



## Fall 2017 - Teaching Survey Report for Matthew Barry

### MEMS 0071 - INTRO TO FLUID MECHANICS - 1020 - Lecture

#### 2181 - Teaching Survey Fall 2017

Total Enrollment 102

Responses Received 96

Response Rate 94.12%

#### Subject Details

Name	MEMS 0071 - INTRO TO FLUID MECHANICS - 1020 - Lecture
DEPARTMENT_CD	MEMS
CAMPUS_CD	PIT
SCHOOL_CD	ENGR
CLASS_NBR	23259
COURSE_NUMBER	71
SECTION_NUMBER	1020
TERM_NUMBER	2181
COURSE_TYPE	Lecture
CLASS_ATTRIBUTE	
ENROLLED_STUDENTS	102
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** Fri, Jan 12, 2018

## University Questions

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

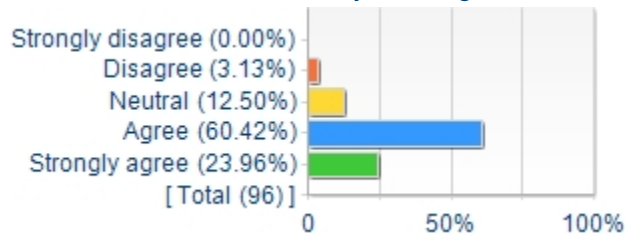
Question	Results		
	Mean	Response Count	Standard Deviation
The instructor stimulated my thinking.	4.05	96	0.70
The instructor was enthusiastic about teaching the course.	4.05	96	0.83
The instructor presented the course in an organized manner.	4.36	96	0.73
The instructor maintained an environment where students felt comfortable participating.	4.22	96	0.82
The instructor maintained an environment where students felt comfortable seeking assistance.	4.30	96	0.74
The instructor provided helpful feedback.	4.13	96	0.82
Assignments contributed to my understanding of the subject.	4.26	95	0.69

### Instructor's overall teaching effectiveness

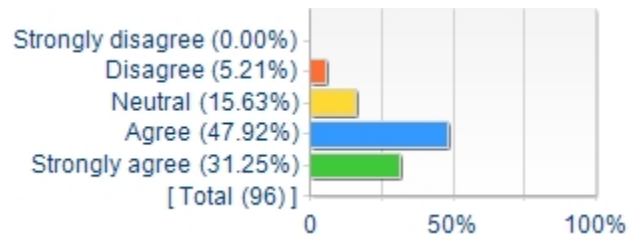
Question	Results		
	Mean	Response Count	Standard Deviation
Express your judgment of the instructor's overall teaching effectiveness.	4.13	96	0.73

## Instructor Items: Detailed Results

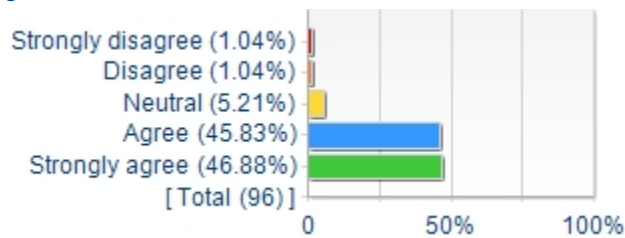
1. The instructor stimulated my thinking.



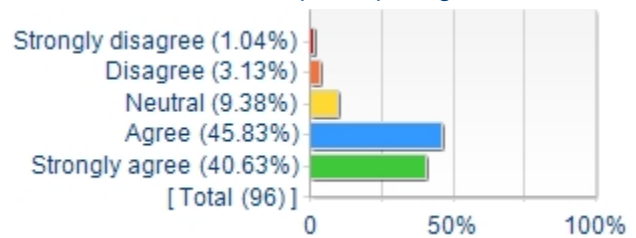
2. The instructor was enthusiastic about teaching the course.



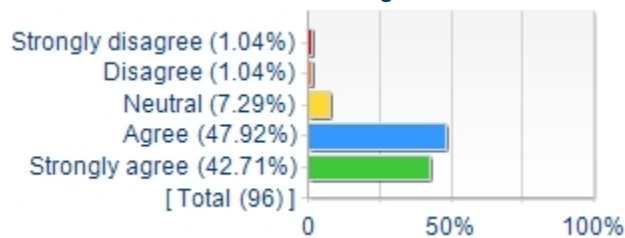
3. The instructor presented the course in an organized manner.



