

# Fall 2021 - Matthew Barry ENGR 0135 - STATICS & MECHC OF MATERIALS 1 - 1020 - Lecture

Project Title: 2221 - Teaching Survey Fall 2021

Courses Audience: **86**Responses Received: **71**Response Rate: **82.56**%

#### **Report Comments**

#### Included in this report:

- Responses to numerical questions
- Responses to instructor added questions (if applicable)
- Student comments

#### **Interpreting OMET Teaching Survey Reports**

A guide to interpreting OMET teaching survey results can be found here - https://teaching.pitt.edu/omet/survey-results/.

#### Develop a plan using your student opinion of teaching results.

- Meet with a Teaching Consultant who can help you interpret your results and develop a course of action if necessary. Email teaching@pitt.edu to set up a consultation.
- Plan on collecting student feedback during the semester the next time you teach. OMET offers a midterm course survey
  option and there are additional ways to collect student feedback throughout the term. For more information, go to
  <a href="https://teaching.pitt.edu/omet/midterm/">https://teaching.pitt.edu/omet/midterm/</a>
- In the future, discuss, teach, and model giving meaningful feedback with your students. Give them multiple opportunities to practice giving feedback. We have several resources that can help guide the discussion and options for gathering student feedback throughout the term.

Go to: https://teaching.pitt.edu/omet/ for more details, references, and resources.

Creation Date: Thursday, January 06, 2022



# **University Questions**

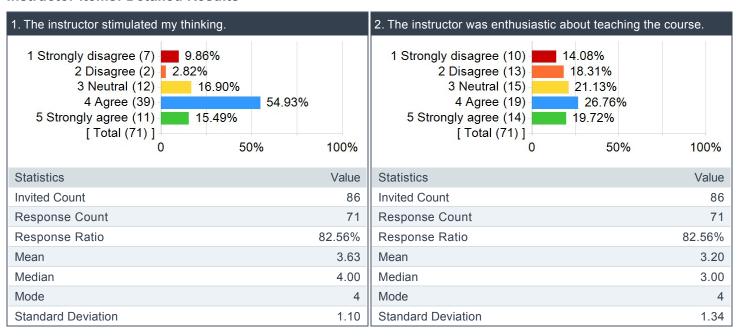
# Instructor Summary of Results - Scale: Strongly Disagree (1) to Strongly Agree (5)

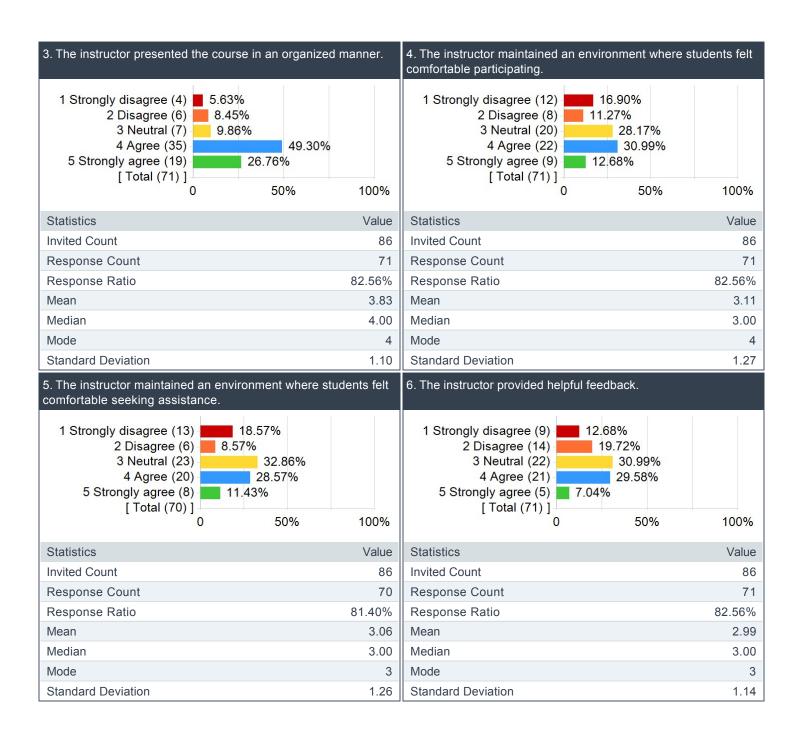
	Results		
Question	Response Count	Mean	Standard Deviation
The instructor stimulated my thinking.	71	3.63	1.10
The instructor was enthusiastic about teaching the course.	71	3.20	1.34
The instructor presented the course in an organized manner.	71	3.83	1.10
The instructor maintained an environment where students felt comfortable participating.	71	3.11	1.27
The instructor maintained an environment where students felt comfortable seeking assistance.	70	3.06	1.26
The instructor provided helpful feedback.	71	2.99	1.14
Assignments contributed to my understanding of the subject.	70	3.86	1.03
Overall	-	3.38	1.22

