

Individual Instructor Report Spring 2023 Version A for C S 371P - OBJECT-ORIENTED PROGRAMMING (52400) (Glenn Downing)

Project Title: Instructor Course Evaluations Spring 2023

Courses Audience: **70**Responses Received: **63**Response Ratio: **90.0**%

Report Comments

Results were collected during the implementation of a new course evaluation system.

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)

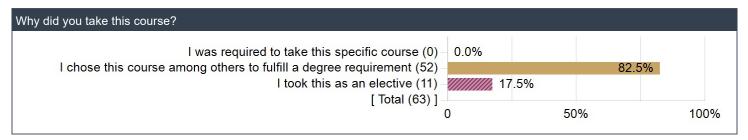
The Mean is calculated by adding all of the weights for a single question and dividing by the number of respondents. The course workload question is not averaged.

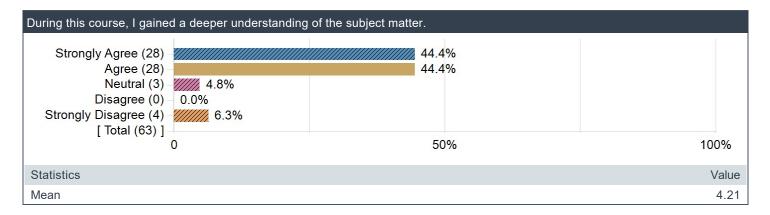
The number of students (e.g. Respondents) marking each option is reported for each of the items. These frequency distributions provide information about the level of student ratings and the spread and shape of the class distribution of responses. The distributions thus provide a picture of student perception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

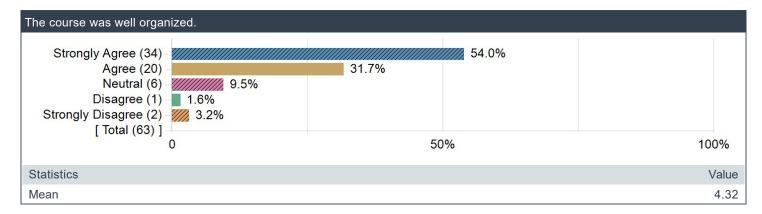
Course evaluations provide snapshots of student perspectives on their course-level learning experiences. Most experts on teaching evaluation advise that no one method gives the complete picture of an instructor's teaching effectiveness; multiple and diverse measures, on multiple occasions, are advised 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.

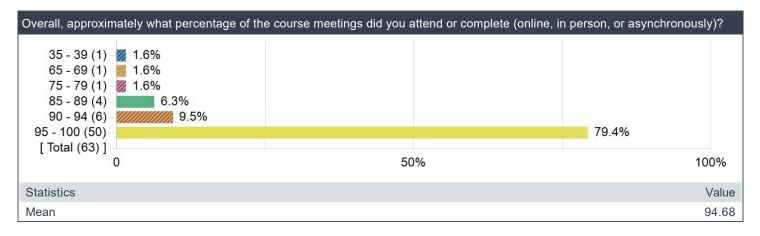
Creation Date: Friday, May 12, 2023

Course Questions

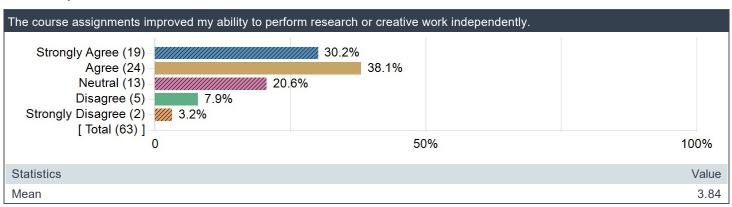








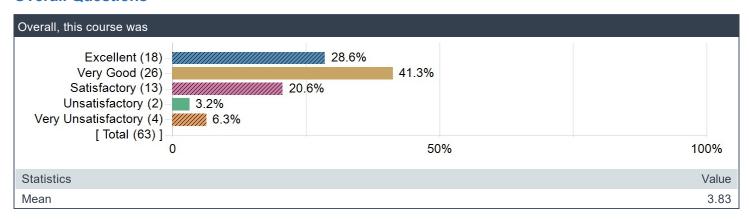
The course assignments improved my ability to perform research or creative work independently. (Flag Question)

