



University of Pittsburgh

# Summer 2019 - Lee Dosse MEMS 0051 - INTRODUCTION TO THERMODYNAMICS - 1030 - Lecture

Project Title: **2197 - Teaching Survey Summer 2019**

Courses Audience: **36**

Responses Received: **31**

Response Rate: **86.11%**

## Subject Details

Name	MEMS 0051 - INTRODUCTION TO THERMODYNAMICS - 1030 - Lecture
DEPARTMENT_CD	MEMS
CAMPUS_CD	PIT
SCHOOL_CD	ENGR
CLASS_NBR	13729
SECTION_NUMBER	1030
TERM_NUMBER	2197
COURSE_TYPE	Lecture
CLASS_ATTRIBUTE	
First Name	Lee
Last Name	Dosse
RANK_DESCR	
TENURE	NT

## Report Comments

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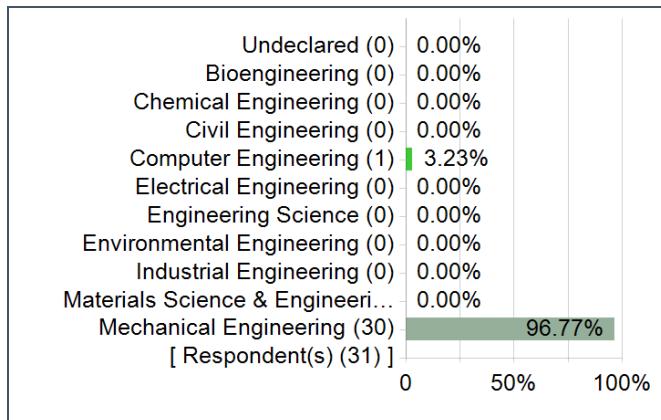
Instructor and Course Survey Results:

- Numerical
- Comments
- Additional School or Department Questions (if applicable)
- Additional QP Questions (if applicable)

Creation Date: **Saturday, August 24, 2019**



**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).**



## University Questions

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

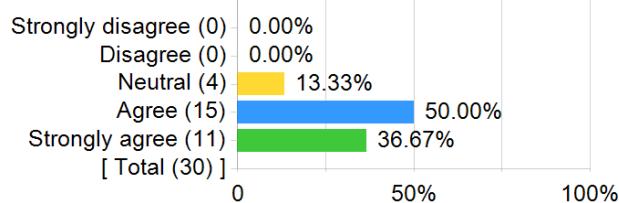
Question	Results		
	Response Count	Mean	Standard Deviation
The instructor stimulated my thinking.	30	4.23	0.68
The instructor was enthusiastic about teaching the course.	30	4.63	0.61
The instructor presented the course in an organized manner.	30	4.43	0.63
The instructor maintained an environment where students felt comfortable participating.	30	4.50	0.57
The instructor maintained an environment where students felt comfortable seeking assistance.	30	4.47	0.63
The instructor provided helpful feedback.	30	4.20	0.89
Assignments contributed to my understanding of the subject.	30	4.30	0.65

## Instructor's overall teaching effectiveness

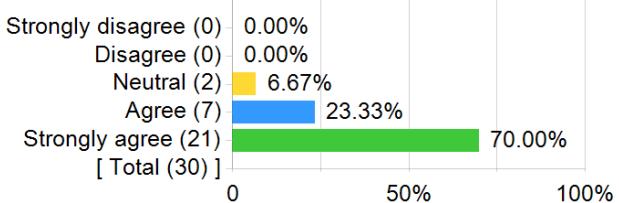
Question	Results		
	Response Count	Mean	Standard Deviation
Express your judgment of the instructor's overall teaching effectiveness.	31	3.87	0.81

## Instructor Items: Detailed Results

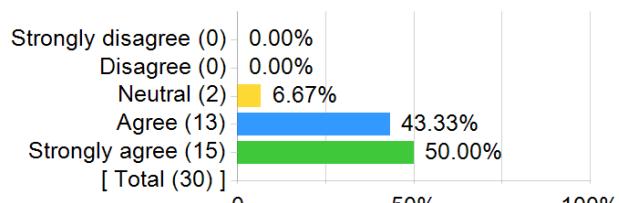
1. The instructor stimulated my thinking.



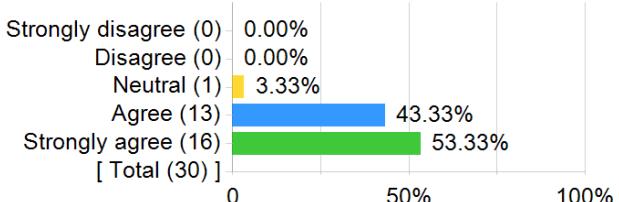
2. The instructor was enthusiastic about teaching the course.



