



Summer 2021 - Matthew Barry MEMS 0031 - ELECTRICAL CIRCUITS - 1070 - Lecture

Project Title: **2217 - Teaching Survey Summer 2021**

Courses Audience: **29**

Responses Received: **28**

Response Rate: **96.55%**

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: **Monday, August 16, 2021**

University Questions

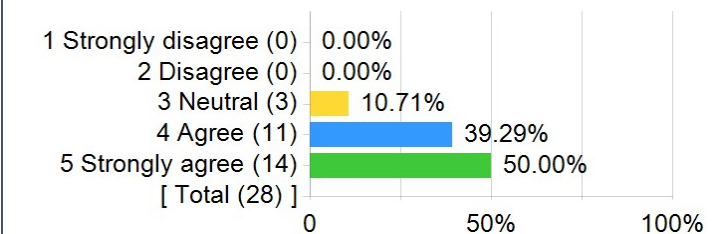
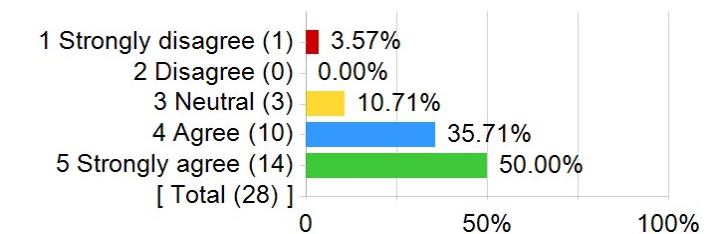
Instructor Summary of Results - Scale: Strongly Disagree (1) to Strongly Agree (5)

Question	Results		
	Response Count	Mean	Standard Deviation
The instructor stimulated my thinking.	28	4.39	0.69
The instructor was enthusiastic about teaching the course.	28	4.29	0.94
The instructor presented the course in an organized manner.	28	4.25	0.97
The instructor maintained an environment where students felt comfortable participating.	28	4.43	0.74
The instructor maintained an environment where students felt comfortable seeking assistance.	28	4.46	0.79
The instructor provided helpful feedback.	28	4.29	0.85
Assignments contributed to my understanding of the subject.	28	4.46	0.58
Overall	-	4.37	0.80

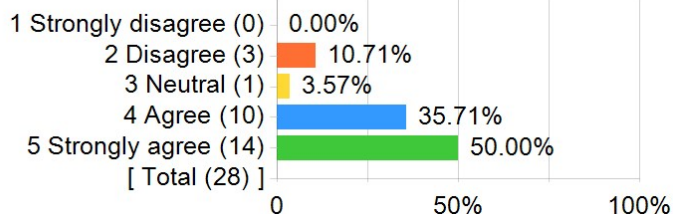
Instructor's overall teaching effectiveness

Question	Results		
	Response Count	Mean	Standard Deviation
Express your judgment of the instructor's overall teaching effectiveness.	28	4.32	0.67

Instructor Items: Detailed Results

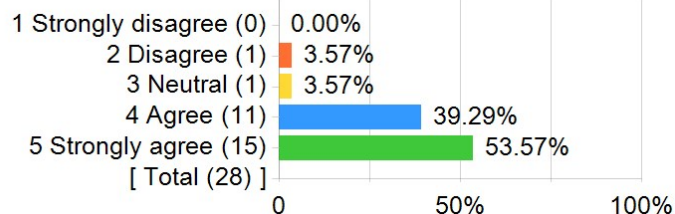
1. The instructor stimulated my thinking.		2. The instructor was enthusiastic about teaching the course.	
			
Statistics	Value	Statistics	Value
Invited Count	29	Invited Count	29
Response Count	28	Response Count	28
Response Ratio	96.55%	Response Ratio	96.55%
Mean	4.39	Mean	4.29
Median	4.50	Median	4.50
Mode	5	Mode	5
Standard Deviation	0.69	Standard Deviation	0.94

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



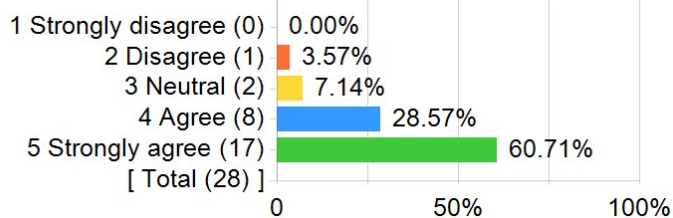
Statistics	Value
Invited Count	29
Response Count	28
Response Ratio	96.55%
Mean	4.25
Median	4.50
Mode	5
Standard Deviation	0.97