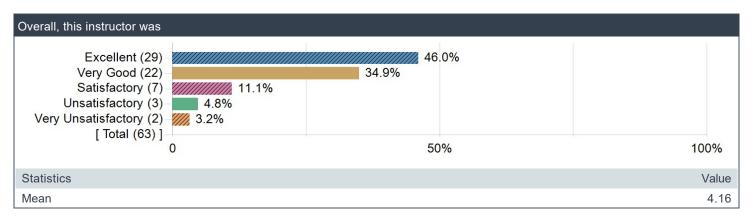


Instructor Questions

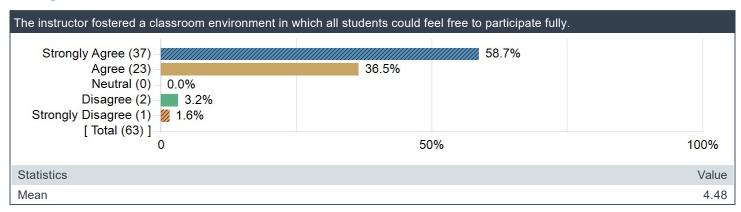
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Responded	Mean
The instructor clearly explained the course objectives and expectations.	55.6%	39.7%	0.0%	1.6%	3.2%	63	4.43
The instructor fostered an inclusive learning environment.	52.4%	42.9%	0.0%	3.2%	1.6%	63	4.41
The instructor effectively explained the concepts and subject matter in this course.	49.2%	41.3%	3.2%	1.6%	4.8%	63	4.29
The instructional techniques kept me engaged in learning.	47.6%	25.4%	11.1%	7.9%	7.9%	63	3.97
The instructor checked for student understanding of the concepts presented in the course.	57.1%	33.3%	1.6%	4.8%	3.2%	63	4.37

Overall Questions





College, School, or Unit Questions



Comment Questions

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

Comments

Cold calling was good

projects were helpful

NA

The in class coding

Assignments and Lectures

I thought the cold calling helped me focus more.

The lectures were very through and easy to understand.

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The in-class exercises and projects were the most effective.

I think the projects are easily the most effective in learning more about C++ and implementing the items that we learn in the lecture as a whole.

the quizzes helped reinforce the material learned the day prior

The way discussions are

Gitlab notes

I enjoyed the projects and lectures.

I found that the labs were useful for my understanding.

I think what was most effective was being able to work on projects that applied the concepts that we learned in class, and having the opportunity to work with partners and consult TAs was also helpful.

Lectures were engaging and thorough.

I felt that the projects were very reflective of the things we learned about in class.

Lecture

The lectures were very informative.

I liked how Professor Downing went through examples and explained the project specifications in class. I appreciated how reachable he was through Teams, and how he answered any questions that I had.

In classes exercises

I think that the projects were all interesting and each taught me new things

Exercises, projects

Projects

Projects

I enjoyed the notes online and the projects. The exercises also helped contribute to my learning

The lecture quizzes were sometimes challenging, but they definitely made me learn the most.

Office hours and Ed discussion have been very important for clarifying project requirements.

N/A

The daily quizzes were meant to be a way to increase of our learning, but instead it felt like they were questions about syntax and random things that felt unnecessary to the course material. I think a weekly quiz would have helped more, as it would have allowed for more studying and then therefore more learning? Unsure.

Deep understanding of C++

I gained a deeper understanding of the benefits of Object Oriented Programming.

I thought how the class lectures set up topics that would be needed for the projects was helpful. I thought that the in-class exercises helped me to better understand the topics that we learned about in lecture.

The notes that were posted every class and the class recordings helped me prepare for the daily quizzes.

Nothing. Not even the lectures were useful.