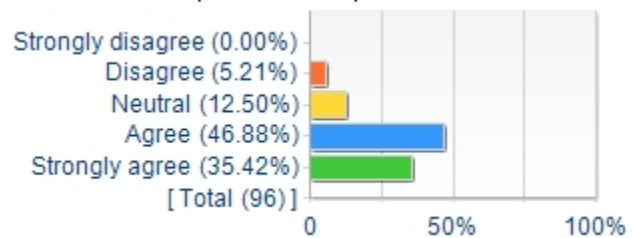
4. The instructor maintained an environment where students felt comfortable participating.



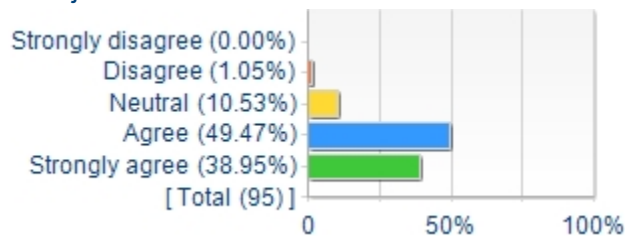
5. The instructor maintained an environment where students felt comfortable seeking assistance.



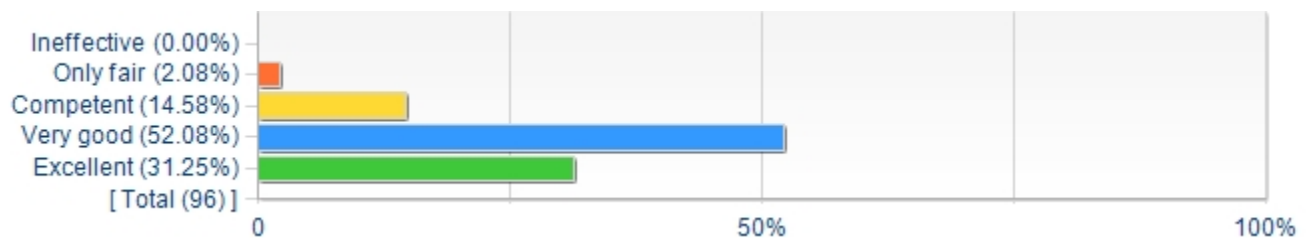
6. The instructor provided helpful feedback.



7. Assignments contributed to my understanding of the subject.



## Instructor's overall teaching effectiveness:



## Comments

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

Comments
Taught the class
Doing examples in class that are difficult and not just the simple ones.
Not much.
I liked the style of the lectures, they seemed like a pretty good mix of concepts/derivations and solving problems.
Provided simplified explanations and walked you through every step of the process. Also made sure you understood why you were doing something.
He designed test questions with 5 paragraphs of information which force you to go over every single problem in the textbook so that way you have a better chance of retaining the material.
homework was helpful
In class example problems were helpful.
Dr. Barry was incredibly available to get assistance regarding concepts or homework issues. He also put up with me coming in almost every week with questions, some of which would take upwards of an hour, and some of which were me over-complicating the issue or overlooking a concept.
Good examples
He did very detailed examples during lecture and was willing to explain then further in his ample office hours.
Homework helped to solidify new topics as learning new material in this course can sometimes be tricky. Homework solutions provided afterwards are extremely useful in preparing for exams because they explain how to arrive at an answer in explicit detail.
He made office hours abundant
In class examples were helpful
He helped me understand how Fluids Dynamics works as a whole and helped me to understand the real world applicability of fluids concepts.
Cared about getting to know students. Communicated on a casual level and made I.T easy to talk to him.
Good use of tophat to improve participation and organization. If only tophat didnt suck and lose his slides occasionally it would be perfect.
that I would like him to bring his dog to class
I went to his office hours a lot, and he was very helpful.
Examples in class were helpful
Dr. Barry was very helpful during office hours. I feel that without talking to him outside of class, I would have been as successful so far in the course.
Always open to questions, very helpful homework and very helpful at providing insights into difficult homework problems.
Gave relative examples that helped to due HWs and Exams
I thought he did a good job of explaining complex topics by going through many different examples.
Effectively balanced notes and examples.
Homework was typically very challenging, frustrating at times, since problems were very different from example problems in class, but doing them was helpful
Feedback on exams was excellent
The in class TopHat questions helped further our understanding of the material taught in class.
He is very organized, and it helps that the lectures can be found on TopHat to reference later.
Posted lecture notes online, tried to make class interactive, learned our names