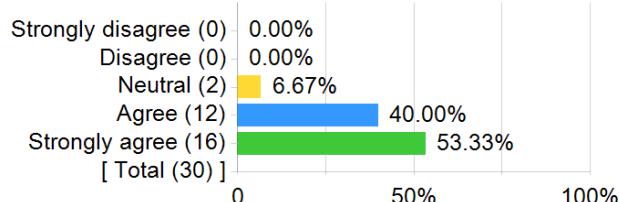
3. The instructor presented the course in an organized manner.



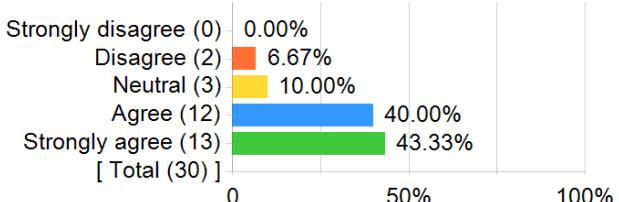
4. The instructor maintained an environment where students felt comfortable participating.



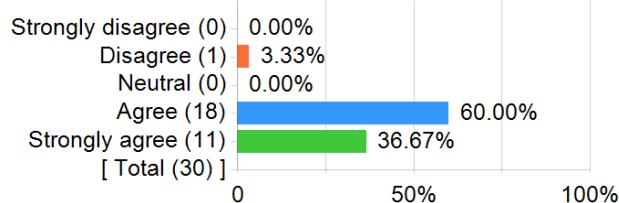
5. The instructor maintained an environment where students felt comfortable seeking assistance.



6. The instructor provided helpful feedback.

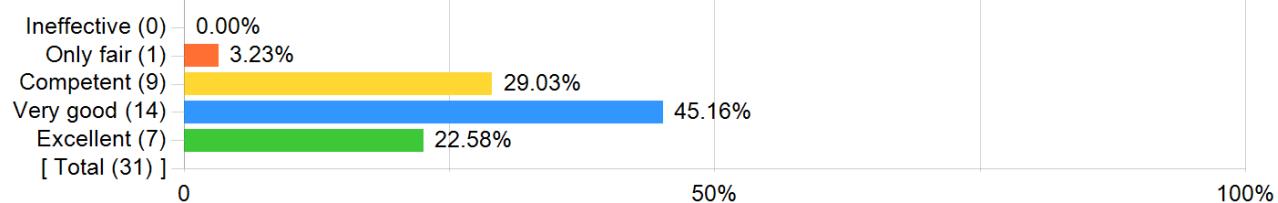


7. Assignments contributed to my understanding of the subject.



## 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 always broke down problems step by step

Went through examples in class, explained concepts

He related the course material to practical application of power plants to make me draw conclusions about the course material.

Lee did a good job of making the class relevant to the real world without wasting a lot of time talking about real world examples that are irrelevant. I thought the subject made sense and he was very encouraging and enthusiastic each class, not stretching class out longer than it needed to be. He also made sure to reach out to me personally to congratulate me on doing well on my exams which I appreciate greatly.

He was very helpful in office hours and available outside of class.

Took the time to divert from the powerpoints and talk about the specific points in his perspective

He was very helpful during office hours and always made extra time at the end of class to help his students

Posted homework and midterm solutions.

His class environment was really open. Lee is an awesome guy who you always feel comfortable asking for help.

I learned about how to properly approach thermodynamic problems. I learned how to make certain assumptions, use given data to extrapolate so much information for one thermodynamic problem.

The 0th, 1st ,and 2nd laws of thermodynamics.

His enthusiasm and walking through examples with us

Very accessible to questions, willing to answer anything and put extra time in to help you understand the subject.

Lee is very good at making people feel comfortable. He does a lot of examples on the board. During office hours, if you ask him to do a question, he will sit down with you and make sure you fully understand the concepts and he is able to do it correctly himself.

powerpoints, drawing on board, many office hours to help, stayed after class and answered questions before class

Complex thermodynamics and the how they apply to real world engineering situations.

He did many examples in class that were easy to follow along.

Mr. Dosse seemed to really care about us learning and understanding the material. Going through the examples on the board is always helpful, as the student sees the steps and processes of the problem. Mr. Dosse is really easy to reach with any questions. The fast email replies are great. He seemed to really try and connect with us students (i.e. not talking down to us like we're not good enough to be there) which made for a very comfortable environment. Students in the class were not afraid to ask questions on material they weren't clearly understanding. I do not see that in any of my other classes.

