

# Spring 2021 - Matthew Barry MEMS 0031 - ELECTRICAL CIRCUITS - 1050 - Lecture

Project Title: 2214 - Teaching Survey Spring 2021

Courses Audience: **54** Responses Received: **43** Response Rate: **79.63**%

#### **Report Comments**

#### Included in this report:

- Responses to numerical questions
- Responses to instructor added questions (if applicable)
- Student comments

#### **Interpreting OMET Teaching Survey Reports**

A guide to interpreting OMET teaching survey results can be found here - https://teaching.pitt.edu/omet/survey-results/.

#### Develop a plan using your student opinion of teaching results.

- Meet with a Teaching Consultant who can help you interpret your results and develop a course of action if necessary. Email teaching@pitt.edu to set up a consultation.
- Plan on collecting student feedback during the semester the next time you teach. OMET offers a midterm course survey
  option and there are additional ways to collect student feedback throughout the term. For more information, go to
  https://teaching.pitt.edu/omet/midterm/
- In the future, discuss, teach, and model giving meaningful feedback with your students. Give them multiple opportunities to practice giving feedback. We have several resources that can help guide the discussion and options for gathering student feedback throughout the term.

Go to: https://teaching.pitt.edu/omet/ for more details, references, and resources.

Creation Date: Wednesday, May 19, 2021



## **University Questions**

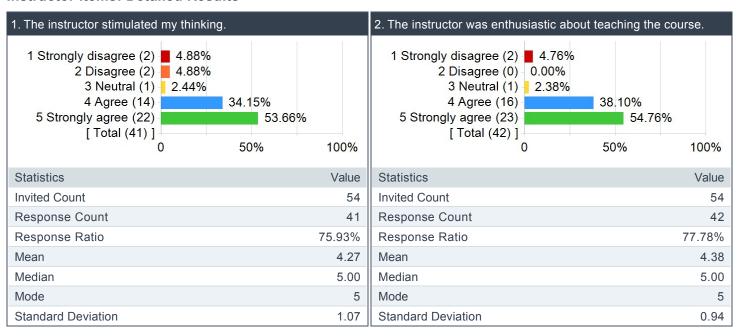
## Instructor Summary of Results - Scale: Strongly Disagree (1) to Strongly Agree (5)

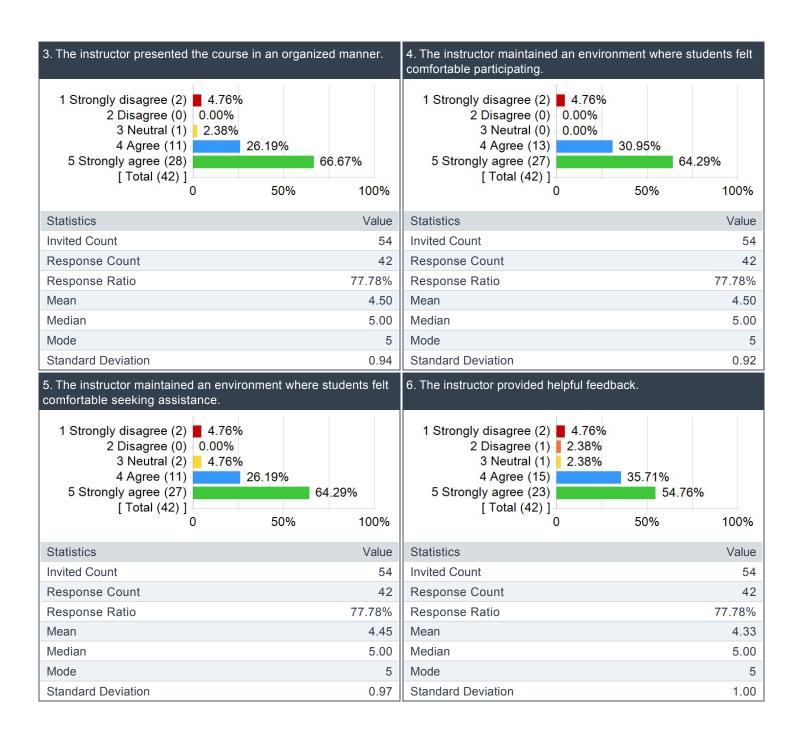
		Results		
	Response Count	Mean	Standard Deviation	
The instructor stimulated my thinking.	41	4.27	1.07	
The instructor was enthusiastic about teaching the course.	42	4.38	0.94	
The instructor presented the course in an organized manner.	42	4.50	0.94	
The instructor maintained an environment where students felt comfortable participating.	42	4.50	0.92	
The instructor maintained an environment where students felt comfortable seeking assistance.	42	4.45	0.97	
The instructor provided helpful feedback.	42	4.33	1.00	
Assignments contributed to my understanding of the subject.	42	4.19	1.09	
Overall	-	4.38	0.99	

