



Fall 2019 - Matthew Barry MEMS 0071 - INTRO TO FLUID MECHANICS - 1020 - Lecture

Project Title: **2201 - Teaching Survey Fall 2019**

Courses Audience: **110**

Responses Received: **106**

Response Rate: **96.36%**

Subject Details

Name	MEMS 0071 - INTRO TO FLUID MECHANICS - 1020 - Lecture
DEPARTMENT_CD	MEMS
CAMPUS_CD	PIT
SCHOOL_CD	ENGR
CLASS_NBR	22278
SECTION_NUMBER	1020
TERM_NUMBER	2201
COURSE_TYPE	Lecture
CLASS_ATTRIBUTE	
First Name	Matthew
Last Name	Barry
RANK_DESCR	Assistant Professor
TENURE	NT

Report Comments

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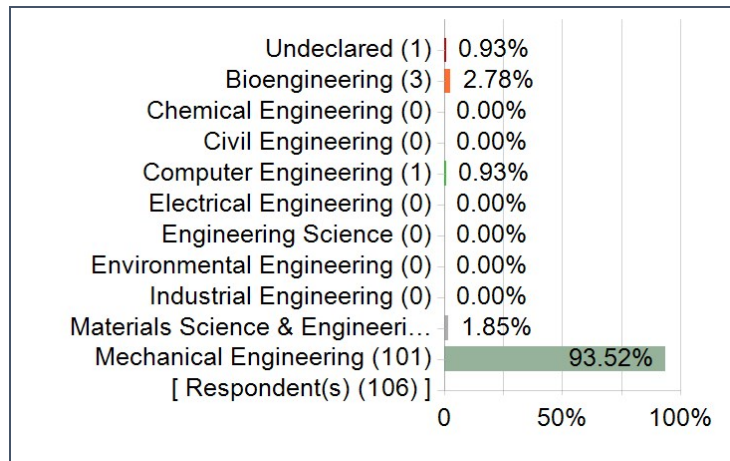
- I. Numerical results to Likert scaled items - Summary and Detailed Results
- II. Responses to Comments or Open-ended Questions
- III. Responses to additional School or Department Questions (if applicable)
- IV. Responses to additional QP/Custom Questions (if applicable)

Collect student feedback early next term.

Beginning spring 2020, the Office of Measurement and Evaluation of Teaching (OMET) will offer a midterm course survey option. This option will be open to all instructors by request. [Read more about Midterm Course Surveys and the new OMET option.](#)

Creation Date: **Tuesday, January 14, 2020**

Please select the major you are enrolled in. Check at most 2 programs. If you are currently a freshman or an undeclared major, select your anticipated major from the list (or select Undeclared if you are unsure).



University Questions

Instructor Summary of Results - Scale: Strongly Disagree (1) to Strongly Agree (5)

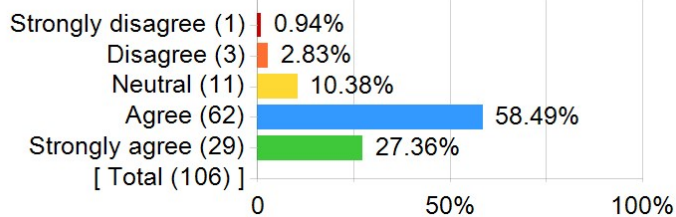
Question	Results		
	Response Count	Mean	Standard Deviation
The instructor stimulated my thinking.	106	4.08	0.76
The instructor was enthusiastic about teaching the course.	105	3.94	0.99
The instructor presented the course in an organized manner.	106	3.98	0.89
The instructor maintained an environment where students felt comfortable participating.	106	3.66	1.09
The instructor maintained an environment where students felt comfortable seeking assistance.	106	3.84	0.95
The instructor provided helpful feedback.	106	3.74	0.91
Assignments contributed to my understanding of the subject.	105	3.92	0.99
Overall	-	3.88	0.95

Instructor's overall teaching effectiveness

Question	Results		
	Response Count	Mean	Standard Deviation
Express your judgment of the instructor's overall teaching effectiveness.	106	3.50	1.05

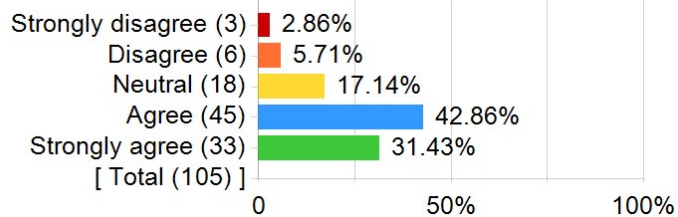
Instructor Items: Detailed Results

1. The instructor stimulated my thinking.



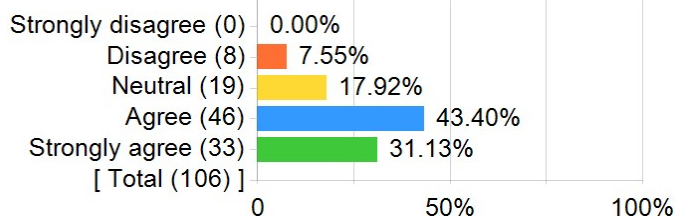
Statistics	Value
Invited Count	110
Response Count	106
Response Ratio	96.36%
Mean	4.08
Median	4.00
Mode	4

2. The instructor was enthusiastic about teaching the course.



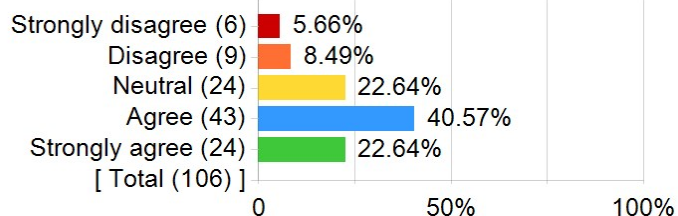
Statistics	Value
Invited Count	110
Response Count	105
Response Ratio	95.45%
Mean	3.94
Median	4.00
Mode	4

3. The instructor presented the course in an organized manner.



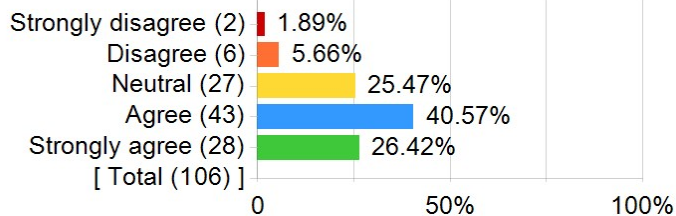
Statistics	Value
Invited Count	110
Response Count	106
Response Ratio	96.36%
Mean	3.98
Median	4.00
Mode	4