Comments
Fair exams similar to homework problems
He put meaning to equations and derivations by going over examples.
Used in class exercises that students worked on either individually or in a small group
making the solutions to homework available and office hours
How to analyze fluids.
concepts of fluids
He was available during office hours.
He is extremely approachable. I always felt comfortable speaking with him after class or going to office hours.
He uploaded his in class notes to TopHat, which helped me study outside of class.
Helped me understand the derivations of some of the equations so that we actually understood where it was coming from
Dr. Barry is engaging and entertaining with students, and walks the line of encouraging students to participate but not asking too many questions to the class perfectly.
Makes good analogies relating the topics to something easily understood.
In class examples and homeworks were most helpful in learning the material
Very organized lecture with many helpful examples.
This gist of the class if fluid kinematics, reynolds transport theorem, and navier stokes equations
He was very thorough with class lectures and provided a decent amount of examples.
Homework assignments were very relevant to the material that is important to the class.
Examples in class
He provided thorough in-class examples, was willing to answer questions, and was approachable.
In class examples
Very approachable outside of class.
Infectious enthusiasm. Possibly also made me learn that maybe history would be a more realistic major.
He taught me
Very organized lectures, posted notes online.
I like the concept questions/quizzes during class. Most of all, I think they get your attention and keep you more focused. They seemed to trail off during the semester, though. I think 1 per lecture could be pretty useful.
Presented the material in a clear way that wasn't just straight out of the textbook. Also, all of the notes from class were posted online so that I could go back to the lectures and review or make sure that I didn't miss anything.
Provided useful in-class examples and relevant, challenging homework problems.
The top hat annotated slides were very helpful.
Examples
He presented the material clearly, and did not just say this is how it is, he explained why in an easy to comprehend manner.
Dr. Barry does an excellent job teaching the concepts of fluid mechanics so students have a strong understanding of the building blocks of the material
Many examples and clear explanation
Explained where all concepts were derived from which made understanding concepts easier.
Asked questions in lecture, was engaging and not boring.
He made asking questions in class or just interacting very easy which was nice in a 100+ student class.
He wrote the notes out which helps me keep up with things.
Gave three books as extra references.

Comments
Notes were well organized and provided good understanding of concepts.
He clearly laid out teaching objectives every class and helped me prepare for exams adequately.
Present in a very organized and understandable format that took baby steps in leading up to core material to ensure better understanding by students.
Dr. Barry was very accessible outside of class and obviously prioritized his students understanding of the subject. I am aware of how much Dr. Barry has on his plate and how busy he is, and yet he still poured hours and hours into preparing the lecture slides, answering emails, making a million office hours, etc. Before the second exam I spent close to 4 straight hours in his office because I felt lost, and he really took the time and consideration to go through and help me learn the material.
Going through examples to see the process of problems
Provided a good textbook
Pressure variant systems
Notes kept online
Gave very straightforward homework and practice exams as well as a good textbook recommendation that greatly contributed to my understanding of the subject
Examples were good, answered some of my hw questions
I thought the use of tophat was ingenious. Students will be on their devices anyway, so Barry was able to facilitate that in a way that kept everyone engaged.
the tophat quizzes were helpful
Examples in class were relevant and made the material easier to understand.
completing in-class examples
He provided in-class examples, derivations and explanations in a clear manner, and was almost always available in his office for assistance.
The lectures were helpful
Focuses on conceptual aspect of of problems and derives important equations. Makes sure we fully understand the equations that we are using.
Examples
Importance of mathematical knowledge and assumptions made of engineering problems.
Posted annotated notes, used to be available all the time for office hours
How to analyze engineering systems involving fluid transfer
I really liked the use of TopHat