Writing out examples on the board in class

the homeworks were good practice to be sure you understood the lecture content

He was enthusiastic and gave helpful example problems. He also made sure to be available outside of class.

I am retaking thermo from Barry in the Spring and I have enjoyed it more and learned more this summer, and while the exams still tended to be tricky I felt good about my comprehension of the theory overall.

He was very good at teaching concepts and ideas.

Lee was extremely helpful in office hours and you can tell he really wanted to convey the material to his students in lecture. He was always willing to go through things and ask thought-provoking conceptual questions to see if we were grasping the material, not just learning how to solve the problems. Unfortunately due to the amount of material, it seemed rushed at times.

## What could the instructor do to improve?

### Comments

It would be helpful if the lecturing part was slowed down so concepts could be understood more before delving into examples.

Help students understand the thought process behind solving each problem, understand the steps of what to do.

Nothing really

I think the whiteboards were occasionally ineffective and there could have been other more useful teaching methods. The slides released to courseweb were blank, so they were not incredibly useful to learn from on the chance that you did not make it to class. The technique of using a digital pen on the slides worked well, but in the beginning of the semester I often felt rushed or that the class was going a little too fast.

Slow down on the powerpoints, take more time to clarify subjects, and make exams closer in difficulty to the homework/in class problems.

Make the examples for the powerpoints himself, so the test questions seem more familiar.

I'm not a big fan of the power points, because I don't like annotating the slides, so sometimes it would be hard to write down all of the information before he clicked to the next slide, but that's just a personal preference

I felt as if I could have done far better on the tests given more time. My grades on the tests are disproportionate to the grades I would get on the homework and quizzes.

Write out the reason for doing parts of problems. For example, when using the energy equation and setting terms to 0, writing out the reason would have been very helpful in better understanding reason. Many times the problems were confusing because didn't know either where to start or what to do for next step, which ended up being a keyword in the problem description.

The exams were really rough, but you can't really knock someone for that

New examples. Since I had to retake the class, I had seen many of the example problems before. It was nice seeing some of them again, and getting clarity. But at other times it was repetitive.

Maybe post quiz solutions and in class examples solved on courseweb

Make the solutions to in class problems accessible online somehow.

He could make his own slides and teach slower. Oftentimes, Lee just reads off the slides and whips through them. It is difficult to keep up if you don't print his slides.

provide suggestions for practice problems for exams

Slightly more prepared for example problems

Prepare for lecture examples better.

Don't make exams much more difficult than homework.

Sometimes during the lecture examples, Mr. Dosse went really fast. I found myself sometimes trying to catch up on the writing of the solution that I couldn't completely focus on WHY we were taking these steps. I personally did not like when he had a student come up to the board and do a complete lecture example. Lecture examples are what really help me grasp the material. I'd rather Mr. Dosse have a student "guide his writing" on the board from their seat if he wants more student participation. Then, if they are incorrect, Mr. Dosse can easily say no and we can continue the problem the correct way. I think this would be a great compromise between Mr. Dosse going too fast and still having student participation.

Give tests a wider spread of topics and difficulty. Possibly by mixing in more shorter, theoretical questions.

the exams differed in difficulty from the homework a little too much. It made studying feel impossible. like there was no way you could practice enough to be prepared for the exam...

The class was very rushed so it was difficult to comprehend a lot of the lectures as they were happening.

I would attempt to try more complex multistep problems in class as examples, I think it would help theory comprehension even more.

The exams were a bit more difficult than homework and quizzes.

I think the lecture slides could be improved, since they could sometimes be disorganized or confusing, but that isn't Lee's fault since they aren't his slides. Perhaps doing calculation examples on the screen with a stylus could be better since writing on the whiteboard can get small and faded.

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

## Comments

Great job teaching the class, hope to have you again in the future.

I think he was a good teacher and very encouraging. He is willing to change and adapt which is important. He also was helpful if you reached out to him because he knew the subject matter well. I wish the office hours were easier to find

I learned a lot in this class and I appreciate the time you took outside of the classroom to help my understanding.

It was a very easygoing class environment.

He was my favorite teacher so far during my time at Pitt!

It would be more helpful to have more study materials. The textbook has plenty of this but it doesn't have the style of problems that were seen in homework or exams for the most part. A study guide and a list of practice problems for each exam would have been immensely helpful! Some parts of the exams were very unforgiving, especially the last problems with all those variables that had to solve for and if you didn't find that one key piece, you wouldn't be able to find the rest.