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



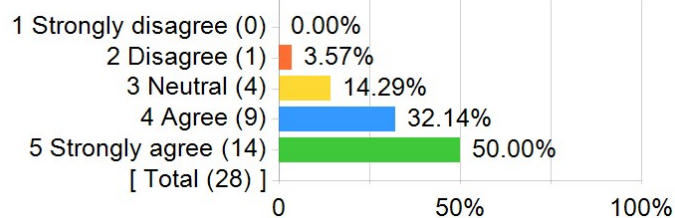
Statistics	Value
Invited Count	29
Response Count	28
Response Ratio	96.55%
Mean	4.43
Median	5.00
Mode	5
Standard Deviation	0.74

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



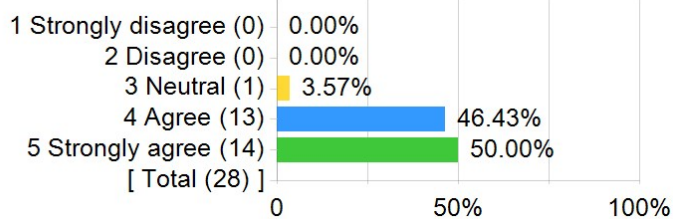
Statistics	Value
Invited Count	29
Response Count	28
Response Ratio	96.55%
Mean	4.46
Median	5.00
Mode	5
Standard Deviation	0.79

6. The instructor provided helpful feedback.



Statistics	Value
Invited Count	29
Response Count	28
Response Ratio	96.55%
Mean	4.29
Median	4.50
Mode	5
Standard Deviation	0.85

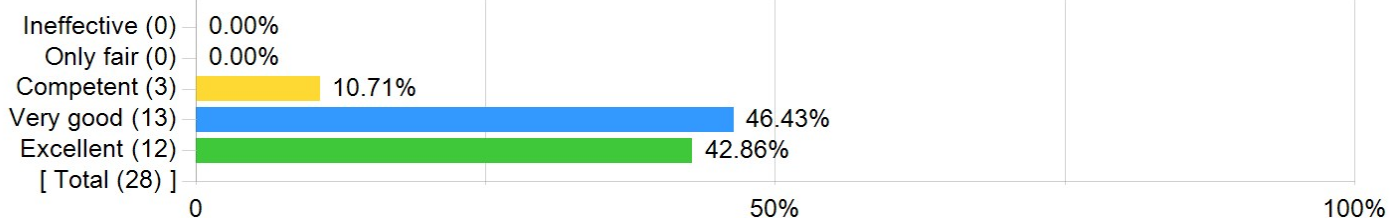
7. Assignments contributed to my understanding of the subject.



Statistics	Value
Invited Count	29
Response Count	28
Response Ratio	96.55%
Mean	4.46
Median	4.50
Mode	5
Standard Deviation	0.58

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
He provided us with plenty of resources on canvas. Was willing to go out of his way to help students.
The lecture videos were great. They weren't too long, which was nice, and they were very easy to follow.
Dr. Barry was, as usual, passionate, personable, knowledgeable, and witty. As a result, Dr. Barry's classroom was an engaging and open environment, with notably greater student participation than is typical of an engineering class.
Dr. Barry created a Github repository of solved homeworks, quizzes, and worksheets from previous semesters for us to access. The benefit this provided cannot be overstated. I have always found reading problem solutions to be the most effective way to learn concepts, so the Github was a godsend for me. This should be the standard in every STEM class in every school.
Related to the above, and possibly the explanation as to why Dr. Barry can provide the Github: Dr. Barry seemingly writes new assignments, quizzes, and exams every semester. Very little recycling is done. To my understanding, this is a investment of time and effort which goes well above the norm.
In class practice problems
Provided videos on the material with corresponding Tophat questions to gauge understanding before class. Then would do a brief overview and examples of the concepts in class to further the understanding and help answer questions.
There were so many ways to interact with the material. No matter what your preferred learning style was, I feel you would have found a way that worked for you.
Was always open to meeting after class if I needed help on a subject.
His office hours were super helpful.
Professor Barry gave lectures, answered every question and gave us tons of practice.
A lot of examples are great for learning!
I enjoyed the original format of the class. It forced you to expose yourself to the content before class, which is both helpful and hard to motivate yourself to do without a direct grading incentive.
Provided cohesive youtube videos with lecture information.
Always went into depth with example problems whenever one asked a question. No question was brushed aside, always fully explained to ensure everyone understood.
Provided ample resources
Fairly thorough outline of introductory electrical circuits. Doing multiple types of problems allowed for coverage of all concepts of circuits.
Barry did an excellent job in explaining circuits. A lot of it is just understanding how to apply algebra to these systems, but he did a very good job explaining the intricacies of different methods of analysis and the special cases with things like op-amps and energy devices.
Class was very thorough and he was extremely accommodating with respect to covid procedures.
Dr. Barry does a great job encouraging students to participate in class and he has a great structure for online classes.
Dr. Barry provided a bunch of examples which really helped my understanding of the mathematics and concepts in MEMS 0031, however it only went up to op-amps and did not really include anything past that (on GitHub at least)
Flipped format was excellent for our Zoom-centric course. Dr. Barry also emphasized the strict methods (MCA,NVA,KCL,KVL,Assumptions,ODEs) for solving various schematics.
Quick emails, pre recorded lectures
Flipped lecture videos, opportunities in class to ask questions, in class work sheets, homework, quizzes, very approachable during office hours and over email.
In class examples
I really like the amount of practice professor Barry gave us. It was a lot, but I was pretty well prepared for most of the exams. I also liked all the examples he gave us in class, the homework solutions, and the GitHub if we needed it.