4. The instructor maintained an environment where students felt comfortable participating.



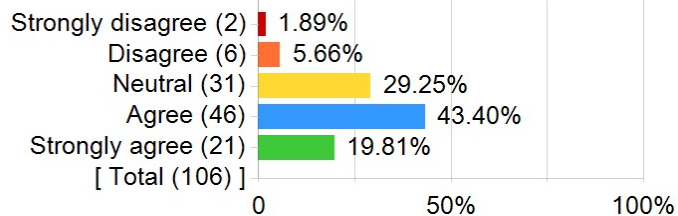
Statistics	Value
Invited Count	110
Response Count	106
Response Ratio	96.36%
Mean	3.66
Median	4.00
Mode	4

5. The instructor maintained an environment where students felt comfortable seeking assistance.



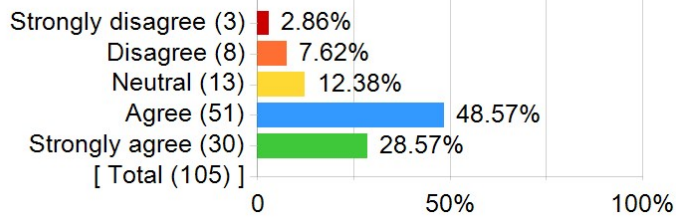
Statistics	Value
Invited Count	110
Response Count	106
Response Ratio	96.36%
Mean	3.84
Median	4.00
Mode	4

6. The instructor provided helpful feedback.



Statistics	Value
Invited Count	110
Response Count	106
Response Ratio	96.36%
Mean	3.74
Median	4.00
Mode	4

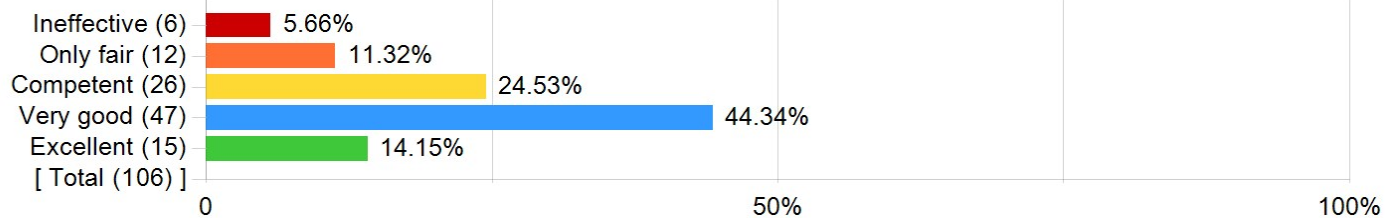
7. Assignments contributed to my understanding of the subject.



Statistics	Value
Invited Count	110
Response Count	105
Response Ratio	95.45%
Mean	3.92
Median	4.00
Mode	4

Instructor's overall teaching effectiveness:

Express your judgment of the instructor's overall teaching effectiveness.



Comments

What did the instructor do to help you learn?

Comments
Everything in the course.
Homeworks felt very relevant to exams
Did proofs to understand concepts
I have learned more about partial differential equations in this class than I did the differential equation class.
Lot's of good work
His lectures are well organized and easy to find.
fundamentals of fluids
Learned a good bit about partial differentiation
Posting the lecture slides before class was helpful
Good examples
He made me struggle so much on homework and tests that I may have somehow learned something
He posted the slides with the updated notes we took in class on TopHat which was useful
I like how he organizes his class notes. I also like the homework assignments cause they greatly help my understanding of the material
Example problems helped
Consistently organized slides.
He talks very emotional
the homeworks were good, appreciated that HE wrote them and they weren't random book problems
also appreciate him redirecting us to the supplemental book
Constantly motivate me with Hem's
very patient
TopHat and posting the annotated lectures are both very helpful.
Example problems that are done in class help massively.
Provided rigorous and stimulating homework assignments that helped me think critically about the subject, in addition to prompting me to make use of skills I have learned in other courses.
By engaging the class and encouraging participation Matthew Barry helped me learn.
His notes are very straightforward and easy to understand. And he is very helpful during office hours.
His in class powerpoints were well organized
Good lectures
The instructor provided helpful homeworks and posted solutions after they were due.
Posted slides
Nothing. Too off topic and convoluted
Homework assignments were long and involved but helped you learn the material effectively.
basic intro to fluids
He is a tough love type teacher. He will kick your butt but I learn more in his classes usually than most other classes.
presented good lectures, and I think the in-class participation questions on TopHat, questions and quizzes, were helpful (kept attention and interactive). but those stopped as the semester went on.
The main principles of Fluid Mechanics.
Dr. Barry had good lectures I would say, and the fact that we were able to access them after class was really helpful.
lots of examples
Quizzes and homeworks directly correlated with the exams.
Patient answer to problems in office hour
Weekly homework helped me learn the material weekly.

Comments
Suffered through using TopHat. Posting annotated slides. Real world applications
He liked navier stokes
Lectures were effective
Well organized lecture slide to follow
Is patient during office hour
Explained well
Provided helpful steps on how to solve problems
The example problems in class helped.
He presented all the information in an organized manor and explained everything very topic very thoroughly.
Guided powerpoints
In class examples
Made me want to do well out of spite. Barry is a very difficult professor but the difficulty does assist in learning well
I don't know really, he just kinda left for 2 weeks in the middle of the course and left us and the TA's with no direction or understanding of the homework due that week.
eh?
His way of teaching using top hat helps me understand better and the homeworks helped a lot
Well structured ppts, challenging and relevant homework
Give me some points.
tough problems
some interesting problems
He went over things in a theoretical manner followed by using many examples to help emphasize the topic
Posted lectures on top hat and did in class-participation quizzes to help learn the topic of the lecture
Using top hat made it easy to look back through the slides for further clarification.
Very well organized lectures and homeworks
Lectures were given before class and after to review, homework solutions were given to check ourselves
Taught class through Tophat so when I got behind in lecture I could pull it up and take notes on my phone.
All of the concepts were conveyed pretty well in my opinion
Providing useful electronic slides on Tophat.
He posted the annotated notes on tophat.
Examples on TopHat. Homework problems were helpful.
I felt like I learned the basic concepts of fluid mechanics.
Speak slower
Presented the course in an organized manner.
Example problems in lectures helped my understanding of the content and showed the use of the equations explained.
Organized notes and homework/quizzes
Kept class involved and interested
He provided notes of examples and notes on TOPhat.
Provided lecture notes
He did example problems on top hat and took notes on top hat.
Used top hat for easier note taking
He was good like always and makes sure everyone understands topics before moving on
He provided examples in class that showed application well and uploaded notes for review in case I missed class.
RTT among other things mostly RTT also Navier stokes, but I don't want to talk about that one.
Fluid Dynamics
Good presentations with effective examples

Comments
His enthusiasm in teaching fluid :)
Office hour
Use Tophat so that we have chance to review what he wrote during the class.
Demonstrated example problems during class Provided detailed solutions of homework problems Both of these are vital for me to understand the content.
The basic dynamic fluid, how it reacts and how to calculate.
Explain the concepts thoroughly through derivations even though they are often hard to follow. Examples in class helped my learning.