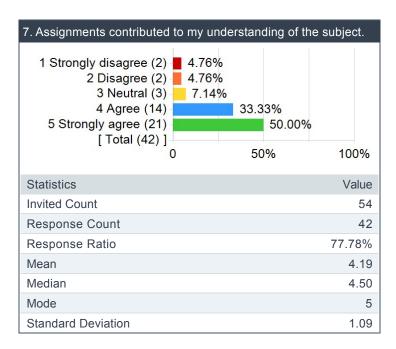
#### Instructor's overall teaching effectiveness

		Results		
	Response Count	Mean	Standard Deviation	
Express your judgment of the instructor's overall teaching effectiveness.	42	4.29	0.77	

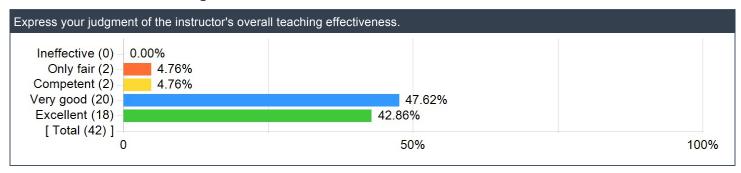
#### Instructor Items: Detailed Results







## Instructor's overall teaching effectiveness:



#### **Comments**

#### What did the instructor do to help you learn?

#### Comments

Offered lots of practice problems, also had a good structure for the class (don't blame you at all for having to change it because you were burning out).

Provided great examples and real world applications after introducing topics in an organized manner

Always allows for questions before class, and was a very approachable person allowing for more comfort in asking for help

Posted and went through many online examples that explain the solutions step by step

There was an abundance of teaching materials offered.

Examples of each lecture.

Dr. Barry was very willing to answer questions, and there were a lot of office hours to get help at. It is very easy to look back and review the recorded material.

Every aspect of the class was thought out into to make the online learning experience more reasonable

He went over many examples in class and encouraged student participation

Pre-recorded lectures helped me digest material at my own pace.

Was very well organized on Canvas, recorded lectures for each lesson, then went over questions live so that we could interact with him.

Very accommodating, and had very good examples in class.

Gave us plenty of practice problems and examples.

Dr. Barry conducts the most comprehensive and mentally stimulating courses that I've taken in my college career. His examples, tests, and projects enriched my learning experience and made me much more confident with the material.

Dr. Barry was extremely responsive to questions both in class and after. He is one of the few professors that provided an overabundant supply of materials to help practice and review concepts. The course was very structured and organize, which made it easy to know exactly where we were at with the material and what was coming next.

Very helpful in office hours, presents the course in a very straightforward and organized manner.

doing a lot of example during lectures, tried to set up group work

in-class problems helped

Explained topics in clear to understand terms

The video lectures were good and concise, Dr. Barry did a great job of answering any questions we had and relating them to real world applications, and all of the work from past years on github was helpful

Analyzing linear circuits

I liked the flipped class structure and the tophat activities.

Provided plenty of opportunities to ask questions during class, and provided alot of practice problems

a basis of electrical circuits and extra for future classes

A good foundation of electrical circuits to prepare me for dynamic systems.

Lots of example problems

office hours, answering various questions both inside and outside of class, mailing out circuits kits to students, flexible and understanding with students

Dr. Barry does an excellent job of providing you with a meaningful learning experience that does not feel like he is teaching from a predetermined checklist but rather from his own personal experience. This makes the course more stimulating as it applies concepts to real life in ways that many classes do not do on a regular basis.

Dr. Barry always gives excellent examples and guidance through his lectures and lecture videos. The exams are very fair and always offers his time to go over stuff if you are stuck during office hours.

He helped me learn the basics of electrical circuits.

The volume of examples (lecture vids, in class, top hat) was a great resource.

Made class interesting and a friendly environment.

He taught me how to analyze different a variety of different circuits and went in-depth in the unique characteristics of each.

Additional time to complete exams and quizzes is in my opinion beneficial as it reduces stress imposed by time constraints and even allows the student to learn while taking the exam leading to a more comprehensive understanding of the subject material.

