



Spring 2022 - Matthew Barry MEMS 0031 - ELECTRICAL CIRCUITS - 1050 - Lecture

Project Title: **2224 - Teaching Survey Spring 2022**

Courses Audience: **56**

Responses Received: **27**

Response Rate: **48.21%**

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: **Tuesday, May 10, 2022**

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. | 27 | 4.48 | 0.58 |
| The instructor was enthusiastic about teaching the course. | 27 | 4.15 | 0.66 |
| The instructor presented the course in an organized manner. | 27 | 4.26 | 0.66 |
| The instructor maintained an environment where students felt comfortable participating. | 27 | 4.30 | 0.67 |
| The instructor maintained an environment where students felt comfortable seeking assistance. | 27 | 4.33 | 0.73 |
| The instructor provided helpful feedback. | 26 | 4.31 | 0.62 |
| Assignments contributed to my understanding of the subject. | 26 | 4.54 | 0.65 |
| Overall | - | 4.34 | 0.65 |

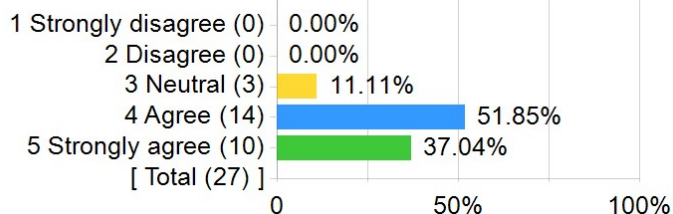
Instructor's overall teaching effectiveness

| Question | Results | | |
|---|----------------|------|--------------------|
| | Response Count | Mean | Standard Deviation |
| Express your judgment of the instructor's overall teaching effectiveness. | 27 | 4.30 | 0.61 |

Instructor Items: Detailed Results

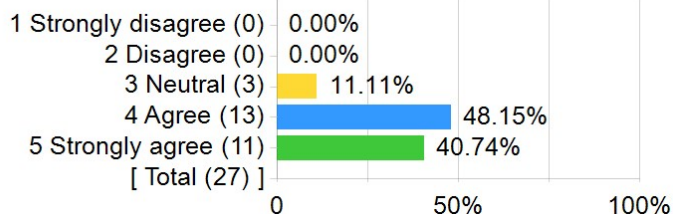
| 1. The instructor stimulated my thinking. | | 2. The instructor was enthusiastic about teaching the course. | |
|--|--------|---|--------|
| <div><div><div>1 Strongly disagree (0)</div><div>2 Disagree (0)</div><div>3 Neutral (1)</div><div>4 Agree (12)</div><div>5 Strongly agree (14)</div><div>[Total (27)]</div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div>0</div><div>50%</div><div>100%</div></div></div> | | <div><div><div>1 Strongly disagree (0)</div><div>2 Disagree (0)</div><div>3 Neutral (4)</div><div>4 Agree (15)</div><div>5 Strongly agree (8)</div><div>[Total (27)]</div></div><div><div></div><div></div><div></div><div></div><div></div><div></div></div><div><div>0</div><div>50%</div><div>100%</div></div></div> | |
| Statistics | Value | Statistics | Value |
| Invited Count | 56 | Invited Count | 56 |
| Response Count | 27 | Response Count | 27 |
| Response Ratio | 48.21% | Response Ratio | 48.21% |
| Mean | 4.48 | Mean | 4.15 |
| Median | 5.00 | Median | 4.00 |
| Mode | 5 | Mode | 4 |
| Standard Deviation | 0.58 | Standard Deviation | 0.66 |

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



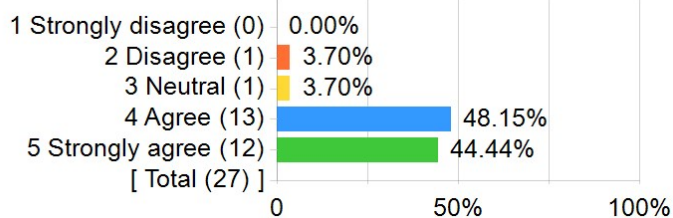
| Statistics | Value |
|--------------------|--------|
| Invited Count | 56 |
| Response Count | 27 |
| Response Ratio | 48.21% |
| Mean | 4.26 |
| Median | 4.00 |
| Mode | 4 |
| Standard Deviation | 0.66 |