What could the instructor do to improve?

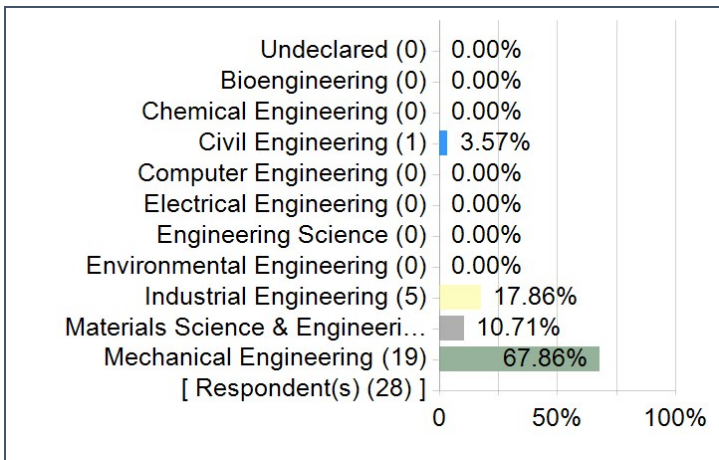
Comments
I felt like we went spent too much time on example problems. I appreciate the detailed explanation of how a problem is solved, but I think if we skipped over the basic math parts, we could cover a lot more. For the people who want to see the step-by-step math, they could look at a solution sheet showing all the details.
I think the only difficult thing was the inconsistency of hws and quizzes as far as due dates
I would advise Dr. Barry to continue to expand the Github as he teaches subsequent semesters of this course. When someday he stops teaching circuits, he should pass this accumulated solution set to the head of the department and demand it be included as standard supplemental course material. It's that good.
This course definitely ramps up in difficulty around the time that op amps are introduced. In future sections where this class is conducted in a flipped format or online, it might be beneficial to expand on the lectures for the later sections of the course. E.g. more explanatory examples, a greater number of lecture videos. I may also just be dumb though, so take this with a grain of salt.
N/A
Occasionally would get sidetracked with TA/students in the classroom who would chip in with not 100% related statements/questions as it is easier for them to interject than online students.
You get sidetracked sometimes, but honestly I don't have a huge problem with it. You're having so much fun it's hard to get mad at you for it.
Too many assignments, grading took too long
Grades didn't come back till much much later
I think the course would be better if the final project was due like halfway through. or really anytime before finals started.
N/A
Some of the preliminary videos were quite hard to follow. I understand that they weren't meant to be all-encompassing, and any questions could be asked before/during the following class, so helps alleviate the problems with a few of the videos.
Provide more exam prep materials.
Maybe space out the end assignments timewise to avoid a rush at the end.
Its probably out of his control but the 3 hour FriDAY class was near impossible
To me, following lecture notes were relatively useless. As in the literal method that it was presented. If I were to copy notes from the video, I found all the conceptual notes usually too cramped on the screen and it became challenging to use unless I went back and took time to rewrite the lecture notes, and I usually ended up just waiting for practice problems to be shown so I could copy those.
These grades need to come out sooner. I know this shortened semester is hard, but getting midterm grades during finals week is unacceptable.
The course load for circuits was much more than other classes, but it did teach very well. Teaching Matlab sooner would be invaluable, but I think the class is great on it's own
Homework's and quizzes need to be graded before exams. There's been no metric of how we are doing in this class and it makes it very hard to know what to focus on when studying.
I believe he could provide more examples on GitHub of the later material.
There is a strong opportunity to be coordinated with the math department on Diff Eq. Directing students to Falstad probably misled some students: introducing and developing knowledge of Falstad (its limits, its advantages) in office hours could be a great opportunity.
Not pile up 5 assignments the last two weeks of class I'm dying rn
12 week format for this class is HARD! I felt like I had little time in-between learning new concepts and practicing "old" concepts. I had much more difficulty grasping concepts from the second half of the course (op-amps on). I think it would be helpful to do more in class examples that cover multiple types of problems we could encounter. We spent a lot of the class time going over problems in the lecture videos which was okay, but I think it would be more helpful to spend more time on new problems and have more examples to reference instead of spending a lot of time on a few problems.
Less workload assigned
On a normal year, I don't think anything. It was a good class, but for this year, with COVID, the circuits project is not the best thing in the world. I'm one of the kids who couldn't get a kit from Benedum. I think both I and Professor shouldn't seen the writing on the wall that there would be no funding to ship circuits kits, and made provision for using MATLAB for the project earlier. So maybe make MATLAB an option for the project moving forward in COVID times?