#### Comments

Provided a lot of practice opportunities

I enjoyed using the circuits kits to get some hands on learning.

Nothing

#### What could the instructor do to improve?

#### Comments

I am not sure, Professor Barry is an excellent teacher.

Concentrate the online resources to less programs

The notes could be organized a bit better. For example, one long video on a subject rather than three short ones.

Grade the homework and guizzes guicker.

I cannot think of anything really. The course started getting a little hard to keep up with after a ways into the semester, though maybe that was just caused by some personal issues. Though, when the class ran into problems during the semester, the instructor adapted the course accordingly to be as accommodating as he could, which helped a lot.

#### Unsure

Possibly more connections to real life circuits ie photos of circuits and what they do

More guided examples are always appreciated.

Despite being online, Dr. Barry has done a pretty solid job of teaching the class, the only thing to improve would be what everyone needs to improve: get back to in person class.

Like I said in my thermo omet, the project felt a little unnecessary even though it was interesting.

More hands-on projects would help to cement the knowledge.

The only issue I found with the course is his worksheet problems, sometimes they were more difficult than I could complete on my own, and I didn't have time to attend office hours for certain weeks. As such, I couldn't properly complete them. I'm not sure of the feasibility of this, but since the worksheets were graded on completion, I wonder if it would be alright to release the worksheets and the solutions at the same time. Lazy students may just get the answers (which doesn't really help them much in the long run), but other students might be able to properly use the solution sets to aid there understanding.

In my opinion, it may be beneficial to cover some of the harder topics for more than just one meeting period. It would maybe help to have some of these topics introduce, give some examples, then return to them for an additional class period to go over a few more examples and just make sure all it understood before advancing into the following topics.

The way practice problems are done in class,

Get rid of flipped, this made the class so impersonal it felt like it was just a game. Watch video, get points, the goal never felt like it was to learn

nothing I can think of, Dr. Barry is an excellent professor

I don't really know its hard to tell with the online structure of class, but Dr. Barry has done the best with the online format of all my professors. I'm personally not a fan of the flipped class

I think this semester went well compared to the last semester I took the class. with the flipped classroom, we still spent a good bit of time reviewing lecture during class time. I think we could fit in more practice problems. maybe the tophat examples we were having trouble finding time to do. I think the more practice problems done together helps me learn the steps to solve these problems.

#### Nothing

The amount of material seems a little overwhelming to keep up with at times. The quizzes could be kept shorter.. The more recent quizzes have been much better than what they were before. And I expect exams to test our knowledge of the material, however the exam problems seem a little too complicated, adding a lot of additional components to a single circuit in ways that we haven't seen or practiced before can definitely add to the confusion and lead to incorrect assumptions and guess work. If you are going to add complex circuits I feel like it would be best to maybe see an example or two that is similar on how to go about solving it. And it might also help to give some incentive for completing weekly hw assignments. Instead of posting all of the previous hw assignments from previous years from the start, maybe pick out a few random problems from the git hub or the textbook before giving the students access to the git hub solutions and have us complete them for a grade. And after each weekly hw is due you could open up all of the previous github assignments for that specific week or material. I think this would give students more of an incentive to practice the problems.

lighten the load, remember some students have him for multiple classes so maybe cut some slack

Instead of 1 quiz that has a 45-minute online version and a written component that often takes about an hour per question, just do one version.

#### Comments

N/A

Fix technical issues

The project can be cumbersome during finals week and having a partner or group would be nice. That being said, I understand we are in a pandemic as of right now and doing so is hard to conduct for such a hands on project.

Maybe the lecture videos have more varied examples, like having some easier examples to intermediate examples in the videos and then doing one challenging problem in the lecture. (For online format)

Nothing that I can think of.

Make more medium difficulty examples, the video examples are usually easy and the in-class are usually more difficult and hard to follow on your own when reviewing.

Include more examples of how we can apply what he is teaching to the real world!

TEACH STUFF THAT HE PUTS ON THE EXAMS

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

#### Comments

It's very refreshing to take classes with a professor who acknowledges he's just as human as his students. Also really enjoy the many connections to the real world you draw in your lectures.

I am glad I selected his course

no

No

I really appreciate Dr. Barry sending circuits kits out to us. I am very excited to work with mine.

I appreciate the effort put in

I really liked this class and I am excited to see what I create for the project

Dr. Barry is doing a great job and I appreciate all the extra work he and his TAs have done to make enrich my experience in his classes.

Great class. Happy to have had the pleasure of taking this course. I look forward to having Dr. Barry in other classes.

