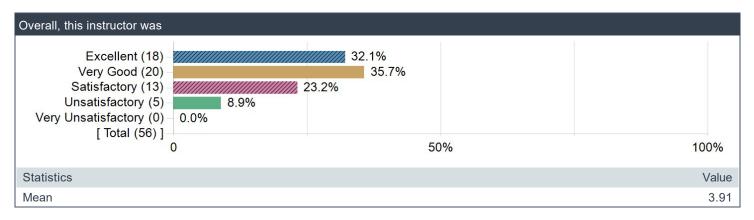


Instructor Questions

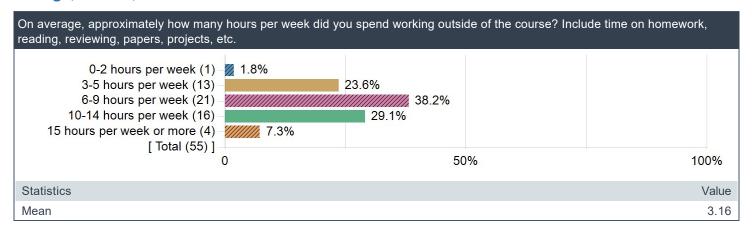
| | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Responded | Mean |
|---|-------------------|-------|---------|----------|----------------------|-----------|------|
| The instructor clearly explained the course objectives and expectations. | 48.2% | 39.3% | 10.7% | 0.0% | 1.8% | 56 | 4.32 |
| The instructor fostered an inclusive learning environment. | 48.2% | 39.3% | 8.9% | 1.8% | 1.8% | 56 | 4.30 |
| The instructor effectively explained the concepts and subject matter in this course. | 37.5% | 42.9% | 8.9% | 7.1% | 3.6% | 56 | 4.04 |
| The instructional techniques kept me engaged in learning. | 39.3% | 33.9% | 17.9% | 7.1% | 1.8% | 56 | 4.02 |
| The instructor checked for student understanding of the concepts presented in the course. | 50.0% | 39.3% | 8.9% | 0.0% | 1.8% | 56 | 4.36 |

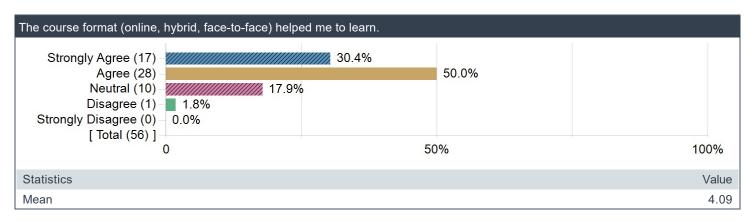
Overall Questions





College, School, or Unit Questions





Comment Questions

Identify aspects of the course that were the most effective in helping your learning.

Comments

I think the exercises and the quizzes were pretty good and helpful in understanding the course material.

The walkthrough style lectures were really easy to follow.

cold calling and daily quizzes, they definitely make me nervous but they force me to pay attention and keep up with the content

I enjoyed the projects the most.

The quizzes and the cold calling was able to help me focus and understand the materials better. The project also helped me with exploring and getting creative with our website, so that was able to help me a lot with learning about web development.

The projects were helpful in understanding elements of software engineering.

The lectures were very good for learning Python details and creative ways of using the language. Exercises were good for putting them in practice but time limits were extremely silly for these.

Detailed rubric and tools needed along with ED discussion posts to learn the skills required for the web based project.

I appreciated the opportunity to work on a full stack project of building an internet database website. I learned a lot about all factors of full stack software engineering, including front–end with React, back–end, databases with SQL, hosting with AWS, and several other very useful skills. I also appreciated how the project seemed useful in real life since it served an underserved community.

Hacker Rank Assignments

Writing technical reports for each phase of the project helped me to break down what I had learned and to learn from my group members' contributions more thoroughly.

I liked the exercises we did in class.

I think cold calling was effective in helping my learning. Because of it, I was more attentive and incentivized to pay attention in class.

The cold calling was great to engage me during each class.

I think the lectures as well as the exercises were good.

I liked that Dr. Downing took notes for us during class and encouraged us to not use our laptops during lectures. Being able to fully focus on understanding the material without worrying I was missing key information in my notes really helped me with comprehension. If I missed something, I felt reassured knowing I could look at the notes later.