What could the instructor do to improve?

Comments
Slow the speaking speed in class.
More organization
More examples in lecture
I think the 2nd midterm would have gone significantly better had that portion of the curriculum been taught by Dr Barry instead of the TA
Pls stop leaving for 2+ weeks :(
His homework problems are ridiculous and require programs such as matlab sometimes to solve. I feel as if they did not contribute to my learning since he made them himself and it seemed as if there was an attempt to fool us rather than help us learn and prepare us for Applied Fluids.
he derives equations for most of the class time, it doesn't help
More practical applications as opposed to heavily theory and derivation based course. Don't disappear for a long period of time, leaving a TA to teach the course and then complain about a low exam average as though it was unexpected
More exam review material would be helpful
Less vacation
Make the class easier
Towards the end of class he stopped making lecture slides, I would have preferred if we continued to have lecture slides instead of just writing on a blank slide.
Practice exams?
More example problems to cement the concept. Spent too much time on theoretical concepts pulled directly from the book outside the scope of the course, leaving us without the know-how to complete problems. Could slow down at times to help us follow the concept. Also not leaving for two weeks without telling us.
Show up to class. Not take a vacation in the middle of the semester. Assign homework problems that are possible to do without asking the TA's for help. Give lecture examples whose difficulty are somewhat on par with homework problems. Not treat his students futures like its a joke. Not constantly suggest that "its time to change majors".
Please keep the examples done during the class into course document
the slides were a disaster. I think general consensus was that the handwriting was just illegible. it was difficult to read, and difficult to follow
also lectures were kinda disorganized and sometimes I felt like I could learn more reading the book at my own pace
Not go to Ireland for a month
unclear test questions
Not much really.
Be my statics teacher, why are you making these classes fun after I'm out. Ckts labs and bridges yo that's not even fair.
In all seriousness, I still prefer flipped classes. Sometimes it is hard to keep up with lecture slides at the pace of your lecture despite them being on top hat. The lectures where you draw and write things out as you explain them seem more effective to me. Overall it seems lecture has improved in this class compared to the last 2 semesters though.
Yeah also maybe not abandon us for 2 weeks, at least have Shadow come and teach he'd probably do better than Tony and Josh

Comments
More example based problems in lecture. Spent a lot of time going over theory and skipped over some of the example problems in the slides.
Maybe have video lectures instead of having the TAs teach when absent
By the end of the year he stopped posting power point slides, and instead just did hand written notes in class that were not as easy to follow, even if I went to class. It would help if he continued preparing lectures all year
Either focus on introducing more and different kind of problems to practice or get more into detail in explaining concepts.
Avoid the use of tophat for class slides. Sometimes the written annotations were difficult to read/follow.
Do less derivation based and a bit more concept based.
Actually be in class
Sometimes homework solutions made little sense or mathematical tricks appeared seemingly out of nowhere. Consistency in what we can assume and what we cannot would improve the clarity of the homework solutions.
Slow down the pace of the course, and focus on the topics you will test us on.
slow down a bit in class, when he did videos when we didn't have class I was able to understand the material better
He scares students into quitting the class a little too much (haha)
Like I said, I liked the interactiveness of tophat. So maybe the instructor can keep up with that throughout the semester. Topics towards the end of the semester got very complicated. But I don't know what to suggest to help improve students understanding of those.
Not saying that this are more simple than they actually are. For example before the second exam he said that most of the solutions should be 3 lines of math while in his solutions posted after the exam, some take up half of a page or more.
I would have appreciated more difficult examples in class because it felt like we did the most simplistic examples in lecture and were then required to do much more advanced problems on homework and exams. I don't mean to say that the difficulty should be the same between lecture and exam problems, but Dr. Barry could have done better by making that transition less abrupt.
be more approachable
Na
Less homework problems
Go over more example problems in class. We spend a lot of time learning conceptually and that makes homework problems more confusing because you don't have enough examples. Exams are even more difficult, because now you're time limited and the problems are usually very different from problems we've seen before, which just adds to stress in the moment. Ultimately we need more example problems and exams where the problems that least somewhat resemble problems we've seen before.
Not leave for 2 weeks or make homework's that have impossible problems on them
Give us quizzes on time Don't use top hat
Get slides and teaching in a more organized way
External information posted outside of class
Make exams easier :)
Assign a few easier problems on the homeworks and then gradually increase the difficulty.
nothing
Foster a positive environment
Post things on time and grade faster
Though I always leave Barry's classes with a solid understanding of the material, I find that Barry generally just doesn't care about the wellbeing of his students. Granted, he doesn't have to, but it would be nice if he did
Teach us what to actually do instead of the theory behind it. no one can keep up and we know nothing for the homework or tests
Nothing really I like how the course is
I would have appreciated links to relevant additional practice problems (given that the textbooks weren't especially utilized)
Any improvement in any field.
Not go to Ireland for 2 weeks without telling anyone.
make hw more rigorous
Possibly spending some less time and theory and more time on the actual examples
Continue doing the participation quizzes in class to help reinforce the lecture topic
Assign homework's which will follow more along the lines of exam questions. Proofs didn't help my understanding much.