## What could the instructor do to improve?

Comments
The proofs for equations were so in depth sometimes that I lost interest in learning the equation
Not go over the derivations so much, but rather the ideas behind the equations. I have found that I can do the math decently but have a bit of a lack of understanding of what the math actually means.
The use of top hat was detrimental to class. It was a distraction and was hardly used to engage in class. Further, at times the annotations he made on slides were difficult to read. Assignments and the content presented in class did not match well and class seemed to be a waste of time because of the lack of relevant content and engagement.
I don't think Top Hat did much to improve the lectures, especially compared to the technical difficulties. More concept questions for examples/homework might have been helpful.
Tophat sucks.
Not have test questions with 4 paragraphs of information telling a story about James Bond and his Humvee.
Forget tophat is a thing. Go back to posting annotated notes. use coursehero if you want to do quizzes, which hardly happened anyways.

Comments
Go over more examples in class or provide extra relevant problems from the textbooks to help student prepare for exams
Please don't use Tophat again, see if you can find any other program to let you do the same thing.
Not sure
Not use the top hat app. It glitches out far to often, becoming a distraction
Drop Tophat
Explain more thoroughly in office hours
Nothing on his end, only the crummy TopHat software that would always glitch out during lecture.
Maybe a few more homeworks. I realize I.T is odd to hear a student want more homework but having more assignments might motivate students to learn the material sooner than waiting till the couple days before an exam.
Find the next, actually functional tophat
he could bring his dog to class
Make old exams available and more practice problems.
More examples, less proofs. More practice problems
Include a few more practice problems/exams. Either that or point out good examples in the textbook to work through. It would help prepare students better for exams.
Bring his dog to class more often
I did not like tophat. When it worked, it was ok, but it often disrupted class.
Maybe making the material a little more engaging, but it is quite dry so I know that would be hard.
Possibly a wider variety of example problems in lecture
Spend more time on conceptual short answer questions so we understand why we use the equations.
It can be difficult to pay attention the entire class just watching a derivation. It also makes it difficult to take notes by hand. I think that might just be the nature of the course material, though, so I'm not really sure how to improve upon that.
I'm not a math based learner, so Barry's approach doesn't resonate super well with me. I feel unable to appropriately answer. He doesn't teach poorly at all
Give more examples in class and more practice problems with the solutions available
Sound more enthusiast because his energy feeds off the energy of the students. Also, I thought that there was a lot of content being explained in the slides. At times, I thought the content was either too wordy or confusing.
Promoting more group work for out of class assignments.
answers to questions are sometimes vague
N/A
solutions to practice exams
Do more examples in class. The lectures were a whole lot of derivations, but not a lot of problem solving. I understood the meanings of the equations, but not the application a lot of times. It got better as the class went along, but was really bad for hydrostatics. I also wish that the homework was easier. It was frustrating spending so much time on the homework to receive a bad grade.
I think having more grades would have been helpful. Sometimes the homeworks were spaced too far apart so there was not much to study from aside from lecture notes for the test
Derivations go quickly and can be confusing, but I feel that it never hindered by progress in the class.
Don't make students buy Tophat unless you know it doesn't suck
Do more examples with more numbers and less with just variables.
spent less time on derivations. yes the derivations are important, but spending an entire week saying " $dy/dx + \frac{\partial \phi}{\partial t} \frac{dy}{dt}$ with respect to $u$ in the $y$ direction" isn't helpful. Especailly when the homeworks are on the applications of the equations not on how to derive complex equations that took people literal lifetimes to derive.
I understand you feel that it is important for us to know the derivations of the equations, but if you could spend just a little bit less time on them it would be great.

## Comments

More examples

More examples!

The derivation based approach was good for understanding the formulas and how to apply them. It really felt like we flew through the derivations sometimes though. I'm not sure what could be done to improve it because there is so much to cover in the class and time is limited. I also think a more thorough discussion of how and why we choose our boundary conditions/make the assumptions that we make would be helpful. I understand that they follow from the properties of the fluid/system but it was the hardest part for me to wrap my head around personally. I often didn't feel completely confident that I'd made the right decisions in that regard when solving a problem.