Exercises implementing concepts from class were helpful in my learning.

papers, blogs, help hours

I like the cold call that let me actually engage with the instructor

I liked the exercises and the projects.

The exercises and quizzes helped me have short–term tests of understanding. I found the timed nature to be stressful, but they were very useful in helping me to retain what I'd learned in the previous lecture. The TAs and Dr. Downing were super helpful! I appreciate how I could ask questions after class, I could tell he genuinely cared about our understanding. The cold–calling was kind of stressful, but it also helped keep me engaged in class.

Learning to use git issues and a proper workflow was useful and realistic.

Cold calls really helped me to pay attention during lecture. The quizzes at the beginning of the class also helped as a refresher. However, sometimes the quiz have examples that were not presented in class before, making it quite difficult.

Projects and lectures

I appreciate the straightforward layout of the class, and how the material broadened our understanding. In my opinion cold–calling helps greatly to uncover what we don't understand, albeit for only a handful of students per class. Overall I feel that lecture is the most valuable in understanding interesting edge cases and generally how C++ and OOP works; the projects were more an exercise in C++ but still a good practice to have.

Projects, exercises

I think the projects were most effective in learning C++ because it was the only time where we got to sit down, with time, and try out C++ concepts for ourselves. I think writing unit tests and learning about test–driven development was crucial for student success in completing the project. In addition, I think the projects were a great learning opportunity for implementing OOP SOLID concepts.

The projects in conjunction with the lectures helped to deepen both my understanding of object oriented programming and c++.

I like how he would go over the quizzes and went over the notes.

In class examples and exercises

The aspects of the course that were the most effective in helping my learning was the repetition of material in quizzes and lecture, and then immediately applying it with the project.

Cool class

Good organized lecutres and thorough explanation of material.

Attending lecture in–person, studying for as well as completing each daily quiz to the best of my ability, and engaging with the weekly in–class exercises all greatly helped in my learning.

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

Quizzes were harder than in SWE

The quizzes, some of them were just relevant to the course material on a tangent

projects were pretty challenging and sometimes didn't relate to lecture material

Vague project structures

I think the attendance quizzes are too hard many times and can be stressful.

The quizzes being part of spec grading is more stressful than helpful. I often learn the material right before the class and then forget right after. And I think making it a percentage? Like you have to a certain pecertage average would be a lot nicer, since its also incentives me to get more than 2/3 each time on the quizzes.

Quizzes - review the notes and assignments

I thought the guizzes were the most challenging.

More clarity on projects grading. I feel like I lost points unfairly.

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The quizzes were pretty difficult for the amount of time we had. I'd appreciate either more time to take them, or slightly more leniency in how many quizzes we're allowed to miss.

I personally found projects the most challenging part of the class, they just take a lot of time more than anything and it requires good time management skills to effectively do well.

The quizzes were the most challenging.

Probably the lack of explanation for the projects.

More design principles

Quizzes were tricky and mildly difficult, even preparation can't fully prepare you. Quizzes were a big portion of why my grade dropped.

I found that the details involving Gitlab were challenging. They weren't difficult, it was just tedious and often I would get points off for minor details. I also found the daily quizzes challenging. Sometimes they would test very specific information learned from the last class. It was also difficult having to show up to every class without missing the quiz in the first 3 minutes.

One aspect of the course I found challenging was being quizzed daily, before I had the chance to fully understand the concepts I was quizzed on. I think if we were to have a bit of a review before jumping into quizzes, that could benefit everyone's understanding of the material.

Having quizzes every class was challenging.

The guizzes were the most stressful part of the course. Dropping the threshold for a "A" by a couple would ease this.

Quizzes sometimes were over content that wasn't explained in lecture

The quizzes were pretty challenging, as there are only 3 questions and they are usually tricky. There could be more quiz drops to make each letter grade threshold.

I found the daily quizzes in the class challenging. I think that it was overall a bit of a stressful experience to have to take a timed 3—minute quiz at the beginning of class each day, especially with the specifications grading scale. I also was not a big fan of cold—calling because I found it a little stressful and made me slightly anxious.

