



Spring 2018 - Matthew Barry MEMS 0051 - INTRODUCTION TO THERMODYNAMICS - 1060 - Lecture

Project Title: **2184- Teaching Survey Spring 2018**

Total Enrollment: **120**

Responses Received: **120**

Response Rate: **100%**

Subject Details

Name	MEMS 0051 - INTRODUCTION TO THERMODYNAMICS - 1060 - Lecture
DEPARTMENT_CD	MEMS
CAMPUS_CD	PIT
SCHOOL_CD	ENGR
CLASS_NBR	14984
COURSE_NUMBER	51
SECTION_NUMBER	1060
TERM_NUMBER	2184
COURSE_TYPE	Lecture
CLASS_ATTRIBUTE	
First Name	Matthew
Last Name	Barry
RANK_DESCR	Assistant Professor
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: **Thu, Sep 13, 2018**

University Questions

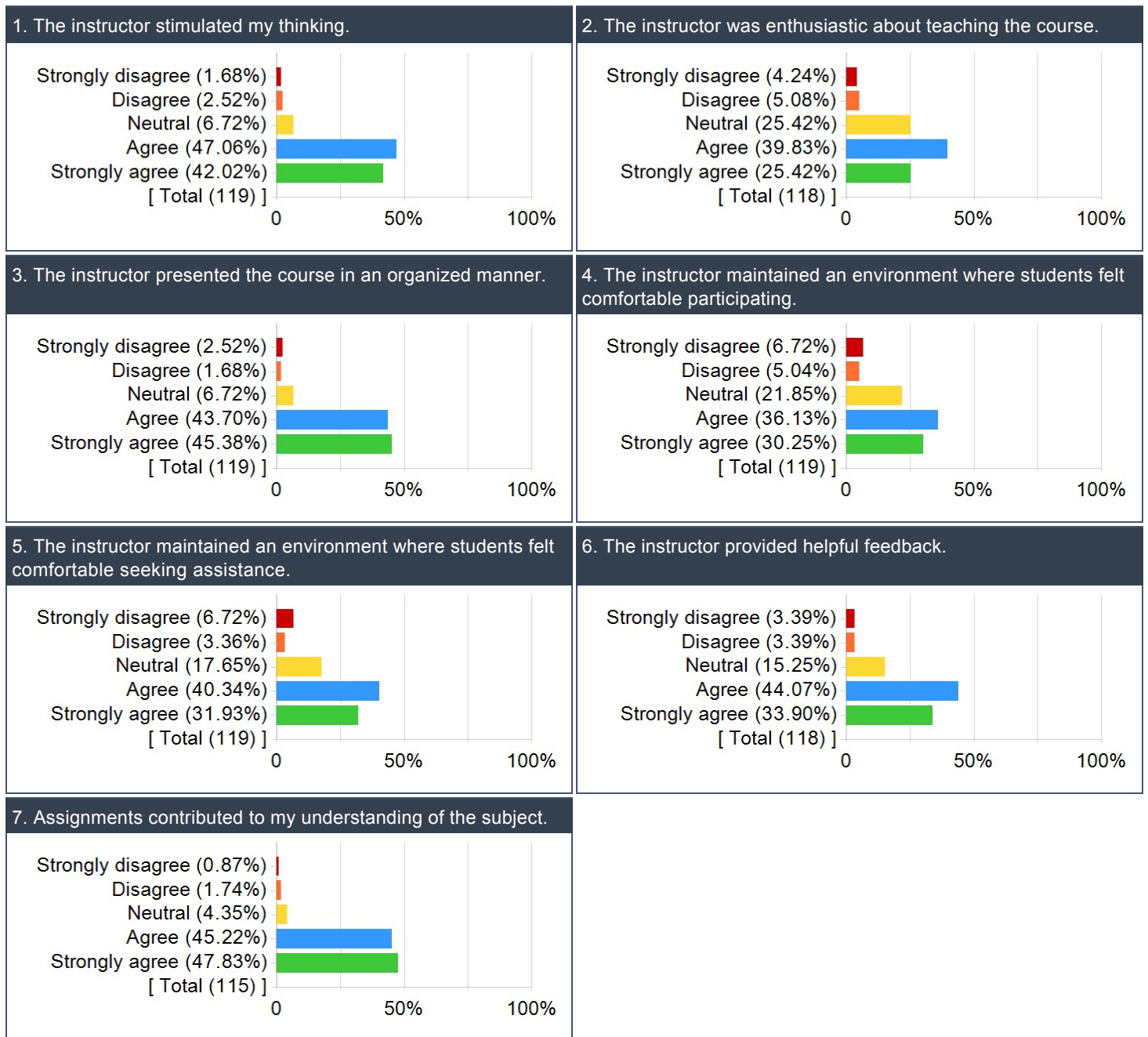
Instructor Summary of Results - Scale: Strongly Disagree (1) to Strongly Agree (5)