Overall, the course was well taught and I learned a lot. The online environment did not make this semester easy for the student or the instructors

Honestly going to class didn't feel important in a flipped, zoom class. I would only watch videos and do the problems assigned. This worked until the break, when I got out of the rythm of watching lectures and I kinda just stopped participating until things were due

Thank you for being an honest and helpful instructor; I hope you have a great summer!

When I see you're teaching a section of a course I have to take I try to make sure yours fits into my schedule

Having more time to do assignments has definitely helped me. I knew I was able to do the exam problems if I had more time and I got to prove that this semester.

I have no idea what my final grade will be. However I definitely enjoyed this class and your teaching style.

thanks for caring about your students mental health

Dr Barry has completely changed my view and confidence in obtaining my degree and has done the best job by far out of any professor during the pandemic. it is clear he truly cares about teaching his students and their own wellbeing as well as enabling students to learn how they learn best whether that is visual, hands on, or auditory

I thoroughly enjoy your classes.

I feel out of any professor that I have had at Pitt so far, I have learned so much more and understand the material better by having Dr. Barry as a professor. He takes the time to put effort in his lectures and always goes above and beyond to give real world examples to help us apply what we are learning.

N/A

I would like to say I really appreciate what Dr. Barry has done for me this semester and am exceptionally thankful for how much he cares about his students.

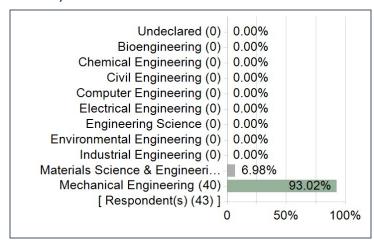
Thank you!

The "spring break" we took in class was extremely beneficial.

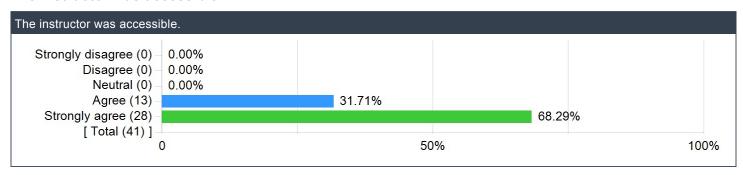
why am I as a student, seeing something for the first time on an exam. For example, there was a circuit layed out in a way never covered in the class, so how are students supposed to know how to solve it if we've never seen it before?

## **Swanson School of Engineering Questions**

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).



#### The instructor was accessible.



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

#### Comments

Make sure you do all the tophat problems, and make time to stay after class so you can ask Dr. Barry for help. It's bonus office hours after every class, and its great for making sure you learn how to do the problems properly.

Prepare before class and do the optional assignments

Try to stay ahead on lecture videos or you may fall into a trap of being behind.

Completing the before class worksheets helps

Keep up with the course.

Attend the lectures and watch the videos for the materials.

Kept up a bit more with the videos. It helps to start out well and keep that momentum. It's hard to get back on if you fall off, so it would be best to avoid that.

Completing assigned work ahead of time and using ALL available resources to learn.

Definitely read more of the book and do more book problems

Be aware of deadlines for assignments that are briefly mentioned during class.

Do practice problems, interact in class, watch every lecture, go to office hours if you have questions.

Read the textbook and master one of the circuit analysis strategies (nva or mca), it makes life easier later.

Do lots of practice problems and go to office hours before you get too far behind.

Consult the text as much as you can, I had a harder time understanding the text than in other similar classes, but it was still helpful.

STAY ON TOP OF THE MATERIAL. The class moves quickly, but if you stay current with the pre—recorded videos, top hat questions, and practice problems, the class will be considered easy.

Make sure to watch the youtube lectures before every class.

do not skip classes, try to do every assignment early on, go to office hours, reach out to other students to get help, use the book.

I could have gone to class and tried more practice problems, but I the assigned work was overwhelming and by the time the "break" was over other classes took priority

If there is work that isn't graded, do it anyway; it's great practice that will definitely help in the long run.

don't be in the middle of a global pandemic

Understand the conventions and signs early on

Take advantage of the office hours

stay on top of lectures and avoid just sitting in on classes

Stay ahead of the lectures as it is a flipped course. Watch the lectures, read the textbook, and bring your questions to class. Every time I did this I had much better success learning the more complicated material.

Start assignments early, they quickly pile up.

office hours and asking questions

Engage further with the material, watch more prerecorded lectures

If you pay attention in class and actively participate or at least follow what he says, you will do completely fine in this course. Do not let the work load pile up as most topics pile on eachother.