Comments
be more approachable
More resources for studying for the exams
Slow the pace of the course down and put an emphasis on what we are tested on. The tests are no
More demos or videos or something because some of the lectures can drag a little bit especially with those fucking annoying derivations
Explaining complex concepts in a more understandable way.
I'm not sure exactly what happened when you were gone for 2 weeks, but it would be nice to have a little bit more of a warning and structure for the time you were gone. Also, having some more review problems would eliminate some stress that builds up before exams.
Give reasonable amount of homework with more time to complete. Do not give a bunch of quizzes at the end of the semester.
Please give more examples and problems for study materials. I felt like I knew most of the material pretty well when it came to problems that were similar to the homework/in-class examples. But I had never seen anything like problem 3 on the first midterm before and I was so confused trying to solve it.
Sometimes I can't understand what he saying
Towards the second half of the semester, there wasn't much available participation through Tophat questions. There also weren't many quizzes to make sure we knew the content before the exam.
Tell better jokes
Go over examples in more detail.
Better/ more examples More midterm/ final review
He could do more difficult example problems in class. The practice problems we did in class never seemed to match to the difficulty of the homework.
Provide more example problems and practice exams/problems
N/A
His office hours seemed limited for the difficult homeworks. It was harder to find help
Fix tophat.
tophat is * B A D *
but not so bad you should stop using it
More consistency between the homework and notes for a few of the homework assignments.
Maybe give the pages of the recommended text , the easier one which we should read because it is structured very differently to the required text. Also maybe let us know what kind of problems from the text books, we can expect.
Make homework more similar level of difficulty as class examples
More detailed slides
Don't be away from the class for 2 weeks before midterm.
Do less derivations and more example problems. Although derivations are important to understanding how we come up with the methods we use to solve problems, in reality, a very small portion of the class engages with them. I do understand how important they are, but at this point, most students only focus on how to use the equations to solve questions correctly as this is what we are assessed on. For this reason, I think doing more example problems would be helpful.
Please post the last couple of presentations. It is hard to review w/o your presentation files.
Harder in class examples to make Homework's more manageable.

Do you have any other information that you would like your instructor to know?

Comments
You are a good professor.
I don't like how some exams are far more difficult than others
No.
No

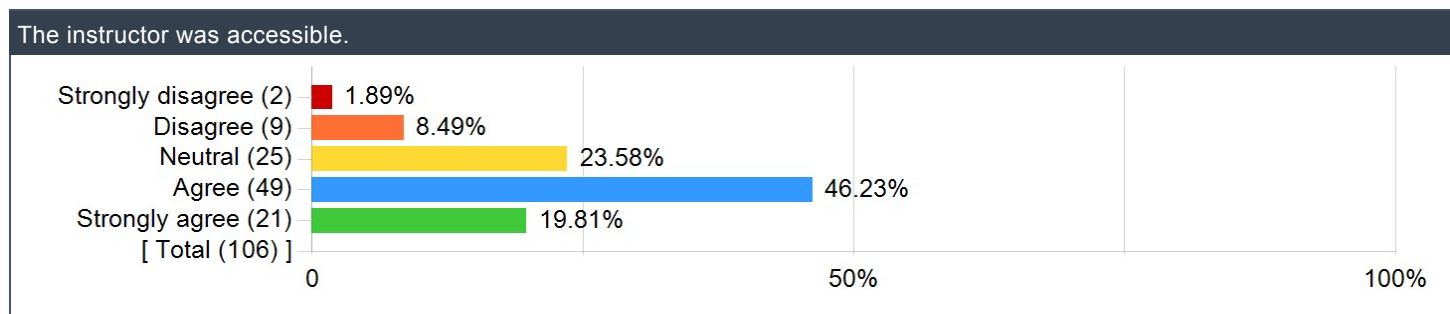
Comments
I hated fluids
Your lectures are my favorite because they're funny and engaging. This is my third time having you and I'm sad this will probably be the last time. Thanks!
This is the third class I have taken with you. You present material in an organized way that is easy to access outside of class. You are an effective, and knowledgeable lecturer. However, your attitude toward the professor–student relationship is toxic at best. Making suggestions about "changing majors", and "giving up" wasn't funny the first time, never mind the 100th time. It helps absolutely nobody, and it is upsetting that you seem to take satisfaction in saying it repeatedly. You have expressed that you hold your students to a high standard of responsibility, timeliness, and work ethic which, over the course of three classes with you, it has become clear that you do not hold yourself to.
I think what could be helpful is using more simulations / videos in class. when I went on YouTube, I was thoroughly impressed at how much more quickly I could grasp a topic when I saw a 1 minute video that showed me a fluid simulation. I know u used videos, but they weren't too effective for me. Animation is amazing
Quiz packets seem a little cruel.
Cancelling class gets annoying even if some people are happy about it. The week before finals would be the perfect time for a review session instead of cancelling class
None
Slaughter teaches better
While I know the derivations of RTT and Navier–Stokes are important, I think it could be more helpful to go over a wider variety of example problems in class rather than spending the majority of some lectures on derivations.
stop saying you learned this previously in thermo when it isn't a pre–requisite assume most of the students don't know what's going on because in reality most of the students have no clue what they're doing and don't understand the material
N/A
no
Referring to topics as easy discourages students who might need help understanding them from seeking it.
I appreciated taking this class and there were definitely moments where I found the material to be super interesting (ie the reformulation of Bernoullis from NS).
TA lecture days were rough
No
None
Take more time preparing for the class, please DON'T use TOPHAT
No
Nope
Navier–Stokes is very confusing.
I appreciate your class and all your classes Ive taken with you in the past.
nah
None
Stop jumping classes
Please realize it is your responsibility to inform your students if you will be gone for an extended period of time.
no
Overall very good job, though make some things to break up the equations work/lecturing of class
N/A
Thank you for the past 3 semesters of joyful teaching
Pretty solid job Barry, please dont fuck us on the final
No.
Giving us a quiz packet and an extra homework at the end of the semester was a real dick move. It's not fair. We signed that stupid contract for the syllabus stating that those were our responsibilities and you would keep to that. And you changed our responsibilities, changing the contract without both parties agreeing. Why make us sign that stupid thing if you won't keep your end of it? It's just so you can cover your butt but screw us over if you feel like it.
Don't go on vacation in the middle of the semester and have the TAs teach most of the information for the second midterm. If you are though, make sure the TAs can actually teach the material.

Comments
One of the best professors I've had during my time here at Pitt.
Provide additional study resources in courseweb.
No
Figure out a way that makes it possible to give partial credit on a quiz.
Nah
N/A
I made a meme of you and the mods of your subreddit wouldn't let me post it. Please take away their degrees. Especially Josh.
Also if the department tell you no more paper homework tell them no.
N/A
A good professor with humorous soul. Keep doing that.
Please improve communication with class. If you are leaving for a week or two it would be helpful to tell the class and prepare the TAs accordingly. (I do not feel like they were fully prepared for your absence. Announce when quizzes are. If there is no homework due that week please make an announcement. If there are problems on homework that are very tricky, give small hints to the class so we don't spend hours on each problem.
TAs were not as effective at teaching material
No

ENGINEERING

Swanson School of Engineering Items

The instructor was accessible.