Quizzes, practice quizes maybe

The quizzes at times were frustrating because of how specific and small the details they tested over were

Exercises and projects. I think more time given for the more challenging/longer exercises would be nice, as well as more time in class reviewing the trickier exercises to see how they can be done.

Quizzes

Projects, could make rubric easier to follow so as to avoid unnecessary mistakes.

Remove spec grading. Even though I know the content of the course extremely well, I will get a low grade simply because I missed some classes.

The lecture quizzes were sometimes challenging, but they forced me to learn a lot by reviewing the previous class' material.

The quizzes are definitely the most challenging part of this course. They have strict time limits and sometimes, it isn't very clear how to prepare for them. We can look at notes and rewatch lectures from previous classes, but notes don't always directly prepare you for quizzes.

Grading Scheme, quizzes aren't even related to the material, teacher is a geriatric "READ THE GODDAMN NOTES"

The daily quizzes, as they missing more than 8 drops your grade. The class is built so that you can skip classes and not have any issues, since you have those slack days, but when you start missing quizzes, you become motivated to start attending class even while sick or during emergencies. I think providing better notes could help students learning for these quizzes.

C++ is hard, but Downing helped in my understanding.

The quizzes were the most challenging part of the course because of the disconnect between the projects and what we learned in class. If there is a way to create quizzes in perusal, that would help us learn the content before we actually take the quizzes in class.

I thought some of the content that we covered in class would have been more beneficial with practice involving it, other than the daily quizzes that I don't think helped my learning but sometimes made me cram the class notes right before the assessments.

The most challenging aspect of the course is the daily quizzes. There are many times where the content covered in the quizzes are much more challenging than the content that was covered in class. Additionally, the time limit and restrictions for the quiz do not really allow any room to be a bit late to class.

The quizzes, the projects, and the TA's. I suggest you get on the same page with the TA's. I do not like how I asked a TA how to use GDB and he proceeds to lecture me on why I don't need to use GDB. I just wanted to use it to help to debug but instead we got in an argument on how unimportant it is to use it. Everyone else has something to say about the quizzes.

The quizes were quite challenging, as they often did not reflect what was taught in the course. To better help future students, I would recommend that quizes do a better job of sticking to content from the lecture before.

quizzes are sometimes ambiguously worded and very focused on small details

I think the exercises are quite challenging sometimes. We just got introduced with the materials and sometimes we didn't know how to apply the concepts yet, but we have to for the exercises. It was very stressful sometimes.

I think the quizzes were very stressful and sometimes very hard compared to the corresponding content. I think the fact that missing a certain number of quizzes can plunge your entire grade was difficult. Also, the quizzes were sometimes very specific, so even if I knew a lot about the topic, I would miss them because I forgot a single aspect. Additionally, I do not think the 2 questions with 1 question being two points is very fair because missing that single question would make one miss the quiz, which does not align with the 2/3rd minimum standard.

I wanted to ask the TAs and my peers for feedback on the projects several times outside of office hours, but I was afraid of people seeing my name associated with the question. I know that Piazza gives us an option to keep our identity anonymous to our

classmates (but not to the instructors). Is there a similar option we could enable for Ed?

Sometimes the logistics of the course were more difficult than the material (project organization, blogs).

The grading system for this class is not as I expected. I took Professor Downing's swe class before and although the grading rubric and system are identical, they are implemented differently which made me confused.

The exercises were the most challenging for me due to the time constraints, I would suggest giving students more time.

On (admittedly few) occasions, the quizzes were not over what was taught in the prior class—I understand that material tends to build on itself and thus is hard to separate out, but I feel that if I bomb a prior quiz, it shouldn't translate to affect my later quiz performance as long as I keep up with the current material. I also feel that some of the quiz questions are difficult to get unless extra inquiry is done on edge cases, which can be difficult to spot or even think about since we're learning the material at the moment. I appreciate Professor Downing bringing up edge cases to think about while presenting during lecture, but of course there are always other scenarios that I'm not sure how to even begin thinking about.

