

**Course and Instructor Evaluation Summary**  
**Department of Mathematics**

Grubb, Thomas  
MATH 157 - Intro to Mathematical Software (A)  
Winter Quarter 2021

**Number of Students Enrolled: 79**  
**Number of Evaluations Submitted: 54**

**PLEASE COMMENT ON THE FOLLOWING:**

1. Your class level is

0 (0.0%): Freshman  
2 (3.7%): Sophomore  
14 (25.9%): Junior  
36 (66.7%): Senior  
2 (3.7%): Graduate  
0 (0.0%): Extension  
0 (0.0%): Visitor

2. Your reason for taking this class is

39 (73.6%): Major  
5 (9.4%): Minor  
2 (3.8%): Gen. Ed.  
5 (9.4%): Elective  
2 (3.8%): Interest  
1: [No Response]

3. What grade do you expect in this class?

41 (75.9%): A  
11 (20.4%): B  
0 (0.0%): C  
0 (0.0%): D  
0 (0.0%): F  
2 (3.7%): P  
0 (0.0%): NP

## GENERAL QUESTIONS

4. I learned a great deal from this course.

2 (3.7%):	Strongly Disagree
0 (0.0%):	Disagree
2 (3.7%):	Neither Agree nor Disagree
19 (35.2%):	Agree
30 (55.6%):	Strongly Agree
1 (1.9%):	Not Applicable

5. How many hours a week do you spend studying outside of class on average?

0 (0.0%):	0-1
4 (7.4%):	2-3
12 (22.2%):	4-5
16 (29.6%):	6-7
8 (14.8%):	8-9
9 (16.7%):	10-11
4 (7.4%):	12-13
1 (1.9%):	14-15
0 (0.0%):	16-17
0 (0.0%):	18-19
0 (0.0%):	20 or more

6. How often do you attend this course?

5 (9.3%):	Very Rarely
15 (27.8%):	Some of the Time
34 (63.0%):	Most of the Time

## COURSE MATERIAL MATH 157

7. The course material is intellectually stimulating.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
2 (4.0%):	Neither Agree nor Disagree
20 (40.0%):	Agree
27 (54.0%):	Strongly Agree
1 (2.0%):	Not Applicable
4:	[No Response]

8. Assignments promote learning.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
2 (3.8%):	Neither Agree nor Disagree
15 (28.3%):	Agree
35 (66.0%):	Strongly Agree
1 (1.9%):	Not Applicable
1:	[No Response]

9. Required reading is useful.

2 (3.7%):	Strongly Disagree
0 (0.0%):	Disagree
6 (11.1%):	Neither Agree nor Disagree
8 (14.8%):	Agree
14 (25.9%):	Strongly Agree
24 (44.4%):	Not Applicable

10. This course is difficult relative to others.

3 (5.6%):	Strongly Disagree
11 (20.4%):	Disagree
19 (35.2%):	Neither Agree nor Disagree
12 (22.2%):	Agree
8 (14.8%):	Strongly Agree
1 (1.9%):	Not Applicable

11. Exams are representative of the course material.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
2 (3.7%):	Neither Agree nor Disagree
28 (51.9%):	Agree
22 (40.7%):	Strongly Agree
2 (3.7%):	Not Applicable

12. Do you recommend this course overall?

54 (100.0%):	Yes
0 (0.0%):	No

13. Course MATH 157:

- I think this course is a very interesting one because it blends together concepts of math and computer science. It shows that the two subjects can be used hand in hand in a real life setting which is particularly useful for my major.
- This was a great experience
- I would be appreciative if we could choose our own group members...
- Great course, really enjoyed the engagement in this class. Assignments were great, but quizzes didn't really feel like a math assessments and more like a cs quiz.
- I'm pleased because I got exactly what I expected; a moderately difficult class that developed my math and programming skills.
- Def learned a lot from this class; I feel dumb at the beginning but smarter in the end!
- I really like this class. It is interesting to learn a new topic every week; I actually surprised that the professor is able to make some concepts interesting by applying them to real-life applications. Additionally, I learned how to code and use panda, python, etc.
- compared to other classes, this class is less abstractive but more praticical which means if you follow the instructions you will be able to finish most parts.