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



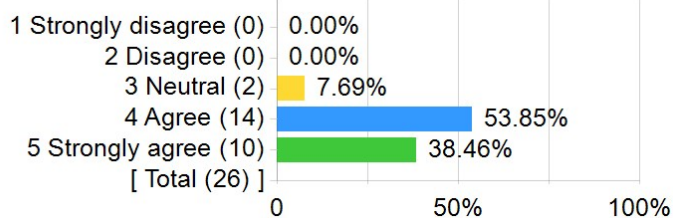
| Statistics | Value |
|--------------------|--------|
| Invited Count | 56 |
| Response Count | 27 |
| Response Ratio | 48.21% |
| Mean | 4.30 |
| Median | 4.00 |
| Mode | 4 |
| Standard Deviation | 0.67 |

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



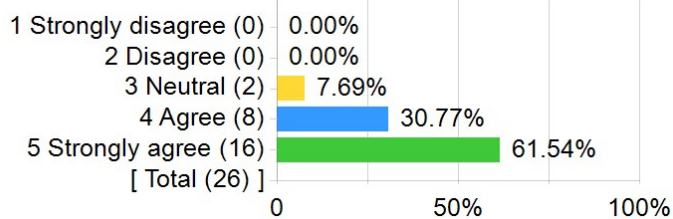
| Statistics | Value |
|--------------------|--------|
| Invited Count | 56 |
| Response Count | 27 |
| Response Ratio | 48.21% |
| Mean | 4.33 |
| Median | 4.00 |
| Mode | 4 |
| Standard Deviation | 0.73 |

6. The instructor provided helpful feedback.



| Statistics | Value |
|--------------------|--------|
| Invited Count | 56 |
| Response Count | 26 |
| Response Ratio | 46.43% |
| Mean | 4.31 |
| Median | 4.00 |
| Mode | 4 |
| Standard Deviation | 0.62 |

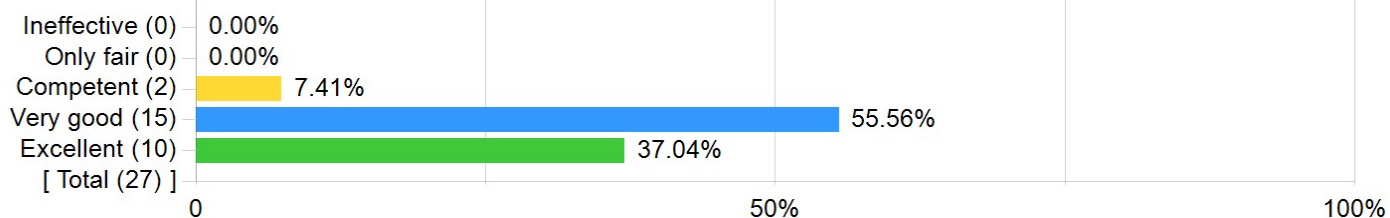
7. Assignments contributed to my understanding of the subject.



| Statistics | Value |
|--------------------|--------|
| Invited Count | 56 |
| Response Count | 26 |
| Response Ratio | 46.43% |
| Mean | 4.54 |
| Median | 5.00 |
| Mode | 5 |
| Standard Deviation | 0.65 |

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 |
|---|
| Office hours, hard hws |
| Was very open and friendly when asked for assistance. Subject matter was hard and he made it even harder (for the hell of it?) But it helped connect a lot of concepts. |
| Homework, and in class problems. |
| The challenging homeworks and ample opportunities to do practice problems were both very useful for becoming competent at analyzing circuits. |
| Lots of examples, and would also explain things conceptually if we had questions |
| He helped me learn more about circuits, more than what we had gone over in physics 2. He helped me to better understand the concepts with the circuits and what was happening with them. |
| The videos provided to be watched beforehand were short yet full of information, perfect for me because I have a hard time focusing for very long. The homework/quiz every week combo is such a pain in the ass but it is excellent. I hated that we had it every week, but it contributed so much to my understanding of the topic. Seeing each topic multiple times spread across two weeks really helps learn it better. |
| Walk through lecture videos in class |
| Love the flipped format |
| Professor Barry provides the content in a flipped classroom setting which doesn't work for everyone, however, it was very helpful for me. He allowed us to try to understand the content at home and then we would walk through different examples and applications in class. He was also very receptive to answering questions that we had about the topics. |
| Dr. Barry was a very approachable professor that made it easy to go to him and ask questions whether it be before or after class or during office hours. His flipped format also worked very well for me in lecture, and it gave me good lecture videos to look back at when needed. |
| He knew most of the course material very well and was able to explain most of it in a very understandable way. |
| Flipped format was great. The lecture videos were typically brief but VERY packed full of information. Being able to work on in class assignments with everyone in the class was very beneficial. |
| kcl kvl ohms law op amps inductors capacitors |
| Pushed us with interesting yet challenging assignments but gave decent support. |
| Dr. Barry does a good job of doing in class examples that can most of the time be followed really easily. He also is very understanding with circumstances of being a college student as seen by his willingness to give occasional extensions, the way he drops a few hw & quiz grades, and general (though sometimes a little thin) patience. I appreciate that he tries to teach us practical information and does his best to be real with us. The feedback that comes with grades is also typically very helpful and a lot more thorough than what is returned in other classes. |
| Walked through examples in class that reinforced our understandings of the lectures. |
| Professor explore a new way to teach and help me can learn the content again and again. |
| The organized Canvas page helped when going back to revisit information |
| Like with thermo, homework assignments and exams were challenging but they were also great opportunities to develop a complex understanding of the material. When I think about my grasp on things compared to friends in the other section of Circuits, I think that Dr. Barry's assignments and support were key to my confidence with the material being way higher than the other section's. |
| Flipped class format helped to provide more examples in class. |