Cold calling makes it more intimidating to other students to ask questions. Also makes the lectures so incredibly slow. I think it could still happen but have it be less of a discussion and an entire person for a section.

I think that the lectures were the most challenging portion of this course. As a student, I would walk into lecture with little idea about what to expect to learn that day. The general subjects in the lectures felt scattered and I felt like we were jumping randomly from topic to topic every week, and sometimes even drastically switching subjects in the middle of certain lectures. I felt that the professor should spend more time trying to explain how previous lectures connect to the current material. In addition, I did not like how the pacing of a lecture was determined entirely by the student who was currently being called on. Some lectures would be extremely fast—paced because the student was able to answer questions very quickly, and I would lose track of what was going on. Similarly, some lectures would be very very slow because the student did not understand and the professor had to spent lots of time nudging the student in the right direction. At these times, I felt like the pacing was so slow that I would mentally disconnect from the lecture entirely. When multiple students with different knowledge levels were called on in a lecture, this led to lecture pacing in a single class being all over the place depending on who was answering questions. More consistent lecture pacing would do wonders for helping students stay engaged during the entire lecture.

Secondly, I think that the professor needs to spend more time addressing all students during lecture, rather than just the person being called on. I know this sounds weird as a professor, but weeks would go by where I did not even receive as much as a glance from the professor. As a student, this causes us to disengage from the lecture as we do not feel like we are being spoken to.

Third, I believe that a majority of the exercises given were very difficult to complete in the 25min allotted time frame. Writing functioning code under high time pressure is an extremely difficult task, and it is made even more difficult when the concepts were just introduced ten minutes ago. In addition, there were only three people to help a class of 70+ students. I understand that students can help each other, but there was very little volume of support from actual instructors during these exercises, and I find that unacceptable. Receiving a 1 on exercises can significantly affect a student's grade, and I don't believe that students are set up for success in this aspect of the course.

Fourth, I believe that students should be given slightly more time to complete the quizzes. Four to four—and—a—half minutes would be adequate. Extreme time pressure limits students' ability to think rationally, and students who know the material will are flustered during the quiz over how little time they are given to read and comprehend the question before coming up with the correct answer. Due to this very short time limit, it feels like we are also set up to fail unless we are very very well—versed in the material in the last lecture.

Fifth, I believe that more material on object–oriented principles should be taught in the lectures. It is hard to understand and ask questions about SOLID principles when we are simply are conversing with other students on Perusall who are just as new to the concepts. I believe this is a crucial part of the class given the course title, and it deserves much more presence in the course lectures.

Sixth, I have some small suggestions for things to add to the course website. It is not stated anywhere on the website whether or not we can use class notes for quizzes. Also, it is not stated anywhere on the website that the professor's office hours are by appointment.

Seventh, announcements about the release of project grades should be blasted out on ALL platforms, not just Teams. Teams for some reason turns off mobile notifications by default and so many students might not receive the message on the Teams channel. It is crucial that messaging about project grades is delivered to as many students as possible via all channels, as this is a limited time—frame where students get the opportunity to correct their submission and avoid receiving a 1 on a project.

Eighth, there needs to be more office hours after the Wednesday due date for projects. Students who are still struggling are left messaging the TAs over Teams/Ed Discussion which is a lot slower than being able to talk to them on Zoom.

Finally, and perhaps most importantly, I believe that the standards-based grading is overly punitive to students in the projects

category. Students who are not absolutely meticulous at every step of completing the projects in this course can receive a 1 on a project for very minor things missing. I took your SWE class, and I appreciated your justification for standards—based grading where you explained that people in the real world aren't going to give you a number grade, they are going to simply tell you if something is "good enough", or if it isn't. I certainly agree with that reasoning, and I believe that it fails to be implemented in the project category of this course's standards—based grading policy.