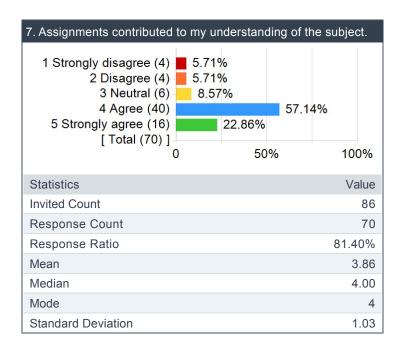
# Instructor's overall teaching effectiveness

Question	Results		
	Response Count	Mean	Standard Deviation
Express your judgment of the instructor's overall teaching effectiveness.	71	3.06	1.09

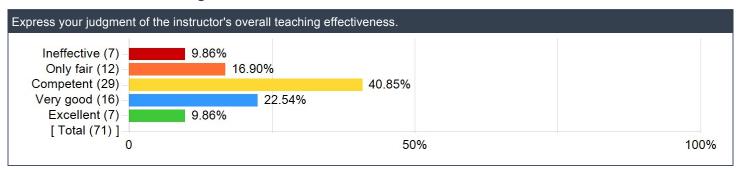
#### Instructor Items: Detailed Results







# Instructor's overall teaching effectiveness:



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

#### Comments

His in class examples were very helpful and he always opened up the beginning of class for anyone to ask a question

Gave tons of examples that helped me to learn the material better.

I found Dr. Barry's method of using TopHat for all aspects of this course to be very organized and effective. Completing small assignments and readings before each class kept me from falling behind in this class and allowed me to learn in a very effective way throughout this semester.

I liked that Dr. Barry went over actual examples in class so that we could see exactly how he would solve a similar problem.

Embedded guestions in the textbook which was a good way to force oneself to try and understand the material.

I learned about the basic concepts in statics.

Video questions made sure i understood

I appreciated the flipped format of the class, especially because the lectures were all posted ahead of time so they were available to us at any time. The solution manuals to homework, guizzes, and exams being posted was also really helpful.

Dr. Barry did a great job of walking the class through the methodologies of more complicated problems as a class, asking questions and stimulating responses throughout to engage everyone; I thought this was incredibly effective paired with the asynchronous lectures. The book having been set up to allow for questions and responses amidst the reading was HUGELY helpful in learning the material.

Was rather supportive and encourged us to learn

Kept lectures very organized and structured.

He went into depth on each topic

**Statics** 

Had many resources for us to look back at in case we did not understand the material the first

He is a nice person. He responses evey question I asked which was really helpful.

Provided office hours and practice problems within tophat.

Provided multiple ways of learning, from visual to text. Plenty of practice

The use of tophat was nice, except we only had the problems he would let us see, there was not problems that were more challenging then on exams he would give us a harder problem then we have ever seen. Using an actual textbook we would be able to see what the harder problems were like.

The makerspace project allowed students to apply what they learned in class on a hands on project which is beneficial

Lots of materials to read and practice with.

He provided us with many example problems to work on.

Dr. Berry presented slides and ideas that helped students understand.

He presented information in a very organized manner.