This was during the pandemic, and I survived. So if I could survive this, you will be ok.

work through problems yourself. it's easy to watch someone else do it or see the worked solution and think you understand. actually doing it reveals where you need to improve. use the Github repositories

A lot of information for this course is outside of lectures. The lectures are still important to go to and participate in.

Stay on time with the videos and make sure to do the top hats associated with them.

Attend more office hours, even if you don't have a particular question in mind.

practice is very important for getting a good grade in his class. he gives you a lot of resources. take advantage of them and you will succeed.

Take a different teacher

## **Engineering Undergrad Courses**

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

	Results		
Question	Response Count	Mean	Standard Deviation
Your ability to identify, formulate, and solve complex engineering problems by applying principles of engineering.	42	4.31	0.90
Your ability to identify, formulate, and solve complex engineering problems by applying principles of science.	42	4.24	0.96
Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics.	42	4.19	0.97
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare.	41	3.66	1.11
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).	42	3.55	1.13
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of environmental and economic factors (i.e., sustainability principles).	42	3.48	1.19
Your ability to effectively communicate verbally with a wide range of audiences.	42	3.48	1.19
Your ability to effectively communicate in writing to a wide range of audiences.	42	3.52	1.23
Your ability to recognize ethical and professional responsibilities in engineering situations.	42	3.64	1.27
Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles).	41	3.59	1.18
Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles).	42	3.55	1.17
Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership.	42	3.40	1.27
Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives.	42	3.38	1.27
Your ability to develop appropriate experiments.	42	3.69	1.16
Your ability to conduct appropriate experiments.	41	3.73	1.16
Your ability to analyze and interpret data and use engineering judgment to draw conclusions.	42	3.93	1.09
Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems.	42	4.07	1.02

## **Remote Instruction and Learning Questions**

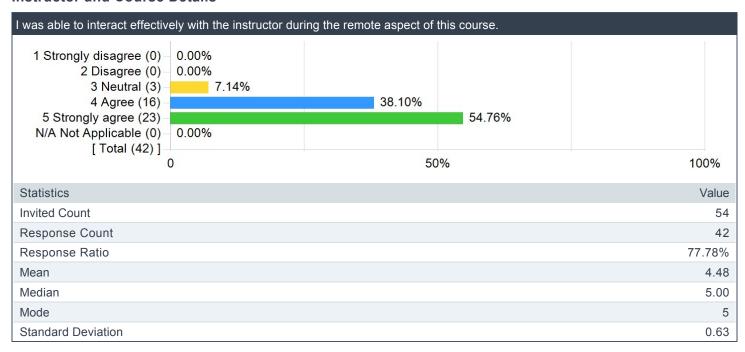
### Instructor Interaction

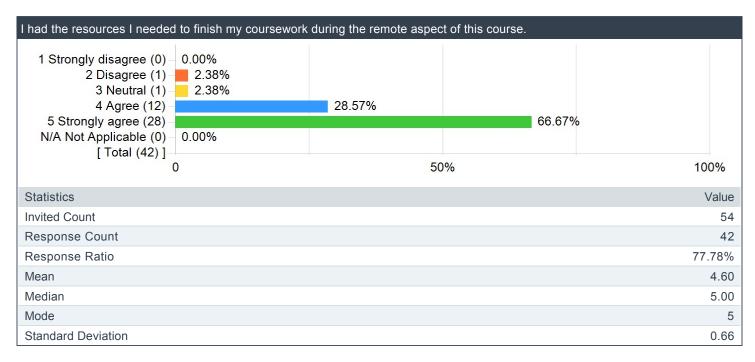
		Results		
	Response Count	Mean	Standard Deviation	
I was able to interact effectively with the instructor during the remote aspect of this course.	42	4.48	0.63	

### **Course Resources**

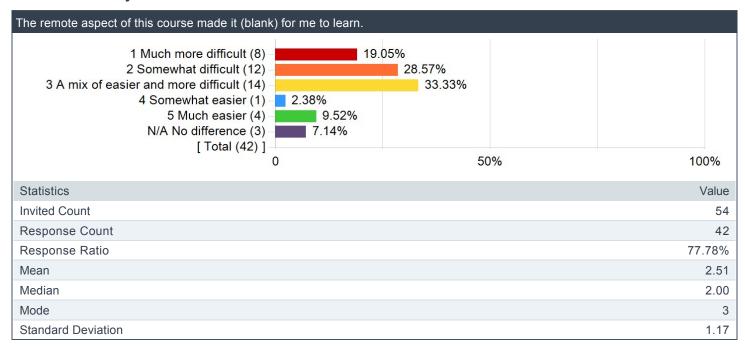
		Results		
Question	Response Count	Mean	Standard Deviation	
I had the resources I needed to finish my coursework during the remote aspect of this course.	42	4.60	0.66	

