

# COMPLEX VARIABLES (Spring 2020 (202003))

Instructor: **Pham, Tuan**  
Subject: **MTH**  
Catalog & Section: **483 001**  
Course ID: **54806**  
Objectives:

Enrollment: **33**  
Responses Incl Declines: **9**  
Declines: **0**

undefined

No Data.

## Student Experience (23 comments)

### **Q: In regard to your interactions with the content, instructor, and other students in the course, what went well this term?**

- 1 "I appreciate how passionate Tuan is about the material. I could hear the excitement in his voice whenever he's talking about a subject he finds interesting." -- Edward Kingston
- 2 I thought the lectures were clear and well motivated
- 3 I felt that office hours were extremely helpful. It was nice to have a space where I could talk with the professor and other students about the homework. I also found the worksheets to be helpful, especially when the professor would go over them in class.
- 4 good explanations, great demonstrations in Mathematica, interesting presentation of the material
- 5 Examples were helpful and generally thoroughly explained. The Mathematica guides and examples in particular I felt helped me understand things much better, maybe because I could experiment and see how things behaved on my own. I felt that the assignments were very helpful practice as well.
- 6 "I say the teacher trying to get us involved and encouraging us to talk outside of class led to success." -- Colin Wallace
- 7 This class was EXCELLENT. Tuan obviously cares about his students doing well. His lectures were very thorough and he always took time to answer questions. Homeworks were challenging but always manageable going off of the lectures and worksheets.
- 8 Lectures and the flexibility of being able to watch lectures again after the session was really nice

### **Q: In regard to your interactions with the content, instructor, and other students in the course, what didn't go well or could be improved?**

- 1 "I wasn't a fan of how we did worksheets. We'd only get between 5-7 minutes to work on them and then we'd have to submit them to Gradescope the same day, which took up a bit of time that I wanted to devote to other classes. I would have appreciated fewer worksheets and/or more time to work on them during class. Also, no one really talked with each other; we'd just work on the worksheets on our own." -- Edward Kingston
- 2 The lectures seemed a little slow paced
- 3 Sometimes during the breakout session where we were supposed to work on the worksheet, other students wouldn't respond if I tried to talk to them and work through the problems with them. This was a bit frustrating.
- 4 everything made a lot of sense in class but not quite as much when it came to homework. office hour availability was really limited, I had classes during the only times so could never make it.
- 5 Concepts and theorems sometimes didn't seem fully explained or justified. I feel that the worksheets ate up a lot of class time that could have been better spent explaining concepts (or just going through the worksheet problems as a class), especially since we already get practice solving problems on the homework.
- 6 "Most of the class didn't want to talk at all. several moments of awkward silence." -- Colin Wallace
- 7 The homework's seemed to be a much higher degree of difficulty in terms of what was lectured in class. A lot of the homework was self-learning.

### **Q: Please comment on your workload for this course. Were the number of hours per week needed to prepare for this course appropriate to the knowledge gained?**

- 1 "The workload was fair. We only had worksheets and a weekly assignment that would take me anywhere between 4-6 hours total to finish, which is fair for a 3-credit class." -- Edward Kingston
- 2 Workload was reasonable

- 3 Workload was perfectly fine.
- 4 homeworks took a really long time
- 5 Yes.
- 6 "I would say so" -- Colin Wallace
- 7 5-6 hours a week
- 8 It was quite a lot.

#### Instructor's Questions (24 comments)

##### **Q: What did the instructor do that best help your learning?**

- 1 "Tuan's excited tone of voice helped me stay alert and pay attention in class, which I needed given it was a 9am lecture. Otherwise I probably wouldn't have been able to focus as much as I did." -- Edward Kingston
- 2 He used lots of graphs which was helpful
- 3 Office hours was the most helpful to me. It felt like a more "in person" experience since we turned on the cameras and worked through problems together. I also found the worksheets helpful, especially when you would go over the solutions in class.
- 4 working through examples in class
- 5 I think that working through example problems in the lecture with thorough explanations helped me a lot in understanding the material.
- 6 "In class worksheets" -- Colin Wallace
- 7 He worked through examples in class that gave a better understanding of how to do homework.
- 8 Gave additional resources for the homework and published extra notes.

##### **Q: Was the Mathematica component of this course helpful to your learning? If so, in what way?**

- 1 "I felt like the Mathematica component was useful because I felt like I need to learn various mathematical programming languages. In particular, I'll be taking MTH 440 in the fall, which I've heard utilizes Mathematica, so I'll have some experience with that going into the class." -- Edward Kingston
- 2 Yes, it gave me a sense of what functions looked like.
- 3 Definitely. I tend to be a visual person when it comes to math, so it was helpful to be able to see what was going on - especially when we were working on continuity.
- 4 yes, had never used or heard of mathematica and the visualization really helped
- 5 I found the Mathematica component to be very helpful, especially the examples with the interactive sliders. Being able to experiment with things in Mathematica helped me to understand how things worked and were related.
- 6 It's pretty helpful. I've used Mathematica before but it was for number theory and so coding for a different type of math feels refreshing and interesting.
- 7 "was tough, but doable since the teacher posted notes on how to use it." -- Colin Wallace
- 8 Yes, it was nice to be able to graph complicated problems and visualize difficult concepts.
- 9 It was very helpful, as it basically taught me how to use this language, but sometimes I felt very lost when trying to answer the questions asked from the homework.

##### **Q: What did you struggle the most with in this course? What could the instructor have done differently to make the class more enjoyable to you?**

- 1 "Again, not having as many worksheets. It felt like a drag to have to go through the process of submitting one problem I'd work on the same day I did it." -- Edward Kingston
- 2 The integration part was most difficult
- 3 I found taking the limits of some functions to be particularly difficult. Maybe some extra examples that aren't very straight forward would have helped me to better understand this topic.
- 4 the mathematica on the homework was really hard, I think it would have served better as extra credit
- 5 I had a hard time understanding some of the concepts. I think spending more time in the lecture on explaining them and the results we

used (maybe even with some full, thoroughly explained proofs) would have been very helpful.

---

6 "Some of the assignments were pretty long at were about 8 or more pages long when written, but wasn't a bad thing at all" -- Colin Wallace

---

7 I struggled the most with the conceptual part of the class and homework. Most of the in-class lecture times were spent going over how to algebraically solve problems, but a big portion of the homeworks would ask conceptual questions.