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

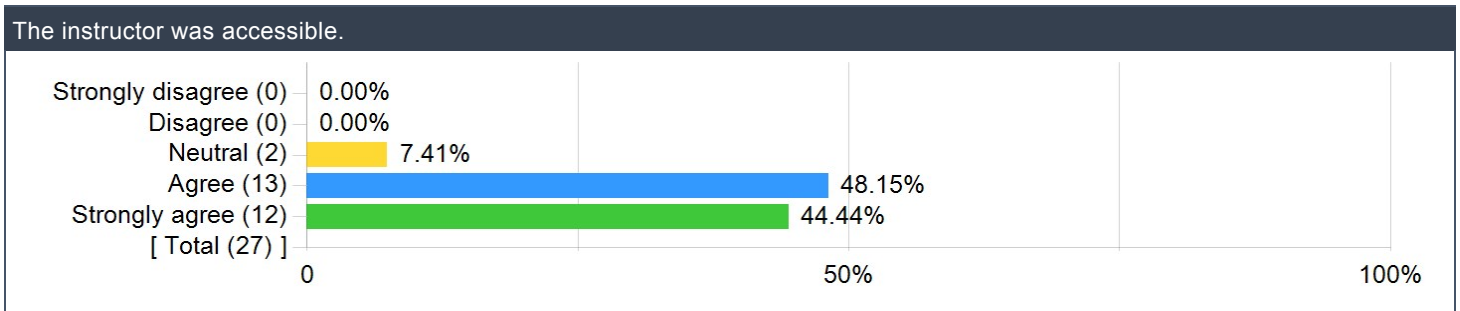
Comments
He's awesome. Really seems to care about his class and wants you to learn.
To me, lecturing to college students often seems akin to shouting into the wind. Dr. Barry brings life into the classroom though. Keep bringing the passion, energy, and humor. It is appreciated, even if it is met with blank stares or lackluster response.
I also enjoyed the chocolates.
N/A
Isabella was very helpful, and her being in the zoom was extremely helpful for when there were questions or she had another way of explaining something, but occasionally she could sidetrack you onto harder material which did confuse me when it did happen.
I was talking to Isabella about how in previous years get two hour test in a one hour time block, to see how people reacted to it. I really appreciate that teaching style actually. It feels really bad when you're doing it, because you don't want to rely on how the test ends up curved, but at the same time by making the ceiling really high, you can more accurately assess who understand and who doesn't, since the difference between 85 and a 60 means a lot more.
N/A
I think you did a great job.
N/A
No
no thanks for the help this sem
N/A
I really enjoyed this course. I really struggled with circuits in Physics E&M, but this course was MUCH better taught.
This class is very well done, and the covid procedures were very helpful in load balancing. Consider maintaining some procedures after flex@pitt is finished.
This has been my favorite class I've taken in college so far.
It made me a bit upset how much work we had during these last two weeks since it felt like we were really cramming everything in (which we were since this is only a 12 week summer course) nonetheless it just made me sad that happened :(
When will in-person office hours be back I relied on those before covid and I find online office hours to be ineffective. I am paying an extreme amount for college and I want to return to full in-person services that I am paying for.
See my input for this question from the thermo survey.
Na
N/A
No
See you in Thermo and probably fluids:)