Question	Results		
	Response Count	Mean	Standard Deviation
The instructor stimulated my thinking.	119	4.25	0.83
The instructor was enthusiastic about teaching the course.	118	3.77	1.02
The instructor presented the course in an organized manner.	119	4.28	0.86
The instructor maintained an environment where students felt comfortable participating.	119	3.78	1.14
The instructor maintained an environment where students felt comfortable seeking assistance.	119	3.87	1.11
The instructor provided helpful feedback.	118	4.02	0.97
Assignments contributed to my understanding of the subject.	115	4.37	0.73

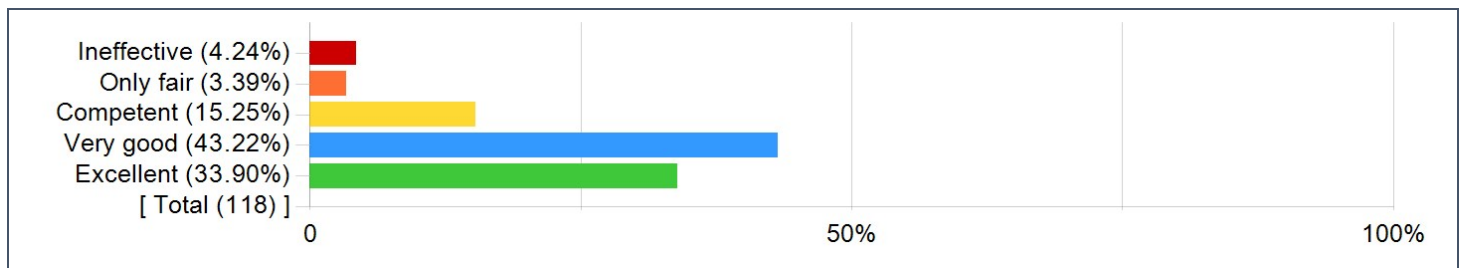
Instructor's overall teaching effectiveness

Question	Results		
	Response Count	Mean	Standard Deviation
Express your judgment of the instructor's overall teaching effectiveness.	118	3.99	1.01

Instructor Items: Detailed Results



Instructor's overall teaching effectiveness:



Comments

What did the instructor do to help you learn?

Comments
any time the class as a whole seemed to struggle with a particular topic on a quiz or homework assignment, he made sure to go over that topic again and clear up any confusion and answer questions about it.
Introduce concept first and show a lot of examples.
The fill-in-the-blank style powerpoints were great, and an unsubtle prod to make it to the 9am class. The step by step homework solutions really helped to see where mistakes were made, and made studying much easier.
Provided lecture slides and example problems
The slides used in class were always helpful because I could go back and review them if I didn't understand the first time. Also, the use of diagrams and pictures was helpful.
I was able to understand the concepts fairly well when he was explaining them in class throughout the lecture slides.
The lectures were very thorough and worked through all the parts leading up to the solutions, as opposed to just handing us a bunch of equations without knowing why we were doing what we were doing.
Note format was very helpful, with supplemental notes being given during class. Homework assignments were very well put together and gave you a good indication of how well you understood the material.
Dr. Barry helped me learn about Thermodynamics, critical thinking regarding assumptions, the usefulness of published data, and that office hours are extremely important.
His occasional asides are helpful for getting an understanding on how we will apply what we learned in the real world.
Helpful during office hours
interpret problem texts very carefully. Consider the context and implications each word carries.
Dr. Barry gave good example problems in class and good homework problems to teach important and relevant concepts.
Dr. Barry broke down examples and other problems down into a step by step process that was easier to pick up on than most other methods.
Online lecture notes were very helpful, solutions to quizzes provided, effective test reviews
Reviewed problems during class and answered questions we had. Gave out difficult homework that forced us to understand the material before moving on in the course.
Clear explanations for concepts.
Gave good examples and went over notes
upload course slides
Explained lecture slides thoroughly
He gave very good lecture notes that were easy to refer back to during assignments and to study for exams.
I like the homework assignments. They are conceptual as well as mathematical which is a good setup for learning/reviewing material. Its especially useful for when you miss a class. The slides had great information as well!
Explantions and examples in class were well explained. Usage of steam tables will help for a long time.
told jokes
Several helpful in class examples
Presented the material in an organized and chronological manner, allowing previous lessons to build on each other for a firm understanding of the material covered. Also allowed an open environment where people were open to ask any questions.
Encouraged a deep understanding of the material.
Consistent homework and quizzes kept me constantly involved in the course.
Patient Office hour
Weekly assignments and quizzes.
detailed hw solutions
Comprehensive slides made studying easier, but...(see next section)
he helped me learn about the processes involving conservation of energy and how they relate to real world applications.
Notes were provided before lecture
Concepts were explained well with examples.