Stimulate interest of the classroom by participating in in-class activities. Top Hat did not do a good job in stimulating my interest in the topic taught.

Can be a bit partial to students he recognizes and knows

Never use tophat again, the notes in OneNote were easy to understand. Finding a way to post those on Courseweb would probably be better. For participation, we all have to buy the response clickers anyway freshman year for Freshman ENGR Seminar.

Top hat is a shit program. I feel like any other program would be better.

Potentially clearer handwriting? That's mostly a tophat thing, it's just hard to re read sometimes.

I see the motivation for tophat, and I like the ability to look back at previous slides during lecture, but the writing can be extremely difficult to read compared to your notes in one note from previous semesters. There's definitely a benefit to writing it out in class, but maybe when you're planning the lecture, you could write them out in onenote or by hand and upload those after the lecture too?

Give more practice problems that cover the material that will be on the exams.

Use a different platform for note taking. Less derivations and more practice problems.

Stop using TopHat

More practice problems for exams

His in class example are not very similar to the questions seen on homework and exams. Use more relevant examples in class rather than deriving equations for an entire class period as well.

If we pivoted away from tophat sooner, it would have saved some frustration

tophat was annoying

It would have been nice to have identified questions that could be used as extra practice. Having three books was nice for theoretical stuff to be explained in various ways, but the amount of questions can be overwhelming.

Use more example problems.

Destroy Top Hat.

Stay the same.

Give more practice problems with solutions so that we can check if we are doing the problems right and have something to look at as an example if we are totally lost.

It is helpful for a derivation to see where things come from but maybe cut out some of the math parts.

Not try to use a technology you don't understand

Don't waste everyone's time by going through esoteric calculus derivations

Grade stuff sooner

Be more accessible for office hours

Homework is very difficult, show more helpful examples in class

Lectures are a little dry and derivation heavy. This is not a bad thing for understanding but it's kind of hard to focus. Also, tophat isn't the best.

The homeworks usually have problems unrelated to class problems, making them too difficult to solve, or are either lacking enough information or require many assumptions

Barry instructed us to seek out the book for additional example problems. However, some information is poorly presented or hard to follow at first. More numerical examples with Bernoulli's would be appreciated. However, the amount at the later sections is perfect.

using onenote at the end was so much better than the tophat notes



Comments
Be a little clearer on some of the steps he does in the derivations and practice problems.
assign more homework... very helpful to apply what I learned
Provide additional example problems. Homework problems are a great way to practice for the exam, but I just felt that there were not enough, even with the lecture examples (I like to practice a lot). We were given 3 supplemental texts which of course have a ton packed into them, but having a list of "recommended practice problems" for each topic would have helped a bit! The examples given, though, were often very useful and easy to follow when going back through tophat.
Nothing
Don't make us purchase Tophat.
More examples
Perhaps offer worked out practice problems with solutions for additional practice. I realize this is a lot of work though.
Top hat glitches a lot but I like the way you can see the posted notes, unsure of grades/if I can recover from one poor exam grade
Give better feedback on homeworks and exams