Please provide advice to future students: What could you have done to improve your learning in this course?

Comments
Listen in class and do homework in time.
Look at examples in class and do all homework
Do the hw
Take the time to understand how the homework problems apply to the material rather than simply trying to get an answer.
Do the work. Read some supplementary material
talk to TAs
Print the slides before class
Look at slides before class
Been less stupid I guess
Don't stress too much after the first exam grade, typically it's the hardest exam (including the final)
The bonus question is crucial
Take the other teacher
Take a different instructor, or prepare to work really hard for worse grade than you deserve.
listen carefully and write down the examples in class
READ THE BOOK. Learn the derivations. Look at videos to understand the conceptual flows. DO THE HOMEWORK! Do example problems from the book.
You won't listen but books have useful information occasionally, not Fox and MacDonald though that's just an expensive paperweight
Read the book on difficult subjects beforehand.
Do more book problems
Go to class take notes do the homework check the homework answers memorize navier stokes after the first day, get a free A
Study and make sure to review calc 3 and differential equations
Studying for this class does nothing
Go to office hours to ask questions about the homework. Doing the homework with the availability of the TA's greatly contributed to my understanding of the material.
Go to the TAs because the homework and material is hard to grasp, especially when class presentations seemed rushed
utilize the TAs

Comments
Don't lose interest when Navier Stokes start, i had to bust my butt to figure it out on my own cause I checked out too much towards the end.
Do homework on time. Try to keep focus in class, maybe by taking handwritten notes along with the professors lectures. And even look back at professors lectures when doing homework. Seek help outside of class. Rewrite important info to study for exams.
Looked over the textbook more and do more review problems from it.
Just use your basic engineering intuition.
read textbook before class
Do homework and read exams closely
Review homework
Good luck. I wouldn't take it again if I had too.
Start homework early
Don't do homework last minute
Keep following in class and understand the assumptions of equations and theories
Go to office hour
Study ahead of time
Nothing will help you.
Review the slides more and actually do the homework earlier than the night before it is due.
Take notes even though they are given to you and seek help in office hours.
If you have a choice, don't take Barry. If you don't, study your ass off
Do the homework, quizzes and in class examples to study. Go to office hours for help. Go to class.
Find a good therapist
Go to office hours
take someone else and if he is the only prof then wait for summer to take class.
Understand the homework and read the book sections before class to help understand the work better
Improve your self-learning skills.
Look at different kinds of problems. Not enough problems are available in class/thru homework to sufficiently prepare for exams
Review the notes, do the homework and don't use chegg, possibly even open the textbook. Go talk to the ta's as well.
Make sure that all the TAs know the solutions of the homework assignments so that they don't provide incorrect answers to students seeking their help in office hours
Understand why things cancel out and do not assume it's always the same. Also do not get behind early.
Get the supplemental textbook, start assignments early and go to office hours
READ THE RECOMMENDED BOOK
Learned a lot of material, however, with the structure of each test my grade did not show my understanding of the course. I went to TA hours every week and yes they do help so go.
Read the textbooks, know the information before you go to class
Reading textbooks.
Gone to the grad TAs first because the undergrad one literally knows nothing about fluids. She is more useless than a barefoot incognito shoe. She should not have been hired and was only hired because she was friends w/ Barry. She is incompetent, stupid, and not fit for this position.
Go to office hours if you're stuck on a concept.
Read text before class
There were plenty of office hours held throughout the week that I could have utilized better by managing my time out. Also, do not wait until Thursday to start the homework, because it will take longer than it looks, and it is difficult to receive help.
Make sure to be on top of top hat for the first 5 weeks. After that the grades stop happening. its do or die those first 5 weeks
Study 5+ hours a week
He had office hours once a week and I had class at that time so it was hard to meet with him.
For me, take another instructor because I learn by examples
Find more practice problems, and I did a lot more for this class than I usually do in other classes

Comments
Make sure to pay attention in class, he covers the material well just make sure to hear what he is actually saying.
Break the projector. He'll cancel class if it doesn't work.
Go to office hours for homework help and understanding
Do you homework more carefully!
Listen carefully to the professor
Review the notes carefully and pay attention to each homework.
Review example problems done in class after each class.
Review lectures each class, especially the basic concept. Review homework before exams. Stay cautious about the quizzes.
Read and understand the concepts. Read the textbook and understand the harder problems.

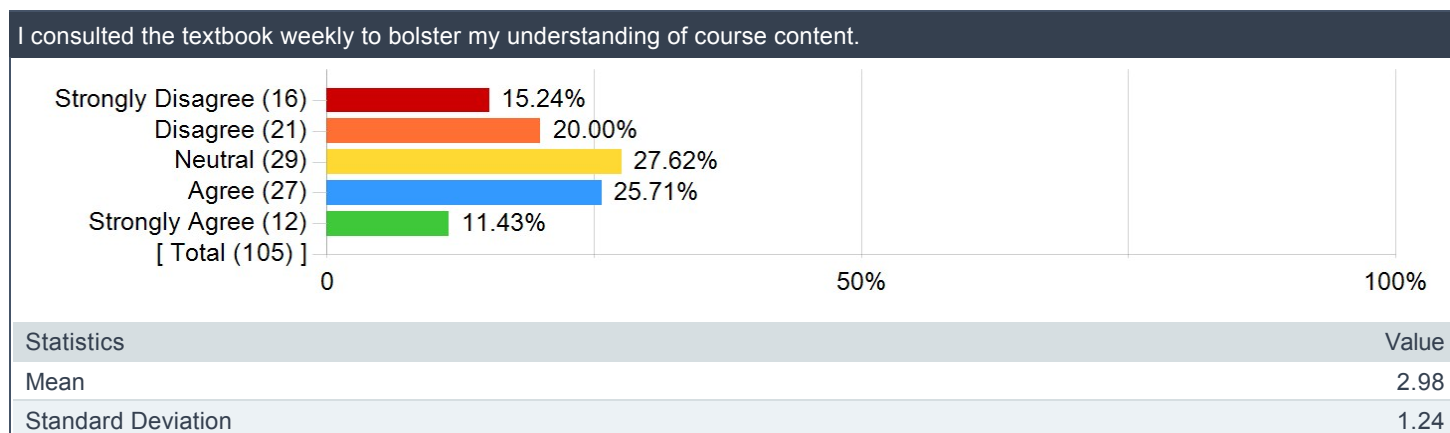
ENGINEERING UNDERGRAD

Please rate the degree to which this course has improved...

