

# 2237 - Teaching Survey Summer 2023

Summer 2023 - Matthew Barry MEMS 0031 - ELECTRICAL CIRCUITS - 1070 - Lecture



Created Wednesday, August 23, 2023



## **Report Comments**



#### Included in this report:

- Summary of responses to scaled questions
- Response breakdowns
- Student comments
- Results to instructor added custom questions (if applicable)

#### Understanding and using student feedback:

- We have resources that can help with interpreting your teaching survey report.
- Schedule a meeting with a teaching consultant who can help you interpret your results and develop a course of action if necessary.
- In the future:
  - Discuss, teach, and model giving meaningful feedback with your students.
  - Request a midterm survey of your course and give students multiple opportunities to practice giving feedback.

Contact OMET

# **University Questions**

## **Summary table**

Scale: strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5)

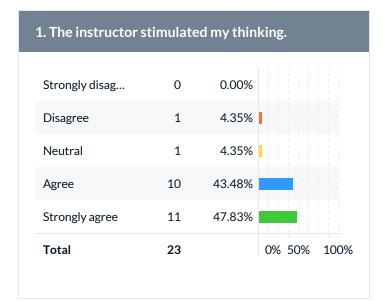
	Invited Count	Response Count	Response Rate	Mean	Mode	Median	SD
The instructor stimulated my thinking.	23	23	100.00%	4.35	5	4.00	0.78
The instructor was enthusiastic about teaching the course.	23	23	100.00%	4.09	5	4.00	0.95
The instructor presented the course in an organized manner.	23	23	100.00%	4.13	5	4.00	0.92
The instructor maintained an environment where students felt comfortable participating.	23	23	100.00%	4.48	5	5.00	0.59
The instructor maintained an environment where students felt comfortable seeking assistance.	23	23	100.00%	4.39	5	5.00	0.72
The instructor provided helpful feedback.	23	23	100.00%	4.09	5	4.00	0.90
Assignments contributed to my understanding of the subject.	23	23	100.00%	4.35	5	5.00	0.83
Overall of All Questions	161	161	100.00%	4.27	-	-	0.82

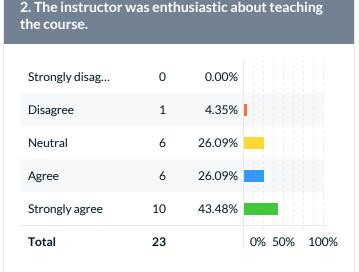
## **Overall effectiveness**

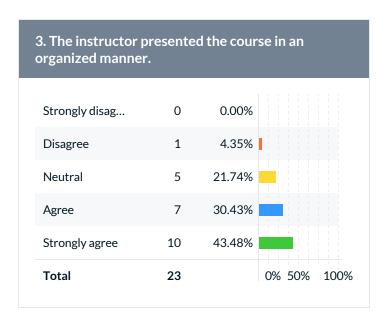
Scale: ineffective (1), only fair (2), competent (3), very good (4), excellent (5)

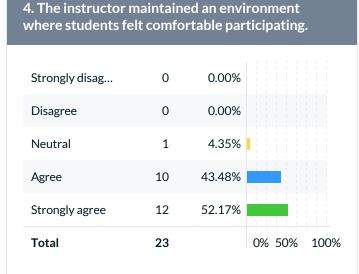
Question	Invited Count	Response Count	Response Rate	Mean	Mode	Median	SD
Express your judgment of the instructor's overall teaching effectiveness.	23	23	100.00%	3.96	4	4.00	1.02