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

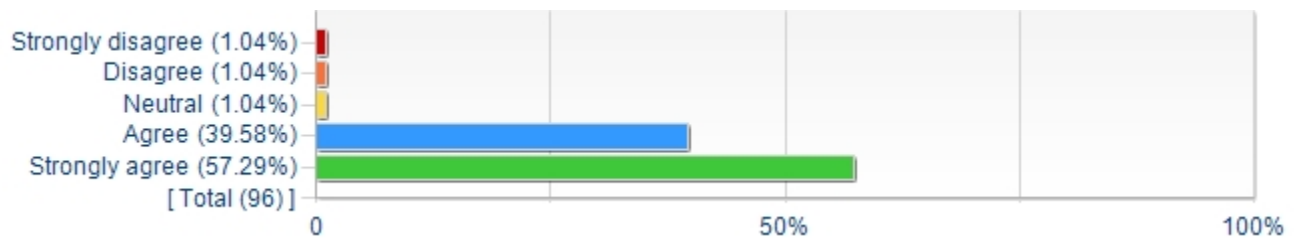
Comments
More examples
No.
You'll know who this is after this, but bonus assignments shouldn't be given after exams. It is not fair to students who do well when bonus is not necessary, and when they do bad on the second test, suddenly that opportunity to make up points is no longer there. That really has me in a bad situation that you got some students out of, but not students who did what I did. Still a great professor though.
This class has been incredibly difficult for me, and the only reason I have been able to succeed thus far is due to the amount of time and patience you have given. I want to thank you for that. Having Shadow there for emotional support also helps!
No
I like how the material is presented. It's very coherent and alleviates the need to do extensive reading in the textbook. Tophat is a great concept and the quizzes are useful as "sanity checks" while learning new material, but between the constant crashing of the program and the terrible resolution on the mobile app, I'm not sure that it's worth it. Besides that, really enjoyed the class. This is my 4th class I've taken with you and I can honestly say I learn and retain more in your class than any other classes.
Nah
None
Fantastic professor, in all my classes I've had him as a professor he has never failed to exceed my expectations. By far the best professor I've had at Pitt. Keep up the good work Barry!
Great office hours.
I would like shadow to come to class
No
You should post practice exams
I might move away from TopHat because it's been causing you a lot of problems this year.
Fluids wasn't my favorite subject, but I like your teaching style and how you presented the material.
Sometimes I would be hesitant to ask a question in class because I felt like the instructor would treat it like it was a stupid question; if other students feel the same way, I think it would be beneficial if the instructor would encourage questions in lecture
Thanks for the flexible office hours. You also have a good attitude and want us to really understand the material
N/A

Comments
Tophat is rather difficult to use
the questions on the first exam were very wordy and the reading of the question took up too much time
N/A
no
I learned a lot more about fluids once you would put the solutions online and I could understand the approach that should be used for the problem. I think that the model of giving homework and solutions at the same time would really be beneficial for the class. Fluids is a very "weird" class in that it can get very not straightforward.
Shadow is a good boy
He's a really cool dude and I enjoy his lectures, but lectures don't help an immense amount for exams. Homeworks help a lot, but generally I don't feel like I learn a lot when he just speaks differential calculus at me.
Overall I enjoyed the course and feel that I learned a lot. It is a complicated subject and there is a lot of information packed into this course, so I hope that I am able to retain enough of it to succeed in future fluid dynamics courses. Dr. Barry's dry wit always helped to make class a little more fun.
It was for the best to stop using Top Hat. It would be nice to see the class more engaged by answering, for example, jeopardy related questions to increase overall interest in the concept.
Exam 3 is worse than Exam 2
Navier Stokes is very confusing. Small practice problems/ assignments would be helpful to aid in comprehension as material is covered.
Not including the density value, identifying the fluid, or even mentioning the variable in the problem statement (like saying "a fluid with density $\rho$ " when it's needed to solve the problem is a little unfair. I've learned over the years that if a problem doesn't mention a variable, you don't need it to solve the problem. Exams are already super stressful, and a trick as small as that can really throw off your confidence and thought process in a problem and caused me to give up because I then felt like I had no idea how to solve it without that variable. I know that's not necessarily your problem, but I guess just a simple fix that could help on future exams. Overall, I think you're a very good professor and your exams are extremely fair in terms of being applicable to the lecture content.
Nope
To be fair, you have to have a very high IQ to understand Rick and Morty. The humor is extremely subtle, and without a solid grasp of theoretical physics most of the jokes will go over a typical viewer's head. There's also Rick's nihilistic outlook, which is deftly woven into his characterisation— his personal philosophy draws heavily from Narodnaya Volya literature, for instance. The fans understand this stuff; they have the intellectual capacity to truly appreciate the depths of these jokes, to realise that they're not just funny— they say something deep about LIFE. As a consequence people who dislike Rick & Morty truly ARE idiots— of course they wouldn't appreciate, for instance, the humour in Rick's existential catchphrase "Wubba Lubba Dub Dub," which itself is a cryptic reference to Turgenev's Russian epic Fathers and Sons. I'm smirking right now just imagining one of those addlebrained simpletons scratching their heads in confusion as Dan Harmon's genius wit unfolds itself on their television screens. What fools.. how I pity them.
And yes, by the way, i DO have a Rick & Morty tattoo. And no, you cannot see it. It's for the ladies' eyes only— and even then they have to demonstrate that they're within 5 IQ points of my own (preferably lower) beforehand. Nothin personal kid
One of the best profs at Pitt
Thanks for another semester with great jokes
I really appreciated you making an effort to get to know everyone's name. It made the class seem so much smaller, more personal and made coming to office hours more appealing.
I very much enjoy you as a professor because it is apparent that you are looking out for your students whenever you assign a midterm by giving us the necessary materials to do well.
He's been my favorite professor so far.
n/a
Top hat seemed more trouble than it's worth
TopHat is a sham
Your dog is the best