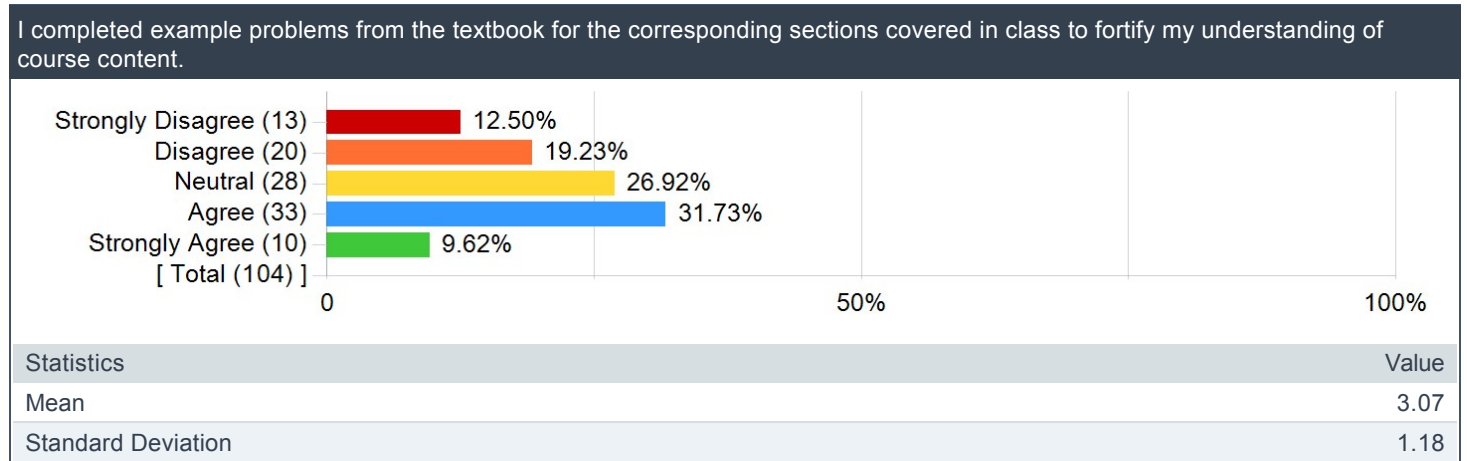
Question	Results		
	Response Count	Mean	Standard Deviation
Your ability to identify, formulate, and solve complex engineering problems by applying principles of engineering.	106	3.84	0.85
Your ability to identify, formulate, and solve complex engineering problems by applying principles of science.	106	3.74	0.87
Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics.	104	3.80	0.82
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare.	106	3.02	1.16
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of global, cultural, and social factors (i.e., sustainability principles).	105	2.80	1.18
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of environmental and economic factors (i.e., sustainability principles).	106	2.83	1.19
Your ability to effectively communicate verbally with a wide range of audiences.	106	2.77	1.25
Your ability to effectively communicate in writing to a wide range of audiences.	106	2.62	1.27
Your ability to recognize ethical and professional responsibilities in engineering situations.	105	2.85	1.22
Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles).	106	2.78	1.20
Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles).	106	2.83	1.25
Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership.	106	2.84	1.29
Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives.	106	2.77	1.33
Your ability to develop appropriate experiments.	106	2.71	1.21
Your ability to conduct appropriate experiments.	105	2.66	1.23
Your ability to analyze and interpret data and use engineering judgment to draw conclusions.	106	3.21	1.16
Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems.	106	3.38	1.17

Personalized Questions

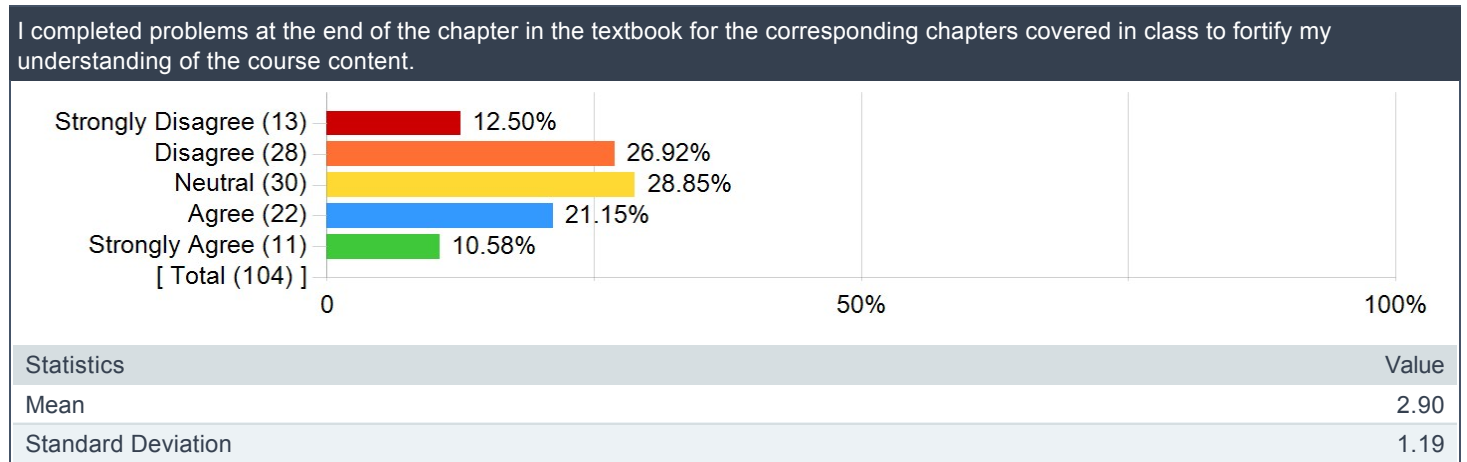
I consulted the textbook weekly to bolster my understanding of course content.