What could the instructor do to improve?

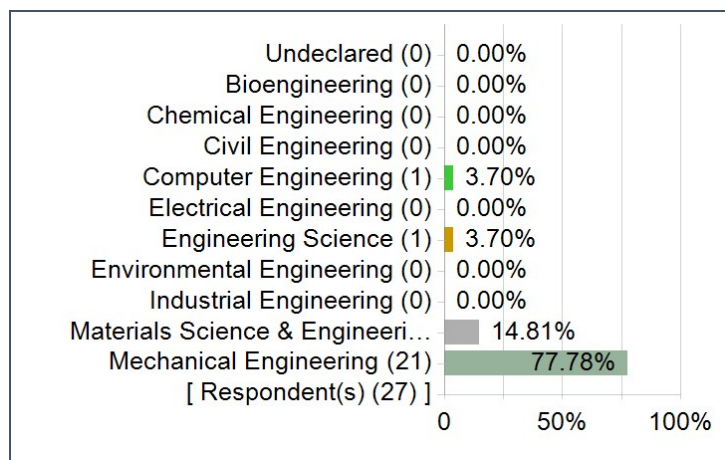
| Comments |
|---|
| better videos |
| Be a little more explicit on some of the extra concepts covered in hw. Sometimes there would be problems on hw with concepts never covered in class or brought up again. |
| Have the quizzes and homework due on different days. |
| Coursework petered off towards the end of the semester, which raises the concern that we may not have learned everything we will need to know for future classes or to practically design our own circuits. |
| Since we have flipped lectures, please try to spend less time on stuff from the lecture videos during class and spend more time on difficult examples. |
| I really liked when he had students come up to do the examples. I would have liked to see more of that. |
| Midterm can't be only multiple-choice questions. |
| I think having a matlab component would be cool... even though all the other students would probably hate Barry for it. The book has a few sections on using matlab to solve for RLC circuits and other things, at least I think it does, which would be cool to incorporate. Matlab is always a great addition because most of the time it helps me think about it in another way, and helps us learn more about matlab (which is helpful for all classes). |
| I am not sure. |
| A couple of the lecture videos that we were supposed to watch before classes were a bit undetailed in my opinion |
| Barry, you're a great professor but you do have a tendency to be stubborn and go down random bunny holes of hypotheticals that aren't that important content-wise. I understand that you're passionate about circuits, but it sometimes shuts down class productivity. |
| Be less judgmental, it makes students not want to go to office hours. |
| Dr. Barry could have been more prepared towards the end of the semester. Once there were no more lecture videos from previous years I feel like the class grinded to a stop leaving at least a week of classes kind of void of learning |
| its a hard class, but I think its good the way it is. |
| Sometimes the instructions for the course are very confusing and can make it difficult to understand what exactly is expected. Rewording some things to make it more obvious what is expected would go a long way in reducing miscommunications and stress. |
| he could redo the videos since they are like 10 years old XD |
| Have more office hour times as I basically couldn't come to his much at all, especially later in the semester. |
| Don't switch the format of the class 3 weeks before the semester ends. Or ever. Like just pick a format and stick to it because it is anxiety inducing to change routine like that, especially so close to the end. Having grades back sooner could also be helpful as it gives notices to where students are at (though I guess this is more a TA thing). Also, while conceptual questions are fantastic, I have found written exams to be more beneficial to check my learning as well as better for partial credit. I can take a multiple choice exam 3 times and get a decent score because a number of questions are repeated and I have a chance to see what I did wrong with them. However, critically thinking and having to solve work that I can start and stop as many times as I'd like is a lot more fulfilling. |
| Less work. |
| Professor can better arrange the lecture time so that we can learn more from the lecture. |
| While going through the math is important, I think it would be much better to go over concepts and talk through difficult points in class and then have posted problems with accompanied video solutions explaining the math. This is because the math isn't necessarily hard but takes a long time so it never felt like class was an efficient use of time. |
| Similar to thermo, Dr. Barry has a strange way of showing that he cares about people understanding the material. He seems to want people to hate their time taking his class, which could be viewed as a rude awakening to how industry works, but it could also be seen as a vicious environment that could either create or inflame mental health issues in some cases. I think that Dr. Barry can put more thought into how he might inspire students and push them without making them feel like shit. |
| Add the classes toward the end of the class to online videos. |