Comments
Nope.
Word travels fast after a test was taken (esp multiple choice, bonuses, and answers like "0")... different makeup tests is fair to all students, as some students were abusing the late test time (even if it was two hours later).
Navier–Stokes is harder than RTT!! Or at least it seems like it.
No
Dr. Barry is my favorite professor at PITT
Spend less time deriving and more time showing us how to apply the information
Thanks for another good semester (this is the 4th)
I give tophat 1/5 stars
n/a

## 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

Probably read more from the textbooks.

Read before hand, rely on the book and other texts he suggests, because lectures are not helpful and examples as well as explanations provided in those resources are much more helpful.

I usually only went to office hours to ask about homework questions, but it probably would have been good to look over the most recent lecture and ask questions about anything unclear.

Go and talk to him if you don't understand something, he is always willing to explain something better. Also take good notes in class.

Get the supplemental texts. If you don't you are at a disadvantage. He will literally pull examples/problems from the supplemental texts and then make them into a test problem.

Office hours would probably help

Start the homework early so that when you inevitably get stuck you can go to office hours for assistance. And use the office hours, Dr. Barry is incredibly available and helpful regarding problems, plus he keeps his dog in his office! Also try and find problems in the textbook to provide additional problems.

Not sure

Read the text before lecture

Homeworks are the most important aspect of learning the material. Form a study group and do them in their entirety

Don't take 18 credits and work 20 hours a week.

Go to office hours for assistance

Go to office hours because they are extremely helpful. Don't skip lectures. Build a relationship with the professor because he is extremely knowledgeable in many different areas and very very helpful when seeking assistance.

Pay attention in class.

Shadow

Be diligent.

Go to office hours, start homework as soon it's assigned

Talk with Dr. Barry. He knows the material really well and is willing to help you. It's a challenging course, but if you put the work in you can do well.

Pay attention during Reynolds Transport

Go to office hours, and do extra problems.

Don't fall behind, keep up with the class.

Review slides from lecture immediately after/that evening. Concepts were difficult to grasp in this class and I rarely retained info from lecture only

Review tophat notes after class and keep reviewing homework and in class examples before the exams.

## Comments

If you don't understand a concept, catch up right away. The class builds on itself, and if you fall too far behind, it's very difficult to bounce back.

Read Barry's suggested textbook, it's super helpful. Make use of office hours

Go to his office hours so you don't overthink the hw problems. Also, the hw problems can be quite confusing and challenging.

Make sure that you always understand what is going on in lectures and take notes on the example problems. Work on the homework early.

go to office hours as often as you can

Homeworks are very helpful. Go to office hours if you are struggling.

I don't know if this is in your power, but get graders/UTAs/TAs for this course! Even if they're underutilized, the more resources the better. A lot of times when I came to look for you for HW help, I couldn't find you. I stopped looking because Benedum is very out of the way for me.

Make sure you really understand all of the concepts before applying it to a problem

Examples examples examples, and try to conceptually understand the material instead of just regurgitating formulas

Do a lot of practice problems from the textbook to study for exams and read the chapters to learn the concepts

Write down everything even if you don't think it's important at the time and study hard.