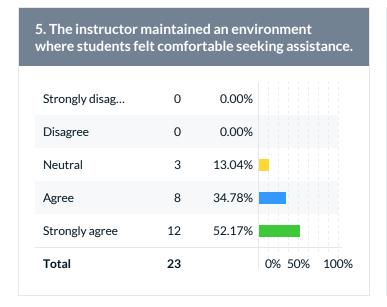
# Response breakdown

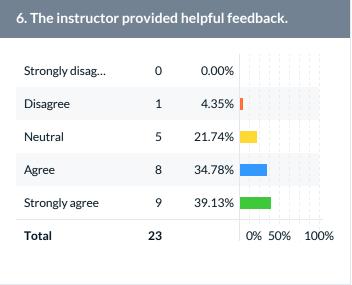




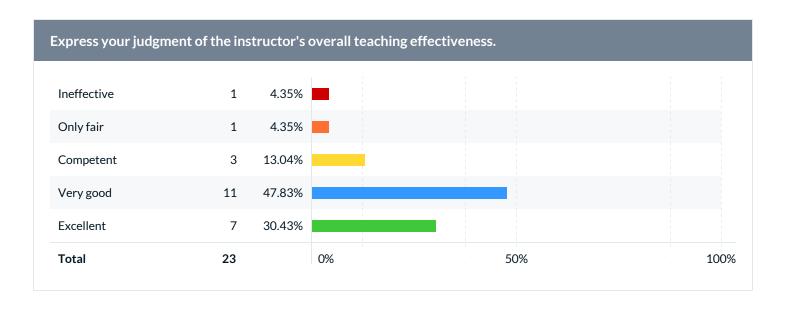








7. Assignments co the subject.	ntribute	d to my understanding of
Strongly disag	0	0.00%
Disagree	1	4.35%
Neutral	2	8.70%
Agree	8	34.78%
Strongly agree	12	52.17%
Total	23	0% 50% 100%



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

#### Comments

He gave us many helpful tips to better understand individual aspects of circuits

I really liked the way this course was structured through Tophat. It was manageable, allowed me to teach myself the material prior to class, and then confirm my understanding of the material in class.

Dr. Barry was always available if I had questions and has an extremely good understanding of the material. Both of these qualities about Dr. Barry helped me learn the material in this class well.

The problems we did in class were very helpful to understand the material.

The flipped format was extremely helpful as I was able to pause, go back, or move forward at my own pace. It also gave time in class to spend the time to go over any questions that could pop up from the videos. Doing the problems in class was helpful for context on how to solve problems. Seeing the exact sections of the book thats in the slides is helpful from the slides for more context.

Dr. Barry was a very good teacher and taught this course in an organized and easy to understand manner.

I learned how to analyze circuits using ohm's law.

I like how you post the tophat modules and allow us to complete them on our own free time. With it being a flipped class, I enjoy being able to work at my own pace. It can be difficult adjusting my own pace to fit the class, and flipped lectures help me learn at my own pace.

Helped me learn concepts to answer questions efficiently

The tophats are very helpful for concisely understanding the content before lecture. Flipped works well with a course like this where its conceptual and procedural solutions, and not super heavy on complex topics. Tons of example problems that are worked through, and showed how to do problems easily. The quizzes with the FE questions were also really nice, with the multiple attempts. I couldn't really just give up on a topic and move on in the class without understanding well enough to pass the quiz.

He quizzed us using question similar to those that would be on the final exam. He also posted the lecture slides and practice problems on the course Canvas page. The quiz format was also very beneficial to my learning. He let us do retakes on the quizzes which forced us to continue to review the material. The quizzes being online were very helpful too because sometimes you had to retake multiple quizzes and would find it hard to schedule that much time outside of class for a retake to be administered in-person.

Dr. Barry is very good at engaging the class with stimulating questions and helpful examples that show concepts in a clear manner. The flipped format also helps because I am able to look at material multiple times over until I feel comfortable with it.

He gave good example problems in class and had good lectures online. I liked how thorough the examples were in class.

He taught even though its flipped.

Dr. Barry made all of the class content accessible and easy to follow.

Go over the in class examples in depth during class

did examples in class of more challenging questions

Dr. Barry helped me learn how to analyze circuits effectively, as well as the concepts that correlate.

Dr. Barry posted weekly videos with engaging questions to ensure the understanding of the material. Each week in class he was able to clearly answer any questions and go through example problems that would be similar to the homeworks and quizzes.

#### Comments

The instructor helped walk through detailed examples of course content that went with each lecture.

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He taught things in what seemed like a simplified method compared to the book

Dr. Barry explains the concepts of the class in a manner that is very effective in securing students' understanding. His organizational skills and presentation of lectures are exceptional.

## What could the instructor do to improve?

#### Comments

Provide more always available walkthroughs of problems

I think just sticking to a lecture and quiz format would be best. It did feel at times like we were testing all these new quiz and lecture formats which made it harder to focus on learning the material at times.