I think the exercises were helpful in understanding the lectures. I think the quizzes helped to recall things from the previous lecture as well.

I think the assignments were extremely helpful in my learning. I think the assignments were also the most relevant.

Daily quizzes, cold calling

This was a project based class where we completely built a website from scratch. That experience of physically making something was the most effective for helping me learn.

I feel like the cold calling helped keep people focused.

The projects and exercises in class made me engaged with material without stressing too much.

I really enjoyed the fact that there are no tests in this class. I was curious if I'd really learn without it, but the daily quizzes ensured that you still would need to remember what you learned every class. I also loved that the professor would repeat quizzes if we did poorly, it really helped overall. Cold calling is stressful but it makes you pay attention which is beneficial, and I honestly didn't mind that the lectures were disconnected from projects.

I guess some tips that were given to us about projects as well as the TA's helping us out

Although cold calling gave me anxiety, it did keep me alert and focused during class.

I thought that the projects themselves were most effective in helping me to learn the course material, as they provided the closest thing to real world experience of how it is to contribute to team projects over a somewhat long period of time.

I didn't enjoy the pressure of cold calling, but it kept me engaged through lectures.

There are a lot of resources available for this class.

Talking to group members since I was the only sophomore in a group of juniors

The cold calling

The project

notes provided to us, good explanations in class

Very clear lectures and grading scheme

Comments

I think the projects taught me the most about software engineering, and the quizzes were decently helpful in hammering in the point of the lectures.

teach me a pipeline of creating and organizing a large project. Also the teamwork is exciting which makes me learn a lot of things from my group mates.

Professor Downing has a very structured class that makes it easy to know what it is you need to do so that you can get the grade you want in his class. He is very organized and that often helps at looking back at notes and knowing how you can be prepared to understand the information in the class.

Professor Downing always asked if anyone had questions if they were lost on certain concepts. Some of the ideas taught were a little bland but I saw the purpose in them.

While it was a lot to have quizzes every class, it definitely ensured that we were reviewing our notes so I think that aspect was helpful. The papers were also useful to expose us to new software engineering concepts, and the projects themselves were really good because we got hands—on experience in building our website. I'd definitely say that the structure for the project was the single most valuable thing that I would take from this class since I got some really good experience from it.

I liked that some quizzes were repeated when they were difficult. I liked that we had a TA assigned to our group that was always available to answer any questions we had. I appreciated having the code repo with notes available to us so that we didn't have to take notes during class.

The lectures were easy to follow and have merit for a software programmer.

good

I thought the later exercises in SQL were the most valuable.

The most effective aspects of the class in my learning was the grading structure. It forced me to become an expert on every single subject or else risk failing.

The quizzes and cold calling made me pay attention in class. Not allowing phones and laptops out also decreases potential distractions.

I thought the straightforward and dense lectures were helpful, as it kept me invested without boredom in class. I also thought the openness and availability of TAs to help was extremely helpful. I thought cold calling was great as well because it made it so students were always present and attentive. I will say though, I wish answering cold calls would get you bonus points rather than take away your quiz grade for that day.

I really liked the project

I think the in class quizzes/no tech in class policy really helped me to learn concepts as we went along.

Identify the aspect of the course that you found most challenging, why you found it was challenging, and suggest one thing that could be done to help future students meet that challenge more effectively.

Comments

The projects were quite challenging, especially as the topics discussed during class was not directly related to the project.

Most challenging was probably the project or the timed excercises.

projects, i had very basic web dev experience so anything back end related was confusing to me

I found the material discussed in class less interesting making the daily quizzes and cold calling a bit more challenging. I would have preferred if the quiz was to be taken at end of the day as opposed to in class.

I found the project the most challenging. Since the project materials is not incorporated into the lectures, it took more time for me to figure it out on my own. One thing that can be done to help future students is to maybe go into a little bit of the backend for the project. I was able to figure out some of the React/Next js code from the Python lectures, but the backend took a little more time to figure out.

I thought the very rigid structure of the class and assignments felt very high–school–like and led to many people phoning it in. Everything felt very formulaic.