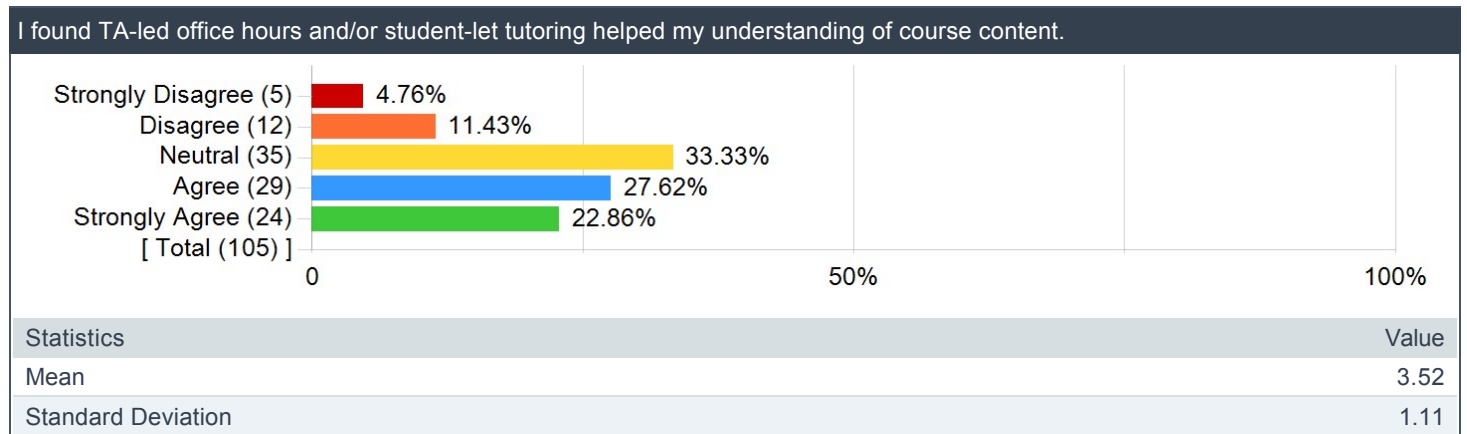
I completed example problems from the textbook for the corresponding sections covered in class to fortify my understanding of course content.



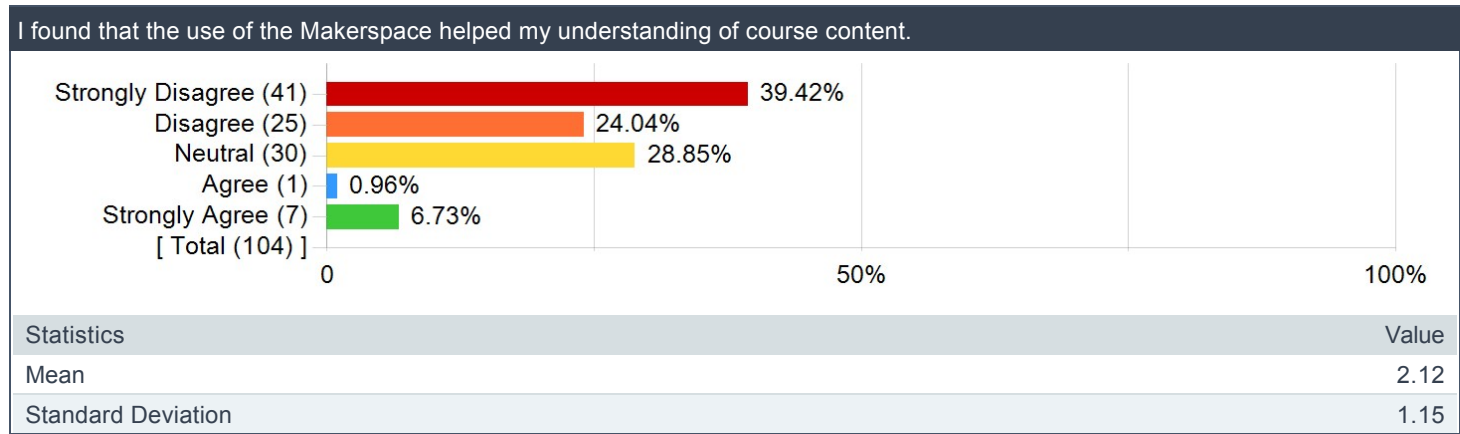
I completed problems at the end of the chapter in the textbook for the corresponding chapters covered in class to fortify my understanding of the course content.



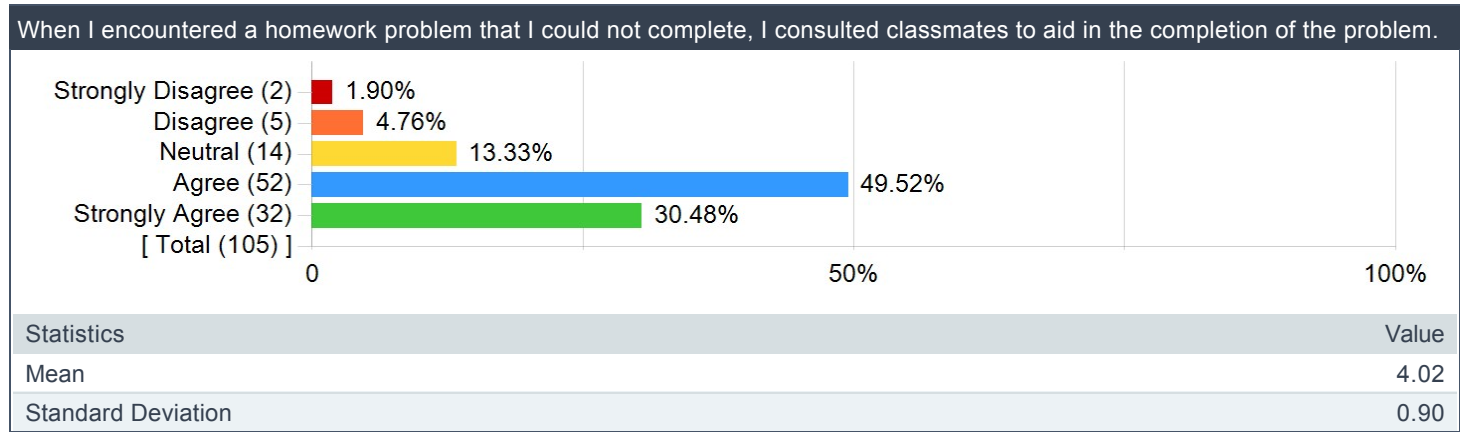
I found TA-led office hours and/or student-led tutoring helped my understanding of course content.



