



## 2237 - Teaching Survey Summer 2023

# Summer 2023 - Matthew Barry MEMS 0051 - INTRODUCTION TO THERMODYNAMICS - 1030 - Lecture



Created Wednesday, August 23, 2023



Courses Audience: 13  
Responses Received: 13  
Response Rate: 100%

## 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.	13	13	100.00%	4.54	5	5.00	0.52
The instructor was enthusiastic about teaching the course.	13	13	100.00%	4.69	5	5.00	0.48
The instructor presented the course in an organized manner.	13	13	100.00%	4.00	5	4.00	1.15
The instructor maintained an environment where students felt comfortable participating.	13	13	100.00%	4.38	4,5	4.00	0.65
The instructor maintained an environment where students felt comfortable seeking assistance.	13	13	100.00%	3.92	5	4.00	1.12
The instructor provided helpful feedback.	13	13	100.00%	4.08	5	4.00	1.12
Assignments contributed to my understanding of the subject.	13	13	100.00%	4.38	4	4.00	0.51
Overall of All Questions	91	91	100.00%	4.29	-	-	0.85

### 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.	13	13	100.00%	3.92	5	4.00	1.19

### Response breakdown

### 1. The instructor stimulated my thinking.

Strongly disag...	0	0.00%	
Disagree	0	0.00%	
Neutral	0	0.00%	
Agree	6	46.15%	<div></div>
Strongly agree	7	53.85%	<div></div>
<b>Total</b>	<b>13</b>		0% 50% 100%

### 2. The instructor was enthusiastic about teaching the course.

Strongly disag...	0	0.00%	
Disagree	0	0.00%	
Neutral	0	0.00%	
Agree	4	30.77%	<div></div>
Strongly agree	9	69.23%	<div></div>
<b>Total</b>	<b>13</b>		0% 50% 100%

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

Strongly disag...	0	0.00%	
Disagree	2	15.38%	<div></div>
Neutral	2	15.38%	<div></div>
Agree	3	23.08%	<div></div>
Strongly agree	6	46.15%	<div></div>
<b>Total</b>	<b>13</b>		0% 50% 100%

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

Strongly disag...	0	0.00%	
Disagree	0	0.00%	
Neutral	1	7.69%	<div></div>
Agree	6	46.15%	<div></div>
Strongly agree	6	46.15%	<div></div>
<b>Total</b>	<b>13</b>		0% 50% 100%

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

Strongly disag...	0	0.00%	
Disagree	2	15.38%	<div></div>
Neutral	2	15.38%	<div></div>
Agree	4	30.77%	<div></div>
Strongly agree	5	38.46%	<div></div>
<b>Total</b>	<b>13</b>		0% 50% 100%

### 6. The instructor provided helpful feedback.

Strongly disag...	0	0.00%	
Disagree	2	15.38%	<div></div>
Neutral	1	7.69%	<div></div>
Agree	4	30.77%	<div></div>
Strongly agree	6	46.15%	<div></div>
<b>Total</b>	<b>13</b>		0% 50% 100%

### 7. Assignments contributed to my understanding of the subject.

Strongly disag...	0	0.00%	
Disagree	0	0.00%	
Neutral	0	0.00%	
Agree	8	61.54%	
Strongly agree	5	38.46%	
<b>Total</b>	<b>13</b>		0% 50% 100%

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

Ineffective	1	7.69%	
Only fair	0	0.00%	
Competent	3	23.08%	
Very good	4	30.77%	
Excellent	5	38.46%	
<b>Total</b>	<b>13</b>		0% 50% 100%