#### **Instructor and Course Details**





## **Level of Difficulty**



## What made the remote environment easy for this class?

•
Students
The recorded lectures and being able to rewatch lectures
Dr. Barry was very accommodating and understood our limits.
Take home exams relieved the stress of a test with a time constraint.
being able to rewatch lectures if needed. having more time on assignments definitely helped.
Could re–watch lecture at any time
prerecorded lectures and recorded live lectures
lots of accessible resources from github and canvas
I like the testing format.
ability to rewatch lectures, many office hours, easy to ask questions
Less commitment to office hours, simply log on
Having lecture videos so I can look back at them.
The material was recorded, so when you did not want to be in class at 6:00 on a Friday night you didn't have to.

#### What made the remote environment more difficult for this class?

dents
remote environment itself and not having any hands on learning
rything else, I'm just not meant for online learning.
more difficult to be attentive during class in a remote environment.
der to get answers to my questions at time
of out of class work needed to be fully understood to full understand the in class lecture
st find circuits confusing and i am a more hands on learning so the online environment was harder however, Dr Barry went rugh the trouble to send us our own circuits kits to help us get a hands on feel!
ier to slack off and miss classes when they have no location
just this class, but all classes assume you have a lot of extra time, so they will all fill it with a lot of things.
re distractions during class.

## What do you think the University should know about your experience as a student in the current remote learning situation?

#### Students

The food was pretty good

The grades given should be lenient due to the learning situation being online (a poorer situation).

The remote learning style makes the schedule more flexible and students can get used to the flexibility quite easily and may experience some difficulties when shifting back to normal.

When things happen at home, it's hard to ask for help from instructors. I feel like it's not appropriate to ask for accommodations because of my situation when so many people may be going through the same thing and be handling it much better than I am. Students should be given a week break mid–semester. It is hard enough as it is when it's expedited, and then we don't get a real break at all. It would help students who are going through a hard time, and need that week to catch up.

I struggled for 70% of the semester to get used to the remote classes and have spent the rest of it struggling to catch up.

Although the hands-on aspect was removed for the most part, the learning situation was still effective

Regular communication goes a long way.

Remote learning is just absolutely awful and we as a school were not at all prepared for it. Some professors have done a pretty good job, but the thing is across the board I'm just not able to learn as well. Also "mental health" days are incredibly stupid and do not even contribute slightly to anybody's mental health.

Zoom is in no way comparable in quality to an in-person semester. I should not have wasted money on this semester.

Overall, the remote learning situation is more mentally exhausting than in-person learning.

The remote learning requires a good amount of self–discipline. Dr. Barry made class enjoyable to where I did not dread returning to class. He also provide a vast amount of materials to be reviewed, practiced and discussed. He was more than happy to explain topics further and was more than willing to help.

Remote learning is nowhere near as effective as the traditional classroom, I hope we can return to in person classes as soon as is safely possible.

It could be a lot harder especially for students living off-campus as they do not have easy contact with other students to get help.

Don't do flipped classes remote! on top of already having assignments and class online, you want me to watch extra lectures online too?

burning out occurs much faster from constantly staring at a computer screen for hours at a time every day

This is hard on mental health, not having a separation between home and school was difficult. Also while this didn't happen with Dr. Barry, other professors seemed to think that because we were working from home we could somehow spend even more time doing course work

care more about your students mental health

it is extremely difficult and detrimental to students mental health

shortening attention span, how fix?

Remote learning is not much different from in person learning. The only thing I miss in person is the actual human interaction we get, but as for learning purposes it is not much different.

This has been very exhausting mentally. I had less time for doing other things because my time was filled with a lot of stuff from all classes at once. Weekends were just like any other week day by doing work all day, and the only difference was that there were no classes.

I think it's time for in person classes again.

It is exponentially harder to stay on task and be motivated with remote learning. It is also just harder to learn, the satisfactory credit rule should have stayed in place.

Only line learning fucked me in this class. absolute BS

#### **Diversity and Inclusion**

Question	Response Count	Mean	Standard Deviation
The instructor creates an inclusive learning environment for all students.	41	4.73	0.50

#### **Details**