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

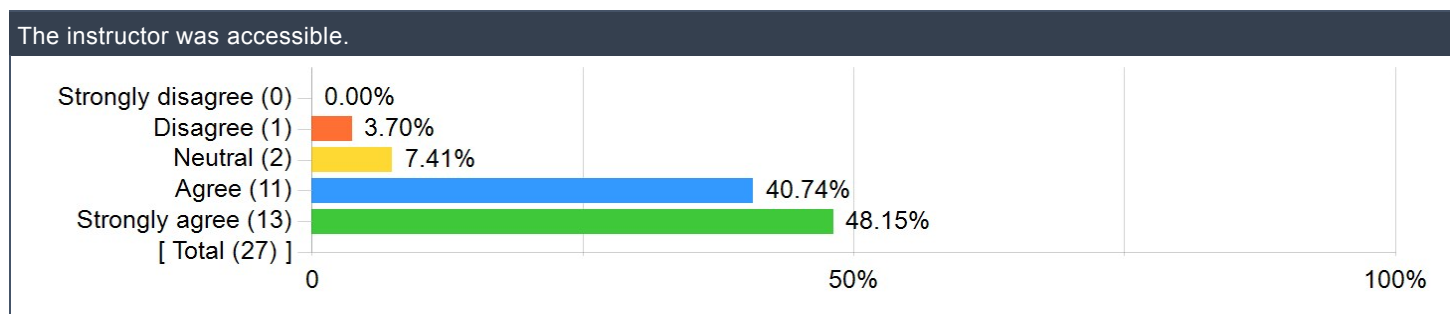
| Comments |
|---|
| I was very eager to make some physical circuits this semester and we never did it which was profoundly disappointing. |
| N/A |
| Everything until capacitors and inductors was baby mode and I feel like we probably could have spent less time on MCA and NVA and stuff like that and spent more time on the RC, RL, and RLC circuits which were way harder. |
| You have to market you fluids class more. I took it with Senocak (great guy) but horrid decision (a blunder even) to take it with him. |
| No |
| All in all, you're a great professor and I've enjoyed having you these past two semesters! Thanks for everything! |
| N/A |
| N/A |
| Dr. Barry has essentially become a meme (in a good way). I think this was his goal? If so he succeeded. |
| it was a very fun and engaging class |
| Thanks for the experience Dr. Barry, its been fun, its been real, hasn't been real fun. Irregardless though your class has taught me a lot, thank you. |
| I appreciate your sentiments but you could tone down the condescendingness just a tad. Sometimes its amusing, but it can also be very off putting and make it hard to interact/ask questions/ask for help. Also op-amps are cool, but most ECE students don't even learn them until their second circuits class (I asked multiple friends at multiple schools) and though they are mentioned in future curriculum, according to upperclassmen who never learned them prior, you are taught all that you need to know, and they are essentially only briefly touched/breezed over. I think the amount of time spent on op-amps could've been spent differently but do as you will. |
| no |
| Professor did a great job! |
| You totally should have put Sami at the front of the room more, she was awesome |