Comments
did examples
EVERYTHING! #GOAT
We had lots of examples that we worked through in class to help our understanding of each topic.
Give lots of stuff to study off (LECTURE EXAMPLES, QUIZZES, AND HOMEWORKS)
class quizzes
About processes
Lots of examples
Material was presented clearly and in an organized manner
Honestly, very little. Only thing that perhaps helped me learned a little was the fact that his lectures were posted online so i could always go back and look if i missed something when doing homework.
really tough quizzes
The power point slides were very thorough. I liked how he completely explained the assumptions and derivations for each equation we used.
He gave relevant homework assignments and solutions so I could make sure I was effectively understanding the material.
Went over hard examples
.
Provide derivations for formulas rather than just stating them as facts. This helped tremendously with understanding why certain things were true.
Good Notes
mentions of real world industry scenarios helped put class into context. Style of lecture and use of slides made class easy to follow along
Thermodynamics
posted notes online, provided practice exams
Very effective teacher
Presented the material and the origin of the material and then emphasized with examples
nothing
Worked out problems by hand
I thought lectures were very effective and informative.
Did example problems in class.
He is available to students through emails.
provided intensive in class examples
Professor Barry was great all around – the in class examples and explanations were very well done and I thought that the assignments were great at provoking further thought.
He gave good examples during lecture and the homework was very helpful when studying for tests.
Lectures were clear, easy to read up on information again when looking back on notes
Provided an excess of helpful materials both in and outside of lecture
He's really makes you want to learn and do well. Barry is a little tough, but i definitely won't make the same errors again.
Meaningful example problems, not just "oh this problem equals zero" kind of problems. Made me think about what was actually happening in the process.
Made sure lectures, homework, quizzes, and exams connected; held sufficient office hours; outlined the course in an organized manner; did examples in class so that we could learn how to approach and think through problems
he was very good with his worked out examples.
Walking through examples in class was very helpful.
Presented the key concepts and gave pretty good examples
He was very open for office hours and put up organized lecture slides. His lectures were organized and effective.
Provided many examples and spent a lot of time explains the theory behind the topics.
His lectures are very well organized and comprehensive. He also draws analogies between various phenomena and others covered in different courses. He clearly takes care to ensure that his slides are well–designed.
Printed lecture slides

Comments
Clear and consistent notes, good office hours, available and response to emails.
He used real world examples to bring the material into focus.
Was very effective in teaching the principles and I will benefit greatly
Thermodynamics and that the bars open at 10
homework solutions are very detailed
The instructor provided ample study materials and schedules on courseweb. Having the option to print the lecture slides before class was helpful. The instructor is very knowledgeable on the subject
Thermodynamic laws and principles, steam table mastery
Providing online slides and homework solutions were helpful for studying for exams
Everything
Hall of Fame level Professor

What could the instructor do to improve?