- Math 157 is a fun course that explores the world of math through different coding languages such as python and sage.
- Extremely interesting course. I had no idea what this course would be like. As a math-cs major, it was very refreshing to learn how mathematics and cs come together. I learned a lot of useful concepts and applications. I learned how to use my knowledge in both and relate them to each other. I really liked that this course was interactive. To me, I think that it is better and easier to follow along with the lecture via remote learning. I don't know how this class is taught in person, but the participation checks and having the lecture open to follow along was very helpful. It was much easier to see what exactly the professor was doing on his screen. I liked that we had the ability to play around on our own files.
- Great class to learn Python and useful Python libraries. I would definitely recommend taking a CS class (at least CSE 11) beforehand though as otherwise, you're trying to learn how to code at the same time that you're learning about libraries which seems like a struggle for some folks in the class.
- Great course with useful content
- Amazing Class!!
- This course was awesome.
- A very good course that is much more interesting than most other MATH courses and is not too abstract like many of them are. Mostly everything is done with real numbers, graphs, or something tangible .
- Such a cool class to take, I can't believe I had never considered it before. I learned a little about a lot of things and it was really fun! Coding is typically not very intuitive for me but I feel a lot more comfortable with it now. I didn't even feel like I was taking this for my major at many points and just for fun because it was such a chill and interesting class!
- Cannot recommend this class and the material enough. Very underrated since it has things any science or math undergrad needs to know. Even if you know python you should still take it, but it covers all the basic to make sure you know how to work with python. If you already know things in this class, you still won't find your time "wasted" you'll still learn alot!
- Interesting class, exposing a new program to open minds

#### 14. Exams/Quizzes/Papers:

- Straight forward and no surprises. If you know what you're doing and studied, you'll do fine. Just make sure you're studying and practicing and understand the math material in addition to the "programming"
- Exam were challenging, but representative of the material in class and homework. I wish there was a little more practice material, but the amount we had was ok.
- The quizzes are a nice way of testing our knowledge of the subject. Nothing is made to be too hard and there are no trick questions, which I really appreciate.
- The quizzes seemed fair, I was always pretty stressed on time but I think that's expected.
- Quizzes were quite simple and representative of the coursework that we did. The final is a final project which gives you a chance to explore a math topic of interest.

- The quizzes are there to test your knowledge of code and your rudimentary understanding of certain mathematical topics.
- These were fair
- Hard for me! I would actually cry during the assignments
- No exams, just two quizzes that represented the course material quite well, and focused more on understanding the concepts rather than the ability to program.
- Quizzes reflect what we learned in class.
- Quizzes are very straightforward and representative of course material.
- exams are fair and resonable. Final projects are where you can be creative.
- For quizzes maybe add some short questions assessing the mathematic proof or concepts.
- Quizzes are representative of the coursework. The only problem is that there are too many questions. 30 minute exams are always troublesome currently the quizzes seem like quantity over quality of the work.
- Quizzes ere more difficult than homework but still doable.
- Quizzes were fair. I wish there was a rubric/brief grading outline for the project - it is a little too open-ended for me.
- Representative quizzes.
- Straight forward exactly like lectures

#### 15. Reading [title(s) and comments]:

- not applicable
- Not much reading. Should be more, but you get references that are helpful but you need to do your own research and dig into the math background yourself, though it won't be required for the class, but for your benefit you might as well learn more while you're at it
- No readings
- It wasn't that long

#### **INSTRUCTOR Thomas Grubb**

#### 16. Instructor displays a proficient command of the material.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
2 (3.8%):	Neither Agree nor Disagree
10 (19.2%):	Agree
40 (76.9%):	Strongly Agree
0 (0.0%):	Not Applicable
2:	[No Response]

17. Instructor is well prepared for classes.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
2 (3.8%):	Neither Agree nor Disagree
11 (20.8%):	Agree
40 (75.5%):	Strongly Agree
0 (0.0%):	Not Applicable
1:	[No Response]

18. Instructor's speech is clear and audible.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
1 (1.9%):	Neither Agree nor Disagree
13 (24.5%):	Agree
39 (73.6%):	Strongly Agree
0 (0.0%):	Not Applicable
1:	[No Response]

19. Instructor explains the course material well.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
2 (3.7%):	Neither Agree nor Disagree
13 (24.1%):	Agree
39 (72.2%):	Strongly Agree
0 (0.0%):	Not Applicable

20. Lectures hold your attention.

0 (0.0%):	Strongly Disagree
2 (3.7%):	Disagree
8 (14.8%):	Neither Agree nor Disagree
16 (29.6%):	Agree
28 (51.9%):	Strongly Agree
0 (0.0%):	Not Applicable