A small thing Dr. Barry could do to improve is to post all of the weekly folders on Tophat at the beginning of the course, and all of the lecture and in-class example slides on the canvas at the beginning of the course.

Be more organized going in so students have an expectation for the class that will be consistent the whole semester. Students were very confused about the requirements for most of the year due to the changing styles of quizzes.

The instructor could post some more examples of previous practice problems filled out, that would be helpful for some more context.

n/a

Having an established office hours from the start of the semester.

I think it would help if the class was more consistent on how our quizzes/exams are formatted, but I understand why the changes were made. I think it would be more distracting during the fall/spring semester, but it was fine changing things during the summer semester because things are more flexible.

Better organized class

Some of the videos need to be fixed or rerecorded. The audio on some of the later lectures goes from very very quite to very loud in a few seconds.

He mentioned in the beginning on bringing in materials to practice with the circuits. I realize we had a lot of material to cover and a limited amount of time to cover it, but actually seeing the application and designing circuits would have been nice. Or even problems on how to design a circuit given certain parameters.

Dr. Barry goes very into depth on every problem and I think that can be an issue sometimes as he will spend a lot of time on nuances like the algebra behind a problem that I don't feel is necessary.

He could give more announcements with what was happening in the class. He could also be a bit more organized with the quizzes. I know he had to make the quizzes throughout the semester, and I know it was time consuming, so I do not think this was a big issue.

Solution sets for classwork and review

The initial guizzes seemed to be a bit too difficult, but then he made them easier once he saw many students struggling.

#### Comments

Stick with one format for the course all the way through rather than switching half way through

post quizzes more on time, have a single style of quiz throughout the semester, have a sample final for us to practice on

I personally do not prefer flipped class format.

One small improvement that could be made is to post the homeworks and quizzes earlier incase a student would like to get ahead on work.

The instructor could be more on top of posting the modules with content. I sometimes found myself unable to watch lecture videos until right before class because the notes that went along with the videos were not posted yet. This made the flipped classroom model difficult to follow and keep on a consistent schedule.

NOT DO REVERSE CLASSROOM STYLE

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

#### Comments

#### N/A

In terms of mode of instruction, I felt that the best format for learning was the flipped lecture format (3 lectures per week) with inclass examples for each lecture. For the quiz format, I felt the initial format with 5–10 FE questions (with multiple retakes) was the best. It allowed me to study for the material prior to class, take the quiz, and if I did poorly, I could study even more to better my understanding of the material to improve my grade. In that format, it felt like my understanding of the material was very good.

I would recommend having the quizzes at the start of class so that people aren't studying for the quiz during the in-class examples (which I did).

Candy was very effective.

No

n/a

I liked the FE quizzes at the start of the semester

I think online quizzes are more beneficial for the summer semester. I can't always make it to class in person, and it makes more sense that we do online quizzes for a flipped class. I think the changes we made throughout the class helped a lot.

The FE quizzes were a better gauge of my learning than the concept question quizzes. It's a lot easier to remember what a resistor is than to apply it to a circuit.

I liked the FE style and open-ended quiz styles because they forced baseline understanding of every facet of the course. I liked the retakes because they encouraged me to stay updated on multiple topics of the course instead of just learning something, taking a quiz, and then ignoring it until It was time to take the final. I think the multiple choice/ short answer style questions would work best for this format because I found the challenge problems to be more rewarding conceptually compared to FE questions because they were more difficult.

No

I'm not an electron.

I appreciate your awareness to see the class was struggling with the initial quizzes, then took initiative to change the format to help the students. Many professors would've been too proud to do that.

I really liked the material and would have potentially enjoyed an application project in this class

I have taken two summer classes with Dr. Barry and he has been very accommodating for working around everyone's summer schedule. I didn't mind all the styles of quizzes that we had, but my favorite type was the multiple-choice conceptual questions paired with short written problems online. I feel that this quiz is low stress and does a great job at testing your basic understanding of the content. Also, the short written problems are graded with partial credit so it gives you a fair chance of receiving the grade you earned.