To expand on this, I will give some examples. Students completing Project #1 are given a large variety of project files that they must submit, some of which they may not yet understand. Confusing files and tools for first–time students may include: the makefile, gcov, valgrind, checktestdata, and docker. In addition, some of these files/tools were purposely set up to not work and students were told to fix them. Since this is the first project for students, it is unlikely that all students will complete the project adequately on their first submission. Given the strict requirements of the rubric, it is likely that a student will receive a 1 on this project unless they decide to use up one of their resubmissions. Therefore, students are most likely going to resubmit and are going to be left with a single opportunity to resubmit for all remaining projects, whose collective difficulty is much higher than Project #1. I appreciate the TAs conversing with students on Ed Discussion on how to fulfill the requirements about these files/tools, but more initial guidance is necessary.

Second, and perhaps my biggest grievance: if a student misses a single requirement on the rubric of a project, no matter how small, they are given a 1 on the entire project. This is not stated anywhere on the course website, and was not stated on Teams or Ed Discussion for the duration of this semester.

I have spoken to students who forgot to run "make Project.log.txt" and receive a 1 on the entire project. I have spoken to students to forgot to change their pipeline link, and they received a 1 on the entire project. These things, in the scope of the project, are extremely small errors: things that would take a student less than a minute to rectify. A student spends much more time and effort writing functioning and correct code for the project than they do running "git log."

Indeed, we do have resubmits for these types of mistakes, but it is possible that college students—being tired, stressed, whatever—may make multiple small mistakes like these after they have used up their two resubmissions. I don't believe that students should be punished so harshly for this. Again, I believe that a project that is "not good enough," should receive a 1, however, I do not believe that small mistakes like these make a project "not good enough." Certainly students who have spent many hours completing 99% of the project correctly should not be given a 1 as their grade.

It is possible that a certain set of slip—ups combined with specific timing of late/resubmissions by the student could result in a very poor outcome for their grade, despite their effort.

Due to the current standards-based grading policy, there is a set of special cases allowed where:

- A student turns in all projects with correct code/tests (a majority of the work), but makes microscopic mistakes in rubric requirements in the final possible submission of 2/5 of their projects.
- A student receives a 3 on the other 3/5 projects.
- A student gets a 3 on all 41/41 quizzes.
- A student gets a 3 on all 12/12 exercises.
- A student gets a 3 on all 14/14 blogs.
- A student gets a 3 on all 14/14 papers.

This combination will lead to a student receiving a D+ in this course.

If this student only happened to make a single mistake in the final possible submission of a project (such as forgetting a pipeline link), they would still only receive a B+.

I do not believe that a student who puts in maximum effort and receives a grade for going above and beyond on 84 out of the 86 assignments in this course should receive a D+. I do not think that you believe this should be the case either.

I urge you to be more empathetic towards your students on this front and consider some amount of partial credit or the ability to resubmit for every project to better account for possible slip—ups like these.

Thank you for reading all of my feedback and I hope you consider implementing some of the suggestions I've made here to improve the course experience for future students.

The quizzes were quite challenging. Not necessarily because of the content of the quizzes, but because of the time given to complete given what were asked sometimes. If you missed too many, it would quickly drop your letter grade, and there was nothing you could do to bring it back up, even if you did perfect in the other aspects of the course. The projects were also quite challenging, though to me, I believe this was due to the nature of the constraints placed on us and the nature of c++. There was a quite a lot of work that each project required.

I found the quizzes the most challenging and 1 thing in the future should be easier quizzes.

Quizzes, we should be given more time

The aspect of the course that I found was most challenging was the grading, since specifications grading requires projects to meet all aspects of the rubric and if one aspect is not correct then the correctness of the rest is disregarded. I think updating the rubric to include important information about each aspect (such as what will earn an E or M instead of an R) will help to clarify what is needed per project.

Cool class

In my opinion, the programming projects were the most challenging aspect of the course. These were challenging because of the amount of independent inquiry needed, at least in my experience, to capture the full scope of the project and to troubleshoot the myriad of tools needed to complete the assignments. I am unsure of what can be done to help future students.