21. Instructor's lecture style facilitates note-taking.

0 (0.0%):	Strongly Disagree
5 (9.3%):	Disagree
6 (11.1%):	Neither Agree nor Disagree
16 (29.6%):	Agree
21 (38.9%):	Strongly Agree
6 (11.1%):	Not Applicable

22. Instructor shows concern for students' learning.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
1 (1.9%):	Neither Agree nor Disagree
19 (35.2%):	Agree
33 (61.1%):	Strongly Agree
1 (1.9%):	Not Applicable

23. Instructor promotes appropriate questions/discussion.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
1 (1.9%):	Neither Agree nor Disagree
19 (35.2%):	Agree
34 (63.0%):	Strongly Agree
0 (0.0%):	Not Applicable

24. Instructor is accessible outside of class.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
4 (7.4%):	Neither Agree nor Disagree
11 (20.4%):	Agree
36 (66.7%):	Strongly Agree
3 (5.6%):	Not Applicable

25. Instructor starts and finishes class on time.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
2 (3.7%):	Neither Agree nor Disagree
13 (24.1%):	Agree
38 (70.4%):	Strongly Agree
1 (1.9%):	Not Applicable

26. Instructor is effective in promoting academic integrity.

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
2 (3.7%):	Neither Agree nor Disagree
16 (29.6%):	Agree
35 (64.8%):	Strongly Agree
1 (1.9%):	Not Applicable

27. The instructor practiced effective teaching strategies that acknowledged and valued differences among students, including differences of race and gender identity.

1 (1.9%):	Strongly Disagree
0 (0.0%):	Disagree
1 (1.9%):	Neither Agree nor Disagree
11 (20.8%):	Agree
33 (62.3%):	Strongly Agree
7 (13.2%):	Not Applicable
1:	[No Response]

28. Instructor Thomas Grubb:

- Explains both simple and complicated topics clearly. He's really good at breaking things down and explaining every part in a way that makes sense. His lectures feel a little formulaic, but I like that because I learned what to expect quickly.
- One of the best professors at UCSD!

- The instructor is receptive to student feedback. I admire the instructor taking the time to address student feedback on the Zulip chat and Google Form surveys. He is also approachable and accommodating during his Office Hours. Furthermore, he is very accessible even outside lecture times, and I can find help if I ask. Lastly, I like that Thomas always connected the theory to real-world examples. I learned a lot from this course, and I also had a lot of fun.
- Thank you for the awesome quarter!
- I really enjoyed having Professor Grubb this quarter. He was very prepared for every lecture. He spoke clearly and covered the material well. He answered all the questions students had and was accessible outside of class. I really appreciate that he created a Zulip chat where we were active on. He is nice and spends a lot of time making quality lectures. In future courses, I would like if he uploaded all our grades and participation checks more often so that we can see how we are doing in the course. Overall, I learned a great deal from Professor Grubb that I know I will use in my future endeavors. I learned concepts and ideas I would have never learned elsewhere. It is very applicable to what I do and I would recommend this course to all STEM students. I had the opportunity to learn about new tools and packages that are very useful.
- Articulate and clearly has thought a lot about the course.
- He is a great teacher with proficient knowledge. And his class is concise but maybe massive, so you have to keep on the track all the time.
- I really appreciate your flexibility while teaching this course. I understand it is really hard to teach something online as opposed to in person, but I believe that you did an exceptional job. The lectures were easy to follow and the homework accordingly so.
- Professor Grubb was very knowledgeable and personable. It was great to have him as a professor!
- Thomas Grubb was a fantastic instructor who was able to effectively teach the course material, as well as give us a deeper understanding of it. He also assigned homework that helped give us a sufficient amount of practice for very relevant programming skills. Overall, lecture was interesting and engaging, and I enjoyed the small and fun things he did, and the enthusiasm he brought with him to lecture.
- Can't say enough about how perfect it was to have Professor Grubb teach this class or teach during pandemic/remote learning situation. Very understanding and knows how to really set up the class for the remote learning perfectly! This class is almost even better because of how he set up the resources for remote learning. 10/10 on using ZULIP, 10/10 with using coCalc and everything. Knew how much to dive into material and balance with the coding and supporting without getting too deep into unnecessary info while packing sooooo much into the course. Even if you knew some python professor still has lots of tricks up his sleeve to make you even better in python. If you ever get a chance to enroll in his courses again, sign up!
- He's a great professor. He's willing to take advice from students and integrate them into the classroom.
- Love him, a great guy who is very caring and knowledgeable
- The best professor I've had at UCSD.
- A great professor! I can tell he is truly interested in the class material and his excitement passes onto the students. Explained concepts very well and sageMath files were very easy to follow.
- Really great professor!
- Thomas Grubb is a great professor and this class was really awesome