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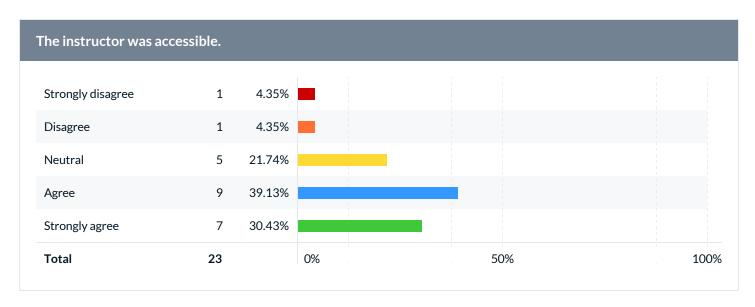
The old quiz format works very well with the online aspect of the course; I found it to increase my ability to concentrate on the material and provide my best responses.

# **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).

Undeclared	0	0.00%
Bioengineering	0	0.00%
Chemical Engi	0	0.00%
Civil Engineeri	1	4.17%
Computer Eng	0	0.00%
Electrical Engi	0	0.00%
Engineering Sc	0	0.00%
Environmenta	0	0.00%
Industrial Engi	4	16.67%
Materials Scie	2	8.33%
Mechanical En	17	70.83%
Respondent(s)	23	0% 50% 100%

#### The instructor was accessible.



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

#### Comments

Review the top hats prior to class

stay on top of the material

Actually pay attention in class and do the lectures ahead of time.

Spend more time looking up in the book

Watch the lecture videos and don't get behind. Do the example problems even if they aren't graded.

Ask questions in class, and do all the practice problems provided.

Complete all the modules and be active in class

Keep up with the course content

Get help when you need it. The topics pile up, and every concept is used repeatedly. Make sure you understand a topic before moving on.

Make sure to do all the provided practice problems, even if they are not assigned for a grade. A lot of the skills required in this class take practice to learn them. Also, many of the ciruits can be solved many ways so knowing all the methods well can help in determining the fastest way to solve a problem.

Spend more time on tophat than any other resource like the book. It's such a clear and concise way to get the information needed.

Do more homework problems and watch all the lectures entirely

Just do the top hat. Its not that deep.

All you have to do is follow what he has posted. Do the lectures, then lecture questions, then the HW, then the quiz. You will do well following his method.

Start the notes and guizzes earlier so you can ask guestions in class if needed.

I could have done more of the homework problems, and in the future I think I would go to office hours to check what I did wrong

Make sure you are prepared before each class.

Watch all the videos, do all the homeworks, and go to class.

Do FE Exam problems to prep for quizzes, sometimes the problems on the quizzes will be very similar to what you saw in class, sometimes they will be wildly different.

Not take it

Stay on top of the top hat videos and worksheets

Make sure to very carefully watch all the lecture videos, as they are crucial to understanding the content of the course.

# **Engineering Undergrad Courses**

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

Question	Results			
Question	Response Count	Mean	Standard Deviation	
Your ability to identify, formulate, and solve complex engineering problems by applying principles of engineering.	23	3.96	0.82	
Your ability to identify, formulate, and solve complex engineering problems by applying principles of science.	23	4.04	0.93	
Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics.	23	4.04	0.88	
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare.	23	3.39	0.94	
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).	23	3.26	1.14	
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of environmental and economic factors (i.e., sustainability principles).	23	3.22	1.24	
Your ability to effectively communicate verbally with a wide range of audiences.	23	3.22	1.17	
Your ability to effectively communicate in writing to a wide range of audiences.	23	3.43	1.04	
Your ability to recognize ethical and professional responsibilities in engineering situations.	23	3.39	1.20	
Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles).	23	3.13	1.22	
Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles).	23	3.00	1.28	
Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership.	23	3.26	1.18	
Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives.	23	3.22	1.24	
Your ability to develop appropriate experiments.	23	3.26	1.1	

Question	Results			
Question	Response Count	Mean	Standard Deviation	
Your ability to conduct appropriate experiments.	23	3.09	1.28	
Your ability to analyze and interpret data and use engineering judgment to draw conclusions.	23	3.78	1.09	
Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems.	23	4.09	0.90	

## **Diversity and Inclusion**