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

Comments
Flipped Lecture and weekly quizzes.
he helped us learn the formula, but with no office hours or TA's it was really hard to get questions answered if I had an issue or didn't understand a concept. I wish there was a consistent method of quizzing or assessing
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.
Provided plenty of opportunities to answer questions during practice problems.
The instructor includes materials that illuminate each important topic, with associated book sections highlighted, and includes questions that guide learning through the different levels from basic understanding through the analysis level of Bloom's taxonomy. Through the final project, which will be administered this semester as a reading and reporting assignment, I will have the opportunity to explore the evaluate level.
The tophat for this class was probably the best organized and had the clearest content compared to circuits and statics. The videos were great, and were very helpful for learning the topics. I also really liked the FE quiz format with the multiple attempts. It's easy to make one small mistake and get a problem wrong (yet get an answer that matches the multiple choice options), so being able to quickly learn from my mistakes and retry questions led me to actually learn the material rather than just do well on a quiz where I can get partial credit for just writing stuff down.
Provided plenty of examples and extra resources to assist in learning. Also, he's clearly thoroughly enjoys the subject and teaching it which always provides a better learning environment.
Provide challenging examples that forced more conceptual understanding of the course instead of focusing on math.
The instructor provided the same materials and class format as in Electrical Circuits.
The instructor used detailed examples in class that were relevant to the lecture material.
He always related the topics in class to real world topics, which I really enjoyed; not many professors do this. He also gave good example problems in class and in the lectures, which I thought really helped me understand the material. He was enthusiastic about the topics, which I think enhanced my learning.
He gave us extra chances on quizzes so we can learn the material better.
I really liked how we had multiple attempts for the quizzes, it made it so that they weren't super high stakes and allowed for improvement.

## What could the instructor do to improve?

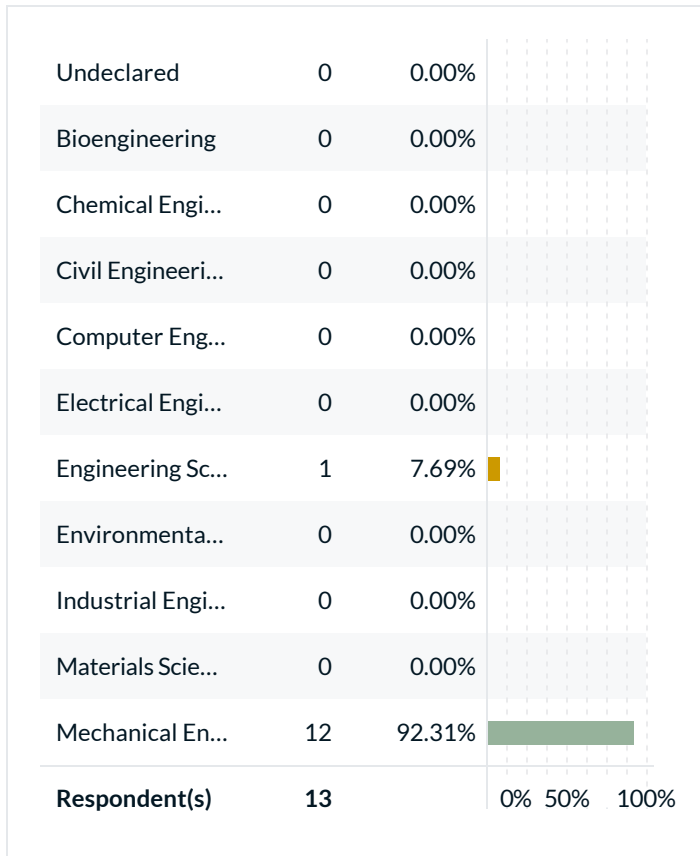
Comments
Nothing.
Have a consistent method of assessment, have consistent office hours, get TA's if possible, keep us all updated (sometimes he would cancel a class and not post quizzes for weeks, which made it really hard to keep track of what was due or needed to be learned by when)
<p>I think just 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.</p> <p>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.</p>
Timing: quizzes rarely came out on time, as with grades. This left students confused as to what we should know for when.
I think the instructor does a great job with this course, and I don't think I'm qualified at this moment to give a genuine critical suggestion for improvement. The instructor did bring chocolate to class to encourage students to participate, which makes me consider that he may have space to grow when it comes to motivating students. Considering that there are many factors at play in this particular instance, however, I wouldn't be willing to go very far to defend this criticism.
Some more homework/practice questions would be nice. I also would've liked to do the project, but I get why we didn't have the time to do it (if it was the spring/fall I would've been upset, but it's the summer).
Honestly nothing off the top of my head
Provide more examples, later in the course I found it harder to find examples that challenged me.
Ideally, office hours would have been very helpful, however, I understand the format of the class is very demanding.
<p>The instructor used a quiz format (FE exam questions) that did not, usually in any way, mirror the types of questions we were asked during the lecture or on the homework. This caused a huge learning curve in figuring out how to properly prepare for the quizzes as I did not have access to content that would properly prepare me for the weekly examinations. One way to improve on this would be to give the students sample FE problems before each quiz so they are not entering the quiz completely blind as to what they will be tested on. While many of the concepts remain the same from lecture to quiz, you will set up your students to struggle and fail if they are unfamiliar with the types of questions they will be asked. I was doing exam-level prep each week at the beginning of the course for these quizzes, which should an expected time commitment for a three-credit course. This course structure caused immense stress and was a massive time commitment, well above the expected contribution of 6-9 hours per week outlined in the syllabus. I think that this was mostly due to the chosen testing format, not the actual course content itself. Further into the semester, the quizzes were moved to Gradescope. I hugely preferred this format as it allowed me to take the quizzes whenever I wanted to and gave significantly more leeway in terms of scheduling retakes.</p> <p>In summary, the number one thing that can be done to improve this course is to use the quiz format that still assesses the student's capabilities but does not require as immense of a time commitment and tests the student in a format that they are familiar with.</p> <p>I think he could be more organized and give more announcements when things would be posted. Many times, I expected a quiz to be posted online, but there never was. The flipped classroom style this semester is new, so I understand that it was difficult to make many quizzes.</p>
Communication, since I had to wait almost a week for a response in regards to my questions.