Comments
Show more examples fully through
maybe go over a few more practice examples in class
No
When class is cancelled there must be a better way to communicate that other than school email. Otherwise, good class.
Proof read the homework.
More practice problems/examples.
Not as many slides dedicated to the derivation of equations, more focus on actual application of equations in different situations.
More examples for the material would be greatly appreciated. There is some material that appeared in notes that I never saw in homework, and didn't know what to do with it, or how to solve a problem regarding it.
Be more understanding of questions that arise during class. Also, post notes earlier so that students have enough time to print them out follow along during class.
Not much to improve. Maybe a bit more enthusiasm?
Nothing that I can think of. Review sessions before exams would be good but he has a busy schedule.
Make the notes for the course more accessible
Not really an 'improvement' per say. For more difficult and involved concepts, maybe suggest optional problems from the book or otherwise you deem relevant to the reinforcing purpose of the lesson. The book did not always have the same quality of problems as the homework for some reason.
I'm a little conflicted about this: when we all got Carnot cycle quizzes back and you said that only one person got an 100%, I was definitely frustrated. But I like being forced to conceptualize and think. I think that you can challenge students on a conceptual level without framing it in such a way that students almost unanimously feel sabotaged. Personally, the only thing I needed to start viewing Thermo through that lens was a bad grade on that quiz, so if you could give a story or lecture that forces students to 'wake up' instead of hitting them with an inevitable bad grade, that would be a lot more fair.
Dr. Barry could be a little more organized with his material, such as posting notes and homeworks with a little more consistency.
Possibly answer some homework questions during class
Don't be as condescending. I appreciate your jokes, but it's too far when it puts down another student. You may call us dumb, which is funny, but I know numerous students who went out of the way to not go to office hours because you made them feel bad.
Less quiz
don't take off so many points for units and getting a wrong number on homeworks, exams
please correct your answers in examples and attend on time
Not missing class as often (just kidding)
Having the notes available on courseweb by a certain time.
I would like if the notes he took were uploaded on top of the slides he already uploads. I know it might encourage skipping(which everyone does from time to time) but it nice for when you lose track of whats happening in class don't get all the notes down comprehensibly.
Not much. Maybe getting the second test back in a timely manner. Very well done class overall however.

Comments
Put notes on courseweb more than 20 minutes before class starts
Put the slides up on time
More examples and going over difficult homework problems
Design assignments to more closely reflect the format of exams.
ppt with notes
Continued through the end of the semester with the weekly homework and quizzes...
more partial credits on exam
This is more a personal preference than anything, but I feel I learn more in class when I have to take notes based on what the professor himself writes on the board or says aloud. Taking notes from PowerPoint presentation tends to be less effective.
I would give out more difficult homeworks in the future.
Don't post lecture slides five minutes before class.
do examples that you ask us hw questions on because it doesn't make much sense
Stick to the schedule. Make sure answers on the few amount of study material we're given are both there and correct because a lot weren't which makes me mad.
Hes already the best so nothing?
not entertaining everyone's question every 5 seconds
more visual examples
N/A
Maybe demonstrations of some of the concepts
Care. To be honest, i don't think Dr Barry is a bad person but i do think he lacks conviction. It was very evident that he does not enjoy what he does and often mentions in a joking yet serious way how sad the lives of engineers are. You could tell that he is just going through the motions and collecting pay checks. During reviews he would get mad if a student did not know the answer to the question the very same student asked and rather than clarifying, he would look down on the student and make him feel bad for not knowing. It is advertised by every person in the department to feel comfortable and ask questions, well I have never felt less incline to do so in my life. That is the effect Barry's attitude had on me.
MAKE QUIZZES AND HOMEWORK WORTH LESS PLEASE! I GOT AN A ON BOTH MIDTERMS BUT I AM NOT GONNA GET AN A IN THIS CLASS BECAUSE QUIZZES AND HOMEWORKS WERE GRADED HARSHLY
Be more willing to answer questions, be more willing for students to come to office hours.
Provide study guides or practice exams.
Better hw
.
Be more open to questions from confused students.
No
be more approachable in office hours, I DO NOT WANT TO KNOW HOW MUCH YOU DONT WANT TO BE THERE. Also if you say your office hours are 1–3, you should not tell me at 2 that I “better be quick” because you have somewhere to be. Chegg can answer my questions better than a rushed professor
all good
better in class examples
provide all of the lecture slides before the class, not just some every now and then
He is not approachable and his teaching method is disorganized and confusing. He seemed to give up on the class (for instance he stopped giving weekly homework at the end). His first exam especially did not reflect the materiel that was taught in class and that was given for homework.
less percentage on hw and quizzes
everything
Nothing
For one quiz, 98% of the class got a question wrong, but the instructor believed it was the class's fault for not paying attention. Personally, if the entire class doesn't know a piece of information, then it was most likely not reviewed at all/properly in class.
Put course material on courseweb in a more timely manner.
Explain concepts better.
Make clear assumptions for homework, quiz, and examples.