Great job teaching!

Sometimes the exams were at a caliber of difficulty I wasn't expecting. I understand they are supposed to be challenging but even after studying book problems, and homeworks and quizzes. I still didn't feel prepared.

Teach all my classes

You are an A1 teacher. Also, your office hours are kind of inconsistent, but when you are there and it is a lot you are always willing to help and very helpful.

thanks!

really good lectures, really appreciated the visuals and real-life examples you demonstrated.

Hi Lee

Please continue being a professor. I'd gladly take another class taught by Mr. Dosse.

I really enjoy the subject of thermo. It's one of the few subjects where I find myself taking the material and applying to things I see in my daily life outside of class (from cooking, to power generation, refrigerators, etc).

However, I really wish I didn't feel so hopeless studying for the class... It's difficult to understand how one can get very high quiz and homework grades then fail exams? studying for the final felt overwhelming :(

Much better than Barry

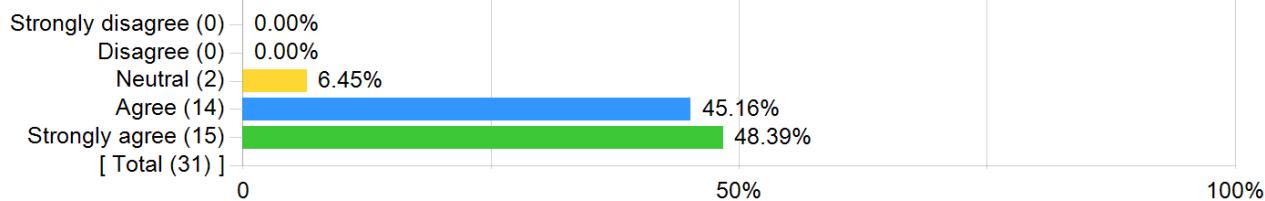
I think that when the class is taught in the future it should be held in a different room since the seats and miniature desks make it difficult to hold notes, equations sheets, laptops, calculators, steam tables, etc. Especially during exams, it's nice to be able to spread out a little bit and the room definitely limits that.

## ENGINEERING

### Swanson School of Engineering Items

#### The instructor was accessible.

The instructor was accessible.



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

##### Comments

Reading the book and highlighting all main concepts and identifying them in every example problem you do would help you learn better.

Lots of practice problems

Make sure you are ready for difficult exams. Study more than you think you need.

Do the homeworks well and make sure you understand all of the various cases when all of the equations apply.

Look through textbook more often

GO TO OFFICE HOURS!!! And make sure you understand the homework

Write down or take picture of all the practice problems and print out slides!! You wont have time to write them down since very fast paced.

Study harder than you think you have to

Do the homework.

Learn your way around the steam tables (i.e. be able to flip to the right page almost immediately to save yourself time)

Fill out as much as possible for each state. Even if you don't use it, at least you'll have it just in case.

Do as many practice problems as possible and understand why you're doing what you're doing.

The timed tests are awful and if you have to stop and think you will fail

read the textbook more often and try more practice problems

Office hours, go back through homeworks in more depth

Read the book. Be smart. Don't be dumb. Make sure you understand the concepts in addition to the math.

I wish I would have read the textbook more and do more in-text examples before a midterm.

more practice problems before the exams? I guess? Don't think that you understand the material just because you do well on homeworks and quizzes

Ask for help on the HW if you need it.

definitely practice and understand the concepts

Go to office hours, take good notes in lecture, be sure to raise your hand and ask a question when you don't understand something.

## ENGINEERING UNDERGRAD

**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.	30	4.00	0.74
Your ability to identify, formulate, and solve complex engineering problems by applying principles of science.	30	3.93	0.64
Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics.	30	3.67	0.80
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare.	30	2.87	1.07
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).	30	2.70	1.15
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of environmental and economic factors (i.e., sustainability principles).	30	2.87	1.07
Your ability to effectively communicate verbally with a wide range of audiences.	30	2.30	1.32
Your ability to effectively communicate in writing to a wide range of audiences.	30	2.27	1.28
Your ability to recognize ethical and professional responsibilities in engineering situations.	30	2.73	1.17
Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles).	30	2.77	1.22
Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles).	30	2.83	1.21
Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership.	30	2.50	1.53
Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives.	30	2.50	1.53
Your ability to develop appropriate experiments.	30	2.43	1.45
Your ability to conduct appropriate experiments.	30	2.27	1.34
Your ability to analyze and interpret data and use engineering judgment to draw conclusions.	30	3.50	1.07
Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems.	30	3.70	1.02