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

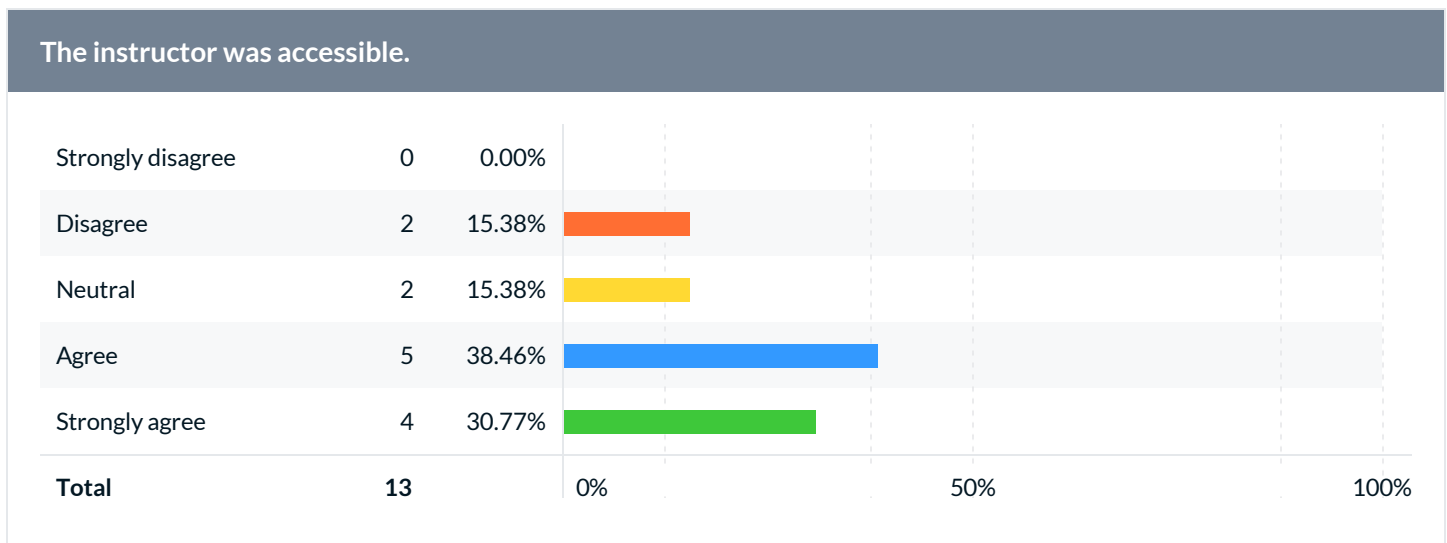
Comments
Nothing
<p>In terms of mode of instruction, I felt that the best format for learning was the flipped lecture format (3 lectures per week) with in-class examples for each lecture. For the quiz format, I felt the initial format with 5–10 FE questions (with multiple retakes) was the best. It allowed 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.</p> <p>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).</p>
<p>I think including real-world examples really aids in making the connection from the purely theoretical concepts to actual real-world engineering. I would also assume that having multiple iterations for quizzes may have allowed students the opportunity to develop their internal motivation to understand the concepts presented in the course.</p>
<p>Excellent lecturer for thermo, really knows how to answer questions in a way that everyone can understand. Very knowledgeable on the subject.</p>
<p>Though I struggle with the content some, the enthusiasm he has for the content makes me want to learn more about it in the future.</p>
N/A
No