Comments
Do not cancel lecture too often.
Get better TAs
Spend more time on the P-v and T-v diagrams when covering chapter 2. Students seemed confused by them at first as it took a while to fully understand them.
Nothing
unsure, he has created a very functional course
Be more open to students asking questions
Give a list of problems to do in the book.
Be more approachable. We get it, life is hard, but you do not have to take it out on the class. It seems like you hate life and that overshadows your teaching ability and the ability for students to connect with you as a professor. Also, try and take it easy because you're doing a lot and the class got unorganized and sloppy at some points and that was not beneficial to me trying to learn and do my best.
Not be so hard on the people asking questions. The student may have a question that has a straightforward answer. and it may seem dumb but that person is paying money for an education
Slow down a little bit on examples, we can move a bit fast, especially at first.
Give harder homework that is indicative of the test difficulty and helpful for test preparation.
I feel it would help if the homework problems would be more difficult then the tests problems.
Try to have a little more patience with people during lectures ;)
More example problems
More videos and in depth explanation of processes and why things happen the way they do.
Not much, he is awesome
Not get angry when students ask questions. We are college kids and we arent experts like you! You make us feel stupid.
Grading was terrible. No partial credit, this class wasn't an industry job and he taught it as such. A's became C's from 1 problem with no partial credit given
Don't yell at students if they don't understand something and don't thoroughly discourage students by saying how badly you just want to go drink away pain due to the bad test scores before and after an assesment. The depressing comments made me feel like I was supposed to fail.
the thermo knowledge is kind of complex and tedious, maybe spending more time to construct a structure could be better
Sometimes the instructor will get frustrated with some of the student's questions, and does not always answer them in a comprehensive way. I do not feel comfortable asking the instructor questions
Use the whiteboard for long examples.
Providing more worked out solutions or dedicating more time to example problems
Nothing
More Office Hours

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

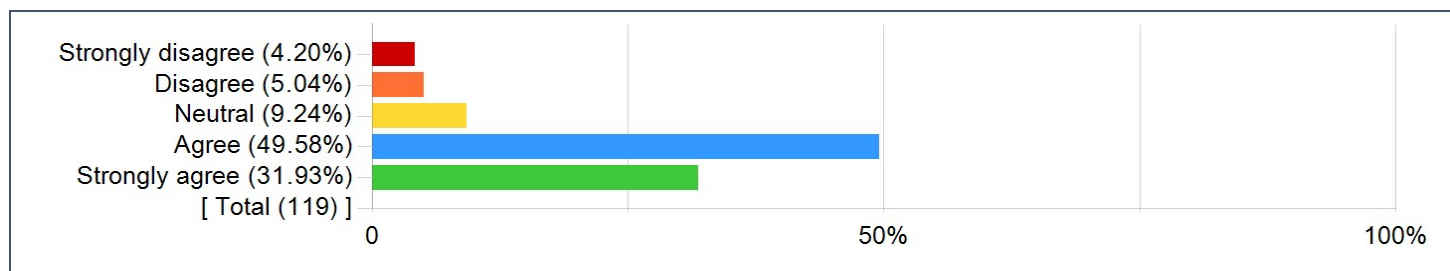
Comments
NO
You're easy to learn from, and definitely present material in a way that promotes understanding over rote memorization. Thanks.
no
Take some extra time to explain more difficult concepts in lecture that not everyone may understand the first time.
I appreciate the patience you generally had with the students, as this material is very different from classes we have had in the past, and creates a learning curve for us to get past.
It's nice to have a professor that cracks jokes and keeps things light, especially during 9am Thermo!
He is the best professor I have had, bar none. Test are fair and I feel more prepared for subsequent classes than any other professor.
He is very cool
You're such a pessimist that learning becomes frustrating. I feel like thermo is my obligation to know as an engineer, like it's some kind of chore. I know you stand for lifelong learning, so stop saying stuff like "one more lecture/quiz/minute and we're done."