Projects were the most challenging, mainly because of how poorly designed they are. Teammates aren't incentivized to contribute if one or two people are doing the work leading to extreme stress on those who are doing work and no consequences for those who aren't. It feels like teammate reviews aren't taken seriously and that the CATME team selection algorithm failed either due to badly inputted time by students or students time availabilities changing over the semester.

Another thing for projects is we were sometimes set up for failure because of outdated recommendations like for backend hosting which caused many issues with pricing that thankfully some of us caught early on. It would be much nicer if we learned some of the stuff relevant for projects early on and then switched to Python since we would have something to go off of at least.

Having to learn the project all on our was quite challenging at the start and relied heavily on one of our groupmate's background knowledge to get started. I think having at least one lecture early on in the course to help get future students get started would be

Comments

really beneficial.

The fact that the lectures were unrelated to the projects made it more challenging. Many lectures (particularly on using things like MyPy, coverage tools, and other software) were very useful, but I feel that some other lectures (such as those on Python specifics) seemed less relevant and were slightly belabored. It may have been more useful to learn more about software engineering concepts including build systems and design + development practices in lecture, since these would be applicable skills.

For the assignments, please limit the group size to 2-3 people. Larger groups make it difficult to coordinate and learn effectively.

The amount of external learning required to complete the projects was challenging at times, but class content did help somewhat with the projects

I understand the purpose and idea behind the grading scheme and find it, for the most part, relatively easy to get the grade I want. However, I found that there was little to none flexibility in the Quiz category and especially in the Exercise category. Missing or underperforming on an Exercise immediately drops you 2–3 letter grades no matter your grade in the other categories. As someone who can not code quickly or apply knowledge they just learned in the same class or previous class, I found them to be largely unfair to my learning style. This is in addition to the fact that these are timed and can also depend on if you are able to receive instructor help quickly. In the case of quizzes, you are only allowed to miss/underperform on 3/42 quizzes but that does not mean you can miss 3 lectures because it is quite possible, due to the difficulty of many quizzes, you get a 0. It is good practice to incentivize attendance through in–class Exercises and Quizzes but penalizing students for not doing well even though they showed up and did the work, as in receive no credit, I do not personally agree with.

The quizzes were probably the most hard aspect of the class. It would be nice if there was more leeway with the quiz grades.

I found it challenging how randomly the exercises were spread out throughout the class. Some weeks there would be none, or two, or one. It made it difficult because sometimes things come up and then a missed exercise can't be made up.

I found the second project to be challenging and I feel that could be spread out more into other projects.

Definitely the projects.

I thought that the grading system was interesting but made it difficult for me. I struggled on some of the quizzes, so I missed the threshold for an A. I wish we were allowed a few retakes to make up for bad quizzes. We did get some repeated quizzes, but only when most of the class did badly.

I think the quizzes eventually got more challenging as we went on and it was kind of frustrating when I only got a one on the quiz since I wasn't able to make that up. I also felt the same with exercises. I felt that there wasn't enough time to be able to do them in some classes. I also feel that trying to meet the grade requirements as in meet enough 2s and 3s for each category can be difficult and doesn't really weigh in the amount of work that you put into the class. I think for future students, just having to rewatch lectures is probably a good idea but not everyone has the time to do that.

The group I was placed with was terrible and it made this class an awful experience.

I found it challenging to learn about full–stack development for our assignments, as it wasn't taught in class. I do wish that we learned more about web–development in class. Maybe in the future, it would be better to have some lectures over React or AWS, which could certainly help students be more prepared for the assignments.

Projects — none of the information required for the projects was taught in class, and I found it challenging to both complete my work and support my teammates who did not have any experience with the tools/skills necessary to complete the project, through no fault of their own.

The part that was challenging was working with a group of people who may or may not be as motivated as yourself. I would suggest allowing students to choose their teams, because they already know people who they work best with.

I found it very challenging that the lecture had nothing to do with the project. Maybe do the sql stuff in lecture before we have to implement things in the project phase.

Being consistent and keeping up every lecture and attendance.

Learning how to use several new tools was definitely the most challenging. I felt very in the dark sometimes, but there was a good support system in place so it wasn't too bad.