I think the hybrid–style of learning is perfect for this course. I really enjoy the idea of priming myself on topics before actually jumping into them in class.

The pre-recorded videos were helpful but limited in their actual content.

Provided some example problems and review material

The final project really helped me learn the application of the material we were learning in class (stress/strain, trusses, moments, torsion, etc.). I also thought that the in–class examples and team worksheets were helpful in practicing the application of the material being taught. I found the layout of the TopHat textbook also very helpful as it was easy to maneuver, there were built in questions, and also ample worked out examples.

He provided videos to watch outside of class and then went through examples in class of the topic. this help me see if I understood the topic. The HW and testing my understanding in the reading was good as well.

Provided useful feedback when I had any questions in the class and design project

Lots of in class problems and plenty of homework problems. The use of book problems for lecture also helped.

The in-class examples!

In class examples

He went over some problems in class that solidified my understanding of the the topic to a certain extent

Doctor Barry was very helpful in providing content in an easy-to-understand way. I also really liked the flipped classroom setting followed by the in-class and team worksheets.

Posting lectures ahead of time so we could preview the material

The TopHat notes/videos and assignments are helpful and easy to follow.

The flipped classroom set up helped me learn the material on my own, and going over problems in class were very helpful.

Good videos and self-checking in Top Hat

The assigned readings really helped

I think the in class problems were helpful and his office hours were helpful for the little he had.

The project help me learn the truss by the project.

Application based learning

He helped me to understand the process of problem solving with the live demonstrations.

Provided useful examples and worksheets with detailed explanations of how to solve problems.

The instructor had TopHat, which was a great organizational tool to help keep homework and review organized.

In class example problems

I did not learn a single thing from his lectures, videos or in-person. His expplanations were lacking and condescending. He assigned ridiculous amounts of work that were unhelpful with learning the content. He had little to no empathy for anyone struggling in his class.

#### Nothing

Required readings and the flipped classroom helped students grasp hard concepts.

Reviewing in–class examples and including lecture videos to watch before lecture to review the material was helpful. He also provided many helpful homework assignments that helped with reviewing the material.

Provided a lot of material to learn and study from.

He was incredibly thorough with his notes, lectures, and documentation of the class

He provided a useful book that was interactive

The book was actually super helpful. Also, having a lot office hours and TAs was great.

Great organization of course content! Very impressive that you and a post–student also went ahead and made your own textbook about it. Tophat takes a while to load problems, which makes it hard to Cntrl+F when looking for the ones you got wrong or looking for a specific one, but that's TopHat's fault. You also know a lot about the subject and MechE– thanks to you, I can see the appeal of that major more thoroughly. Your work and previous job seem really cool! Thank you!!!

The in class examples were useful and the written lessons were generally easily understandable.

Top Hat was a very effective tool to help me understand the material.

nothing

both videos and reading materials

the before class videos and readings were very helpful as well as the examples that were given

Went through problems in class and gave us the opportunity to work on similar problems with classmates around us

He explained things in a very simple way that was easy to pick up if you were lost, started at the basics and didn't expect us to understand anything going into the class

Makerspace project allowed us to gain experience applying concepts learned in class in practice.

#### What could the instructor do to improve?

#### Comments

Stop acting like all his students are stupid

Organize the TopHat textbook better and also ensure that the answers are right for homework.

I think that harder examples (exam level questions) would be beneficial for learning the material and bringing a lot of concepts into one.

The best way that Dr. Barry could improve as a professor is by having a more positive attitude when in class.

I think that some of the questions asked should be answered in class. I understand that there were some that could be saved for office hours (as Dr. Barry suggested), however I will admit that some of them were relevant to the lecture and general enough to be answered in front of the entire class (especially considering if one person has a question there is a good chance at least one other

person has the same question).

I'm not a big fan of a flipped classroom and always felt that concepts that taught during class time were a lot clearer than when i initially "taught myself" by reading the textbook and answering the questions.

Delivering instructions

not assign 50 homework questions over thanksgiving break

If possible, I would have appreciated all of the readings being posted ahead of time, like with the lectures, although I think there were only a few times where this was delayed. I also think posting homework earlier would help, but I understand if that isn't possible.