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
Kinda applies to every class, but don't procrastinate. If you procrastinate, you might not even know if you're behind.
You better check the Github and get your asses to office hours. Also the first half of this class is deceptively easy relative to the latter half. Get ready to up your efforts significantly from the halfway mark on.
Stay up to date/ahead on material for lectures
Focus on the early content because the later material is all heavily built on what you learn early on in the course and it all builds.
This class requires a lot of time. A lot of the question require to understand how the circuit works. There may be a number of ways to solve the problem, but recognizing a particular aspect can give you a relation that makes life a lot easier.
Read the textbook while watching the lectures
Talk to him! hes a nice guy
Be smarter!
Ask any question that comes to mind.
Use the book
Pay more attention to lectures.
Make sure to email the professor or ta to meet anytime you don't fully understand the homework.
go to class and start early
Put aside most of your time for doing this course's work and problems. You will learn a lot as long as you participate in the all the time demanded
Don't completely buy into NVA like you're about to rename Hanoi.
Start all assignments early, just to get an idea of the timetable.
Barry is not as scary as people say he is, introduce yourself and be active in class and it'll help a lot.
Take this class in person cause online sucks
Be resourceful. Do enough of the homework to have questions for office hours, use the book, use the videos (if the class is flipped). Put in the work for the homework, quizzes, and exams. DO NOT HAVE FEAR OR HATRED OR ANXIETY ABOUT ASKING QUESTIONS TO DR. BARRY! Look at any mistakes you make, and learn more from them! If you work like a top student in a Barry class, you WILL be the top student.
Do the homework and quizzes and stay on track
Come to class prepared
Go to office hours more often
I would ask about the mechanics of the finite gain and offset model more. Make sure you do your homework. It's good for you.

Engineering Undergrad Courses

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

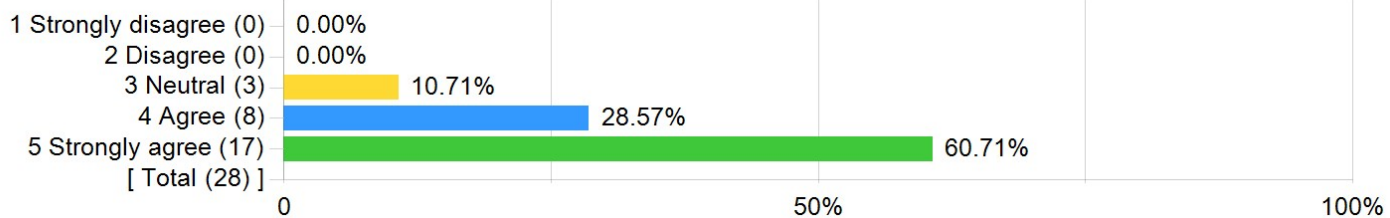
Question	Results		
	Response Count	Mean	Standard Deviation
Your ability to identify, formulate, and solve complex engineering problems by applying principles of engineering.	28	4.18	0.94
Your ability to identify, formulate, and solve complex engineering problems by applying principles of science.	28	4.04	0.84
Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics.	27	4.15	0.77
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare.	28	3.21	1.40
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).	28	2.93	1.36
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	2.89	1.42
Your ability to effectively communicate verbally with a wide range of audiences.	28	3.29	1.36
Your ability to effectively communicate in writing to a wide range of audiences.	28	3.11	1.40
Your ability to recognize ethical and professional responsibilities in engineering situations.	28	3.29	1.36
Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles).	28	2.93	1.33
Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles).	28	2.93	1.33
Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership.	28	2.89	1.42
Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives.	28	2.86	1.38
Your ability to develop appropriate experiments.	28	3.79	1.07
Your ability to conduct appropriate experiments.	28	3.61	1.03
Your ability to analyze and interpret data and use engineering judgment to draw conclusions.	28	3.71	1.08
Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems.	28	4.00	0.94

Diversity and Inclusion

Question	Response Count	Mean	Standard Deviation
The instructor creates an inclusive learning environment for all students.	28	4.50	0.69

Details

The instructor creates an inclusive learning environment for all students.



Statistics	Value
Invited Count	29
Response Count	28
Response Ratio	96.55%
Mean	4.50
Median	5.00
Mode	5
Standard Deviation	0.69