Comments
(Admittedly, maybe this is just me, maybe that method does actually motivate most students). Later on these OMETs it asks if we pursued any additional thermo learning through the textbook problems or any other methods, and I didn't even realize that was the expectation—I honestly thought that the bare minimum would be enough to get past this class, since that's the only thing that had ever been demonstrated to me. At this point, I feel like that's my fault for being lazy/optimistic, but I also think that you should at least consider that your behavior, as a professor, will be reciprocated by your students in some way or another.
I feel that Dr. Barry is a great professor to have for this class because he has a very logical way of laying the information out and is always willing to help students clarify information.
N/A
Partial credit boosts morale. We may be dumb, but zero credit when we work hard for something is not positive reinforcement.
no
upload slides on time
Sarcasm=much appreciated
I learned a lot in this class and it was a good base to build on for the rest of my engineering career related to thermodynamics.
Thanks for this semester.
I needs those slide
Nope
Liked your deadpan humor :) but sometimes it made it harder to approach you with questions
Give partial credit for test problems People understand the concepts but plug it into their calculator wrong.
I missed class a few times cause I was hammered
REALLY GOOD PROFESSOR WOULD RECOMMEND AGAIN 10/10
N/A
Either put all of your effort into what you are doing or do not do it at all. It is unfair to the students who come ready to give it their all and you only provide 40%. It was a very disheartening experience to have you as my professor this semester and I hope I never have to take a class with you again. You should take after DR Ian Nettleship And Sung Kwon Cho. Perfect examples of top of the line staff.
get new TA
I really enjoyed having you as a professor.
No
.
No
your lectures and homework assignments were really good, but your attempts to gain pity with us by complaining about pitt did not make me feel happy to be in your class
One or two of the homework assignments were written by the other Thermo professor, so they weren't exactly consistent in difficulty and relevant material with our normal homework. Minor issue, not really his fault.
nope
terrible man in general
No
Although I did not find class interesting, it was taught in an effective manner
Thank you.
I still don't really know what entropy or enthalpy are but hey I can calculate them
It took me a while to get used to the style of the course and Professor Barry and it was frustrating at first – the details really count with grading and understanding. Once I got used to it I really do get it – it helped me learn substantially more. I can honestly say I learned more in this class than really any other and Professor Barry solidified his place as one of my favorite professors.
Again, Dr. Barry is one of the best ME professors here at Pitt.
dont change... i dont know how or why it works, but i feel like i have learned so much because of the way you teach. I always enjoy coming to class.
n/a
I've talked to other classmates and students that have had you before and they all agree your attitude sucks. It is okay to be sarcastic but you take it too far sometimes.
You're a cool cat.

Comments
A recitation might actually be really helpful for this course, just because of the fast pace and breadth of information.
The course was well planed out and went smoothly.
N/A
No.
You are the man, don't let anyone else say otherwise
Overall not very nice, and not effective at teaching. Wouldn't take again.
grading
If you told me the same professor taught thermo and circuits, I would only believe you because of the bad attitude. Thermo was great because of the enthusiasm and I could deal with that but circuits was just painful because you could tell Barry didn't want to be teaching circuits.
sometimes you write too fast...
nope
He is a cool dude, 10/10 would recommend for any class.
You're my hero

Swanson School of Engineering Items

The instructor was accessible.



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

Comments
read over the notes more
print out the slides and take notes carefully
Attend lectures every time, and print out the powerpoints for note taking.
Start studying early
Office hours are so useful. Also, know your steam tables inside and out. You will underestimate how important they are.
Read the textbook, do problems in the textbook, do the homeworks over again before the exams, and before going to Barry try to find the answer in the book or notes. You'll learn more that way, and keep his head from exploding at the same time.
Re-read the notes after class. Go to office hours!
Read the book, come to class, print out the lecture slides, and ALWAYS have an annotated copy of your steam tables (for class, homework, & tests)!
Go to office hours. Many professors feel inaccessible or that your questions are bothering them. Barry is very good at connecting to students.
Review notes right after lecture
practice all the problems
Dr. Barry likes to force you to internalize concepts and dwell on them. Sometimes I found it frustrating that he wasn't as direct as he could have been, but he gives you all the information you need, so just take what he gives you and think about it.
I could have seeked out more help when I needed assistance understanding a topic or problem, which would have given me a better understanding of the content of this course.
Don't use ideal gas law for water
Be more understanding when we don't understand a concept early on. Explain in simpler terms. If the entire class doesn't understand a topic, there is a good chance that it's not our fault.
Take notes, practice for quizzes
predict the unpredictable, be more aware, work harder
review hw for exams
Study for the quizzes before class.
The notes and the slides have really great information so the book isn't entirely necessary. That being said the book did come in handy when I just didn't understand material at all.
Know that your steam table is your best friend.
Open your door during office hourrs
Do homework and in class examples
Understand WHY you are using each equation and what situation each is for. An understanding of why to use each equation greatly improves ability in the class as you see many different situations.
Reading the material and practicing problems from the text makes the course much more intuitive.
More time
Study, study, and study for the exams. They can make or break your grade early on.