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 |
|--|
| watch videos |
| Start going to office hours early. Only "kind of getting" early concepts (like I did) destroys your ability to catch up later in the class. |
| Use the top hat and do more practice problems. |
| Do as many of the practice problems as you can manage. |
| definetly could have worked harder to understand some of the concepts that are gone over later in the class. The class starts out pretty simple but it does get harder and so its worth it to take the time to really understand what is happening in the class so you dont fall behind. |
| Start the homework ahead of time so you can see Barry in office hours throughout the week. Some students are nervous when they go see him for the first time (not sure why) but Barry is so very helpful. |
| Review lecture videos |
| Read the textbook. |
| Do the homework and watch the videos |
| Stay on top of the dual instruction material + form a study group. It's a difficult course. |
| Make sure you actually watch the lecture videos before class and come to class ready to participate. If you go to class without knowing the lecture, you won't be engaged. Being engaged is the best way to succeed in any of Dr. Barry's classes |
| Watch the lecture videos AND show up to class ready to learn!! |
| Reach out and go to office hours; it is largely helpful and contributes much more to understanding. Participating in class is also very beneficial. |
| the homeworks are the best way to ask for help and understand the topics |
| Take full advantage of office hours and indulge in the course and the people. |
| Go to office hours and/or communicate with Dr.Barry more. I did fine on my own but probably could have done really well if I worked harder by building relationships and working with the prof and TAs to check my understanding on a deeper level. |
| Make sure you complete all the assignments. |
| Don't only learn in lecture. You should also learn after class. |
| Stay ahead on your work. It's much easier to do good on assignments when you're not also trying to catch up on last weeks assignments at the same time. |
| Put as much effort into the homeworks as possible. They're designed to take time and to take a lot of critical thinking but if you put effort and work with friends, you'll learn a lot more than people who don't. |
| I should have kept up with the tophat questions. |

Engineering Undergrad Courses

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

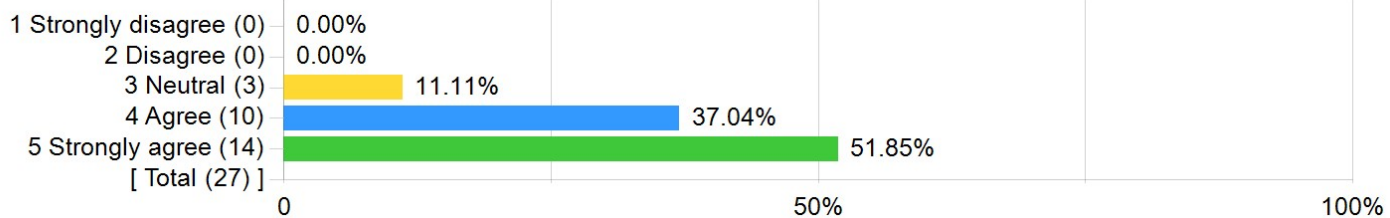
| Question | Results | | |
|---|----------------|------|--------------------|
| | Response Count | Mean | Standard Deviation |
| Your ability to identify, formulate, and solve complex engineering problems by applying principles of engineering. | 27 | 4.15 | 0.82 |
| Your ability to identify, formulate, and solve complex engineering problems by applying principles of science. | 26 | 4.00 | 0.89 |
| Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics. | 27 | 4.00 | 1.04 |
| Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare. | 27 | 3.11 | 1.31 |
| 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). | 27 | 2.89 | 1.48 |
| Your ability to apply engineering design to produce solutions that meet specified needs with consideration of environmental and economic factors (i.e., sustainability principles). | 27 | 2.93 | 1.44 |
| Your ability to effectively communicate verbally with a wide range of audiences. | 27 | 3.04 | 1.45 |
| Your ability to effectively communicate in writing to a wide range of audiences. | 27 | 3.15 | 1.38 |
| Your ability to recognize ethical and professional responsibilities in engineering situations. | 27 | 3.22 | 1.28 |
| Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles). | 27 | 2.93 | 1.49 |
| Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles). | 27 | 2.89 | 1.45 |
| Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership. | 27 | 2.93 | 1.47 |
| Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives. | 27 | 2.96 | 1.51 |
| Your ability to develop appropriate experiments. | 27 | 3.44 | 1.15 |
| Your ability to conduct appropriate experiments. | 27 | 3.44 | 1.15 |
| Your ability to analyze and interpret data and use engineering judgment to draw conclusions. | 27 | 3.93 | 0.87 |
| Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems. | 27 | 4.11 | 0.75 |

Diversity and Inclusion

| Question | Response Count | Mean | Standard Deviation |
|--|----------------|------|--------------------|
| The instructor creates an inclusive learning environment for all students. | 27 | 4.41 | 0.69 |

Details

The instructor creates an inclusive learning environment for all students.



| Statistics | Value |
|--------------------|--------|
| Invited Count | 56 |
| Response Count | 27 |
| Response Ratio | 48.21% |
| Mean | 4.41 |
| Median | 5.00 |
| Mode | 5 |
| Standard Deviation | 0.69 |