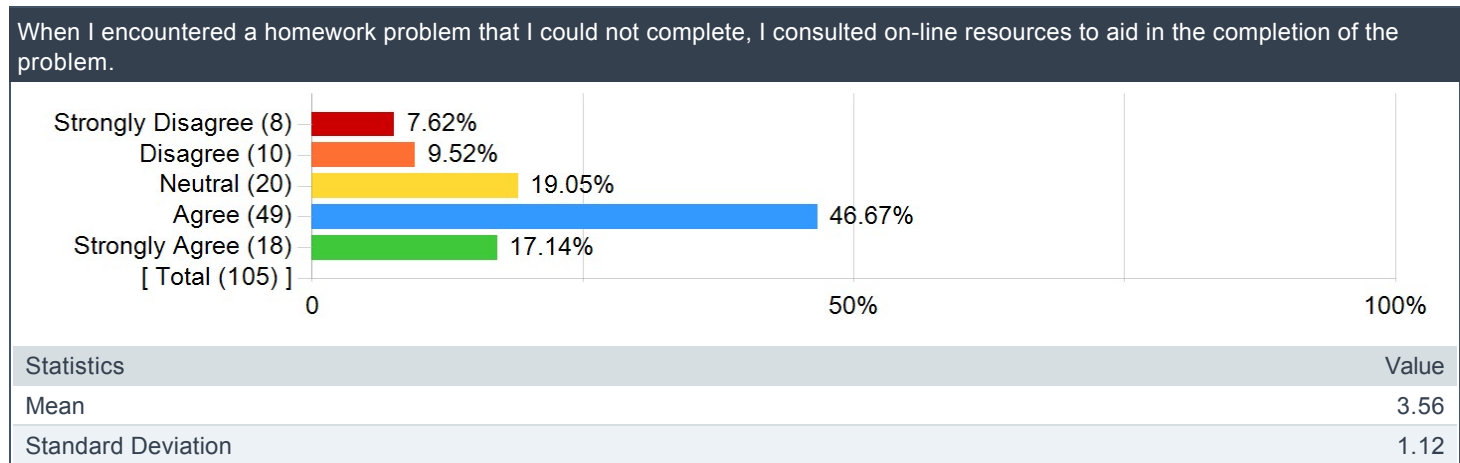
I found that the use of the Makerspace helped my understanding of course content.



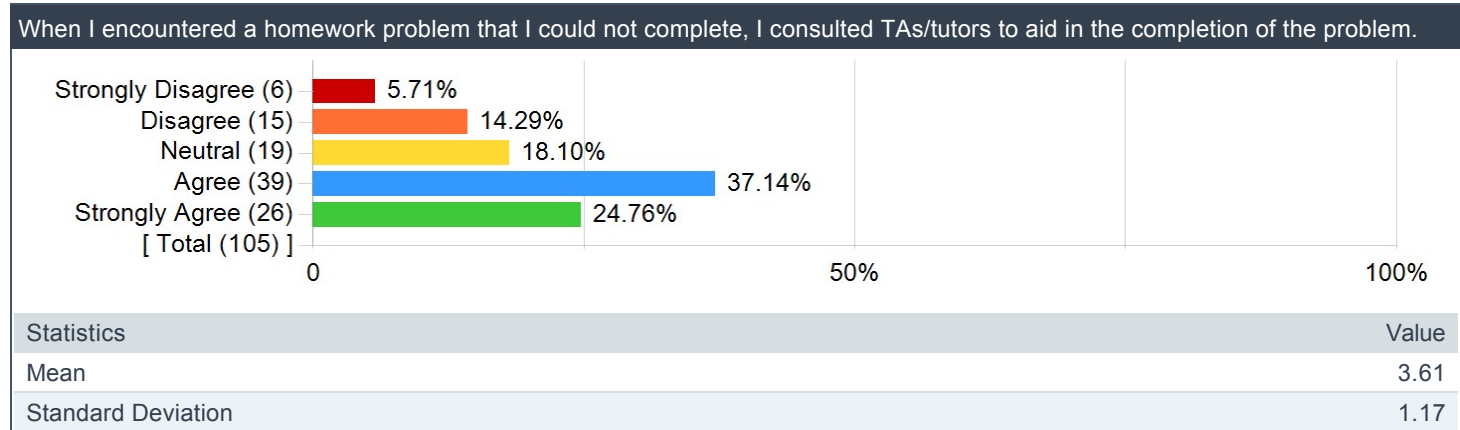
When I encountered a homework problem that I could not complete, I consulted classmates to aid in the completion of the problem.



When I encountered a homework problem that I could not complete, I consulted on-line resources to aid in the completion of the problem.



When I encountered a homework problem that I could not complete, I consulted TAs/tutors to aid in the completion of the problem.



On average, how many hours per week did you devote to this course, outside of class instruction?

Comments
About 3 hours.
4
Lots
10–15
3
~2
5 hours/week
0
5
10
7
Many
Too many
4
4 hours
8–12
6
3
averaging out all weeks like 7–8? exam weeks were a lot more, and hard homework weeks were more too.
10
5
5
5–6
5
4–6
6
5
4 hours
4
Too many
7
13
5–8
5 hours
At least 3hrs on homework, sometimes more. which also involved reviewing lectures. Close to 7 hours or more if there was an exam.
4
5 hours, but more like 8 for exam weeks.
3 hours
4
10
10
3–10 hours
5
6 on 1 homework every week
4

Comments
8
5
7
3–6
4
40
5 or 6
5
5
6
6
5
10
4
3 hours.
4–7
5h
2–4 hours
7 hours
6–7
10
10
6
3
About 5 hours
7
So many. Especially when we had an exam coming up.
2
6
I spent about 5–6 hours a week
5
5
6–7 hrs
3
10
4
15
5 hours
4
probably like 6 or somethin. I might be doing the math wrong on that tho. don't @ me, I wasn't prepared to answer this specific question.
about 5–6 hours
5
5
3hr
Around 4 hours
6

Comments
>8
5–10

On average, how many hours per week did you seek assistance through TA-led office hours and/or student-led tutoring?

Comments
About twenty minutes.
2
1
0
0
3 hours/week
0
0
2
1
Some
Not enough
0
0
1
2–3
0
0
0
1
1
2
0
1
2
1/2
0.5
0
0
7
3
2–3
not often
Zero but I wish I had gone more.
0
0
<1 hour
2
1
1

Comments
2
0
I went to check answers with tony for like 15–30 mins every week.
0
1
2
1
1–2
0
1
0
0
0 (I had class during those hours so I went to the professor's office hours).
2
0
0
2
1
0.5 hour.
0–1
1–2 hours
3 hours
0
1
2–4
1, if that
1
0 hours
2
Not many
0
0
about 1 hour
1
1
0.1
0
4
.5
1
3 hours
2
less than 2 for sure. Like I didn't actually register that there was more than one of them for like a month.
1–2 hours
0
1
1hr

Comments
1 Hour
2
<2
0