Comments
do hw
Make sure you are taking the time to understand the processes from top to bottom and not just how to use the equations.
Just do the work and study. Simple as that
If you get a homework back and didn't understand the concept make sure you learn it because you'll see it again.
Just hope you have good friends cuz this guy is too smart to teach beginners.
Choose a different instructor
Prob not get so drunk and go to class more
STUDY OFF OF HOMEWORK AND QUIZZES AND YOU ARE GOOD FOR EXAM
keep on up homework and the material and seek help when you need it do not wait until it is already too late
HW early
Go to office hours
Take another teacher if possible and i mean that in the most sincere way.
nothing
Start studying earlier and spend more time with the material before exams.
Paid Moe attention to quizzes
.
Go over homeworks and quizzes prior to exams.
No
Make sure you do and understand the homework clearly. Go to office hours and get clarification.
do the homework, study for the quizzes, redo the homework to practice for the test
try to care somewhat
dont take this class
Nothing
Do practice problems from the book
Please learn by yourself.
read the textbook
Learn how the STEAM tables work and read the book
do the homework, and listen to his advice
For the love of god practice solving problems.
Try and email him for his office hours ahead of time because sometimes he does not show up and then you will not be able to get the help you need.
Go to every class and make sure you record the examples done in class, they are essential in performing well.
Definitely take notes on lectures ahead of time, it can be difficult writing while Dr. Barry is talking.
Know your stuff
Go to office hours.
Read the book it will help you understand everything that is going on.
Know how to solve process-related problems upside-down, wearing a blindfold, and with your hands tied behind your back, all in a span of 5 seconds.
Go to office hours
Studied more.
Woke up more
Don't take professor Barry
make sure you do the problems correctly
Barry has a certain sense of humor, don't take it personally.
read solutions carefully!!
Print the slides out, and attend every lecture
This is a course where understanding the principles is what really counts. Not speed through a problem, only understanding it

Comments
thoroughly.
Do practice problems outside of homework assignments. Learning the application is important
Keep up the good work
Be prepared for a hard first exam

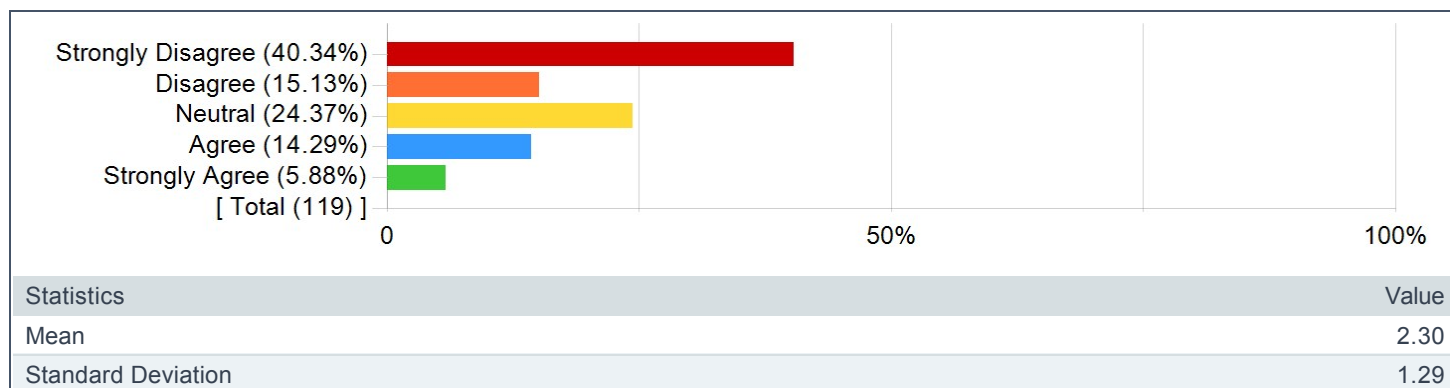
ENGINEERING UNDERGRAD

This course has improved my:

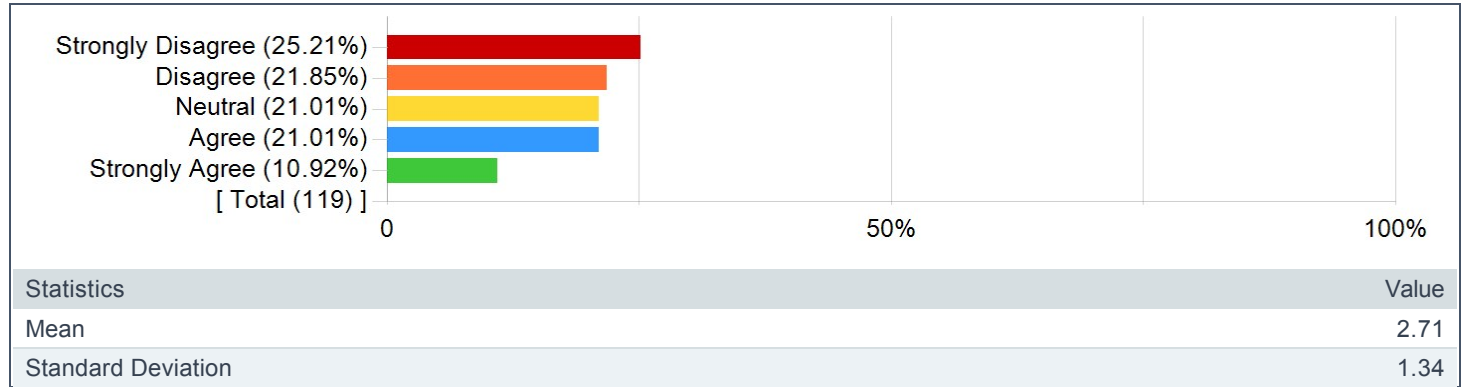
Question	Results				
	Response Count	Mean	Standard Deviation	Min	Max
Ability to use math concepts to solve engineering problems.	117	4.17	0.82	1.00	5.00
Ability to use chemistry concepts to solve engineering problems.	117	3.34	1.17	1.00	5.00
Ability to use physics concepts to help solve engineering problems.	117	3.78	0.92	1.00	5.00
Ability to use engineering concepts to help solve problems.	115	3.97	0.93	1.00	5.00
Ability to design an experiment to obtain measurements or gain additional knowledge about a process.	116	2.86	1.40	1.00	5.00
Ability to analyze and interpret engineering data.	116	3.47	1.15	1.00	5.00
Ability to design a device or process to meet a stated need.	117	3.18	1.33	1.00	5.00
Ability to function effectively in different team roles.	116	2.15	1.35	1.00	5.00
Ability to formulate and solve engineering problems.	117	3.72	1.03	1.00	5.00
Ability to use laboratory procedures and equipment.	116	1.69	1.18	1.00	5.00
Ability to use software packages to solve engineering problems.	117	1.60	1.16	1.00	5.00
Ability to use CAD software.	117	1.55	1.21	1.00	5.00
Knowledge of professional and ethical responsibility.	116	3.05	1.29	1.00	5.00
Ability to write reports effectively.	117	1.80	1.25	1.00	5.00
Ability to make effective oral presentations.	117	1.66	1.25	1.00	5.00
Knowledge about the potential risks (to the public) and impacts that an engineering solution or design may have.	117	3.41	1.24	1.00	5.00
Ability to apply knowledge about current issues (economic/environmental/political/societal/etc.) to engineering-related problems.	117	2.98	1.40	1.00	5.00
Appreciation of the need to engage in life-long learning.	115	3.62	1.12	1.00	5.00

Personalized Questions

Did you read the assigned sections of the text prior to class? Select Strongly Disagree to signify "no, never", Strongly Agree to signify "yes, always", or the remaining to signify the degree of frequency for which you completed the assigned reading within the text.



Did you complete the examples problems and problems at the end of the chapter within the text to fortify your understanding of the course material? Select Strongly Disagree to signify "no, never", Strongly Agree to signify "yes, always", or the remaining to signify the degree of frequency for which you completed the example problems within the text to fortify your understanding.



Did you attempt to find additional examples problems within other texts or online to fortify your understanding of the course material that the prescribed text and lectures were not able to provide? Select Strongly Disagree to signify "no", Strongly Agree to signify "yes", or the remaining to signify the degree of frequency for which you completed the example problems within the text to fortify your understanding.