- He's a really great professor! Very chill and always knows what he's talking about but not in a condescending way. Sometimes I almost felt like he is a peer and it was a nice experience to have such an understanding professor of how the students learn and feel.
- Straight forward teaching.
- Great instructor, passionate.

29. Do you recommend this professor overall?

54 (100.0%): Yes  
0 (0.0%): No

## CUSTOM QUESTIONS

30. The size of the lecture was appropriate for of the educational goals of the course.

0 (0.0%): Strongly Disagree  
0 (0.0%): Disagree  
5 (9.3%): Neither Agree nor Disagree  
21 (38.9%): Agree  
27 (50.0%): Strongly Agree  
1 (1.9%): Not Applicable

31. The size of the discussion section was appropriate for of the educational goals of the course.

0 (0.0%): Strongly Disagree  
0 (0.0%): Disagree  
4 (7.4%): Neither Agree nor Disagree  
18 (33.3%): Agree  
25 (46.3%): Strongly Agree  
7 (13.0%): Not Applicable

32. There were a sufficient number of lectures of this course offered to allow for flexibility in my schedule.

1 (1.9%): Strongly Disagree  
2 (3.7%): Disagree  
8 (14.8%): Neither Agree nor Disagree  
17 (31.5%): Agree  
21 (38.9%): Strongly Agree  
5 (9.3%): Not Applicable

33. The instructor was responsive to my questions in (and outside of) class.

0 (0.0%): Strongly Disagree  
0 (0.0%): Disagree  
2 (3.7%): Neither Agree nor Disagree  
13 (24.1%): Agree  
36 (66.7%): Strongly Agree  
3 (5.6%): Not Applicable

34. The prerequisites for this class were good preparation for success (Please answer only if you completed the prerequisites AT UCSD).

0 (0.0%):	Strongly Disagree
0 (0.0%):	Disagree
6 (11.3%):	Neither Agree nor Disagree
12 (22.6%):	Agree
27 (50.9%):	Strongly Agree
8 (15.1%):	Not Applicable
1:	[No Response]

### Custom Question 5

35. Please provide examples of the ways the instructor did or did not create a learning environment that welcomed, challenged, and supported all students.

- When I asked him rather personal questions in OH, he is very nice to offer the break out room! He helped me a lot in gaining confidence in coding and math in general, not just in the content of this class! I am very appreciative!!!!
- I was traumatized trying to learn Python, yes, its easy but there are certain basic syntax and I had no formal training in python. But professor sets up lecture examples and homework examples that gets your going while making you proficient to doing it on your own the next week to move on to more advance and interesting challenges. I thought it would be a just a basic class, but I'm blown away by how I underestimated how much I got from this class and instructor. Even though I probably got 80% of what the class gave (like trying to drink water from a fire hydrant) I got more out of that 80% than I ever imagined I would get. I thought I was bad being late to the python party and even bad enough learning python since its such a basic skill that everyone has now a days but regardless of how good or bad, professor really had the patience and ability to get you going and move you fast once you got the hang of things. Plus he made it fun and gave so many good examples and even made amazing cartoons for lectures!! Assignments also were wide and diverse, that it will appeal to everyone and anyone at least half the time.
- Thomas Grubb created an environment where everyone was coming to class excited to see what we were going to learn by being enthusiastic and interested in what he was talking about. He connected mostly everything that seemed abstract to something real and concrete and it made the class feel more inviting to someone who may be confused about how everything works.
- Quickly responds to question on zulip. Takes into account students living in different time zones.
- He definitely created a safe learning space
- Online learning is hard. Even though there are live participation checks, sometimes it still feels like I am watching a prerecorded video. I wish there were more professor-student / student-student interactions in class.

Please note that any responses or comments submitted by evaluators do not necessarily reflect the opinions of instructors, Mathematics, Academic Affairs, or UC San Diego. Responses and comments are made available without auditing or editing, and they may not be modified or deleted, to ensure that each evaluator has an opportunity to express his or her opinion.