Grading scheme was terrible and is not helpful to motivate students to have success, especially when quizzes are super short and can't be missed more than 3 times for an A. Lectures were irrelevant to class and were basically mostly just cool to know tidbits that have rare uses if at all.

I wish we were allowed to have our computers out such that we can take notes along with the professor. This would've allowed me to feel more prepared for each quiz.

I found the daily quizzes and exercises to be the most challenging aspects of the course, as it felt at times a bit too punishing on our grade if a quiz or exercise is missed.

I felt like the team I was paired up with didn't match up with my level of knowledge for the project. We were able to get all the work done, but we struggled with communicating, meeting up, and starting the projects early. It always felt like we were on different levels and schedules ended up conflicting the whole semester. I think my experience in the course would of been more pleasant if I would of gotten the chance to pick at least one of my team members.

Comments

I wish the exercises date is more transparent so I can spend extra time studying it.

I thought getting 39 quizzes was a bit hard. There was only 42 total so you can't mess up on more than three. Go over notes of the previous day.

The cold calling because it forced me to pay attention

Learning how to do aspects of the project without any teaching in class

project is completely separate from what we cover in class, wanted a better walkthrough of how backend works

Group projects are hard to coordinate at times but CATME helped with scheduling similar

I thought the quizzes were the most challenging part. I appreciated the makeup policy and the occasional attendance quiz, but I think 39/42 quizzes is a pretty big bar and could be a bit stressful. It felt a bit overwhelming that your entire grade could be ruined by one small thing, and sometimes the questions would be pretty specific.

Aside from that, I think my main issue was that none of our lectures focused on SWE topics like setting up a database or calling from an API. Luckily, we had someone in our group with backend experience but it was a lot to try and figure out for me, and I did already have some previous web dev knowledge.

The webpages developing. Because I need to learn everything online without any clue previously or outline of what this concept is about. In other words, if u can include some more teaching materials or a walkthrough labs. That will be better.

The most challenging part of the class was definitely the project. Since the lectures are not about the project, a large chunk of that information is left for the students to work together and figure out. I wish that some of the lectures would help in that sense and make it easier for us to figure that part of the class out.

One of the most challenging aspects of the course was making sure you got good team members that actually worked on the project in a timely manner.

I do wish that lectures focused some more on software engineering concepts. While the python lectures were useful in deepening my understanding, it would've been helpful if we could talk more about some common tools or tips for the project in class. That might've saved us a lot of time.

I didn't like not being able to choose my group for the project. Even though I had friends in the course that I knew I would work well in a group with, I got stuck with random people I didn't know which was a headache from the start. We had trouble aligning our schedules and not everyone contributed equally.

I don't understand why the course lectures and the course assignments have no overlap. It genuinely boggles my mind. You absolutely should change this in the future, make the lectures relevant please. Otherwise students just show up for the quiz and then turn their brain off.

good

I found the quizzes and project 3 to be the most challenging. The content in class should be at least a little bit more related to the projects.

The most challenging was the fact that we weren't taught at all how to do the projects, and had to learn on our own. I don't feel like I've learned everything required to build a website, only the aspects I worked on which feels very unsatisfactory. I did not learn what I wanted to coming into this class.

We are just kind of thrown into the projects without any kind of direction. It wasn't so bad for me because I had previous experience writing APIs and working with this type of web development, but my teammates definitely struggled. I spent a lot of time on phase 2 explaining my thought process and debugging their code. I think some lessons on API writing would be good, and moving the database lectures to be earlier in the semester would be helpful as well.

I wish the course at least spent a little more time on the projects, perhaps recommending certain libraries or showing off examples of how to do certain snippets of code. It's hard to start from a fresh slate, and giving at least a demo of the basics of web dev could give some people an idea.

The grading system does not work for groups, as students who are already below a certain threshold have no reason to work as hard as the others.

I found the group project to be the most difficult/stressful. Having to complete a sizable website with randomly selected groups was quite daunting at times. I'm not really sure how this could be improved, maybe a more concrete plan created by the mentor TA? I also am not a huge fan of specifications grading. I don't like that poor performance in one category can ruin your whole grade. I had a minor freakout around Spring Break because I was worried I wasn't going to be able to complete enough quizzes to pass.