I got high 90s on the first two exams. The lectures are complex, but the exams are very simplified. Literally same advice I give for all of these OMETS, just do the homework and make sure you understand it. Redoing homework assignments before exams is one of the things that helps me the most.

Do your best to pay attention in all the lectures, even the derivation ones. Be willing to spend many hours on the homework occasionally because it is essential to your understanding of the topic.

The Cengal textbook is really helpful for RTT

Pay attention in class, read and do examples from the texts

Do the homework regularly. Make sure you understand the core concepts as well as possible so that you can start your solutions with the correct assumptions. And if all else fails, memorize, memorize, memorize. Learn to recognize the different types of problems and when certain things can or can't be applied.

Get the textbook because it will help to clarify unclear concepts.

Get to know Barry, he will work with you much better.

Do.Not. Miss. A Single. Class. You will be lost for weeks.

I could do practice problems from the book while material is being covered instead of using it to study last minute.

Honestly, paid attention better. Having classes in Chevron is always difficult for me and I don't pay attention well.

Make sure you do the homeworks independently (they directly correlate with exam material), go to office hours and lecture, and all of the standard stuff you should know to do as a college student. Doing all the basics make this a very manageable and "easy" course.

Spend more time going through the lecture notes before an exam and understand how to apply the concepts instead of just trying to memorize all of the information.

Start the homework early so you have time to ask for help if you need it.

Just be in every lecture or you will fall behind fast

Find more problems from the textbook or outside sources to practice. Homework and in class examples aren't enough

Pay more attention, go to office hours.

Go to class and office hours! Just be being in class you will absorb so much and then the notes are good to look back at. And go to office hours.

To pay extra attention to the homework problems because there is a very solid chance that a similar one will be on the exam.

Paid more attention in class maybe? Not much improvement that I could really do.

Read through notes after class to reinforce understanding

Have better/more accessible office hours

Comments
follow along with the example problems in class
Study and buy the book also do the homework on time
Go to office hours
dont just print the notes, rewrite them out
Make sure you completely understand the practice problems.
Paid more attention in class and go to more office hours
Really spend time going through the derivations, especially for RTT and NS. Understanding the math behind it is tedious but often times it helps with overall understanding. The concepts are very important in this class.
Do the homework over again
Pay attention in class.
Make sure you look over all the examples done in class
Do more practice book problems
Do practice problems
Go to his office hours more

## ENGINEERING UNDERGRAD

This course has improved my:

Question	Results				
	Mean	Min	Max	Response Count	Standard Deviation
Ability to use math concepts to solve engineering problems.	4.23	2.00	5.00	96	0.75
Ability to use chemistry concepts to solve engineering problems.	2.04	1.00	5.00	95	1.10
Ability to use physics concepts to help solve engineering problems.	3.98	2.00	5.00	95	0.81
Ability to use engineering concepts to help solve problems.	4.00	1.00	5.00	96	0.88
Ability to design an experiment to obtain measurements or gain additional knowledge about a process.	2.27	1.00	5.00	95	1.33
Ability to analyze and interpret engineering data.	2.88	1.00	5.00	95	1.25
Ability to design a device or process to meet a stated need.	2.53	1.00	5.00	94	1.22
Ability to function effectively in different team roles.	1.74	1.00	5.00	94	1.00
Ability to formulate and solve engineering problems.	3.76	1.00	5.00	95	1.03
Ability to use laboratory procedures and equipment.	1.41	1.00	5.00	93	0.88
Ability to use software packages to solve engineering problems.	1.67	1.00	5.00	96	0.95
Ability to use CAD software.	1.32	1.00	5.00	95	0.82
Knowledge of professional and ethical responsibility.	2.45	1.00	5.00	95	1.22
Ability to write reports effectively.	1.54	1.00	5.00	95	0.99
Ability to make effective oral presentations.	1.38	1.00	5.00	95	0.88
Knowledge about the potential risks (to the public) and impacts that an engineering solution or design may have.	2.84	1.00	5.00	96	1.17
Ability to apply knowledge about current issues (economic/environmental/political/societal/etc.) to engineering-related problems.	2.57	1.00	5.00	94	1.32
Appreciation of the need to engage in life-long learning.	3.55	1.00	5.00	96	1.22