## 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 the lectures and participate in class.
I could have gone back and done the homework problems more, I didn't do enough of those
learn the introductory material very well as it continues throughout the course.
Watch and understand the lectures before class, then improve your understanding by following along with the problems in class.
Being in charge of my own learning really aided my ability to do well in this course. I think preparing lightly and attending lectures to boost my learning would have minimized the amount of effort I needed to put in to the course. I did not always attend lecture and thus had to put in additional work to succeed. While it's not revolutionary, I think this would have been the best method for this particular course and I highly recommend it for any future students. Also, if you note any problems, in TopHat, quizzes, or homeworks, where your solution differs from that given, either by a small amount or a large amount, reach out and seek to determine where the discrepancy is coming from. Sometimes a small discrepancy in a solving method may lead one to a solution that is acceptable but not the best solution possible. By seeking help, you have the ability to elevate your understanding above a purely "acceptable" level.
Do the homework, even if it's not graded like it was this term. The homework is the main way to actually get to the core of the topics.
Explored the additional resources he provided more so than I did.
Just spend as much time on the conceptual understanding as possible. Understanding the thermodynamic tables along with the behavior of a system makes everything easier.
Make sure to do all the provided problems in the Canvas page even if they are not for a grade.
Do as many practice problems as possible and buy an FE prep book for sample questions.
Really study the material after class and before class. There is a lot of material and concepts, and you will get confused quickly. Also, definitely get in the habit of using the steam tables and EES. EES in particular is very helpful solving problems
I could've looked at the online lessons more frequently throughout the day.

## 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.	12	4.25	0.97
Your ability to identify, formulate, and solve complex engineering problems by applying principles of science.	13	4.15	0.80
Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics.	13	4.08	0.95
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare.	13	3.46	1.13
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).	13	3.15	1.34
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of environmental and economic factors (i.e., sustainability principles).	13	3.31	1.25
Your ability to effectively communicate verbally with a wide range of audiences.	13	3.08	1.32
Your ability to effectively communicate in writing to a wide range of audiences.	13	3.00	1.47
Your ability to recognize ethical and professional responsibilities in engineering situations.	13	3.08	1.44
Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles).	13	3.15	1.34
Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles).	13	3.00	1.47
Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership.	13	2.85	1.46
Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives.	13	2.77	1.54
Your ability to develop appropriate experiments.	13	2.69	1.38

Question	Results		
	Response Count	Mean	Standard Deviation
Your ability to conduct appropriate experiments.	13	2.69	1.44
Your ability to analyze and interpret data and use engineering judgment to draw conclusions.	13	3.85	0.99
Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems.	13	4.08	0.95

## Diversity and Inclusion

The instructor creates an inclusive learning environment for all students.

1 Strongly disagree	0	0.00%	
2 Disagree	0	0.00%	
3 Neutral	1	7.69%	
4 Agree	4	30.77%	
5 Strongly agree	8	61.54%	
<b>Total</b>	<b>13</b>	<b>0%</b>	<b>50%</b> <b>100%</b>

Statistics	Value
Invited Count	13
Response Count	13
Response Ratio	100.00%
Mean	4.54
Median	5.00
Mode	5
Standard Deviation	0.66