Some sort of forum for questions during class that TA's can check over afterwards might help some of the students with less conceptual questions.

Mainly, I would have liked to have seen more problems that we could do rather than being limited to what was in the assigned reading. It felt as though there was very little variation in problems at some points, and there were no others to practice. When faced with not understanding a problem, it was incredibly difficult to have such limited resources to dissect what was happening.

Top hat could use some refinments, especially in terms of stability (bugs need removed), and general organization. It would also be nice if assignments were posted at consistent times and had consistent due dates

Professor was very condescending to majority of the students. Many did not enjoy conversing with him, which made it difficult to seek assistance.

Provide more practice material

Lessen the workload towards the end of the semester

Nothing.

Provide more representative examples in class as to what we will see on exams.

Make the material less trivial and nuanced

Be a little bit more approachable. People were afraid to ask questions it seemed because of the remarks you would often say in class. The only people who talked were the 3 people who probably got A's on their exams.

Allow more flexibility with the homework/quiz software so that late assignments are not automatic zeros.

He seemed to rush through the material and we finished all the material for the class a couple weeks early.

Dr. Berry was slightly demeaning, even if it was in a humorous way, that made students embarrassed to answer or even ask questions in class. Exams were extremely difficult and morale in the class was very lose.

He could give more examples and non-mandatory practice assignments.

It would be helpful if class pre—work, videos, readings, and homework were posted ahead of time. I have much anxiety when I don't know when assignments will be assigned to me. I like the liberty of being able to plan out my week because I know exactly what will be due when, and when I will be able to do it.

Dr. Barry puts himself and his work on a pedestal, much to the detriment of his students. He plays clear favorites and shuns everyone else that he hasn't picked.

That aside however, the most difficult aspect was not understanding the methodology that he uses in going through problems. He'll tell you to A,B,C but what I would like is to understand WHY to do A,B,C.

- -Encourage TAs to be accessible outside of class
- -Fix errors in assignments and text
- -Be more accessible outside of class
- -Have exams that fit the allotted time better as many people didn't finish
- -Continue to hold office hours even in weeks with design reviews
- -provide review for final during class in weeks after course material is finished instead of ending instruction

The instructor can spend some more time during class reviewing some confusing material from the assigned readings. The instructor can also spend more time going over more complicated examples. The examples done in class are sometimes incomparable to the ones given on exams, Homeworks, quizzes, and team worksheets. I think more time should also be allocated toward problem—solving techniques. In other words, the professor should do examples of what to do when you first look at a problem. I think this is something I struggled with most. I did not know where to start and what equations/relationships to use when.

I believe that keeping standards the same across class times would be better. I also believe that the HW giving no feedback to incorrect answers especially when the problem is sig figs or signs leave me confused and unsure of if my method is wrong or something else. I also believe that the final project should have been spaced out more and that the roles within it prohibits good team work. I also dislike the curve Policy though I understand it. It feels like it ignores the average person and allows for outliers to determine too much.

Provide harder and more difficult explanations in the videos and during class so we are more prepared for the exams.

Give a little more guidance with certain types of problems/assignments so as to not leave students feeling like they were left to fend for themselves if they don't understand a topic.

Be a little more empathetic and supportive to groups with less people

more instruction and examples

He can either go over more difficult problems in class and homework so that we are better prepared for the exams or he can make the exams easier.

While Doctor Barry teaches the material well, I think that he comes across as very harsh to most students, especially those who do not understand the content as well and are thus less likely to ask their questions and get help.

Consistently upload assignments and notify students when they go up. Also making less comments about how the school doesn't pay him enough and semi-insulting students when they ask questions.

Use more difficult examples for the problems you go over during class and do more than one.

Spend more time in class going over practice problems.

Try to stick to schedule better

Provide more practice problems in homework, I feel like there's a lot to learn but not a lot to do

He only had one office hour a week which made him not very readily helpful. The flipped structure of the course made learning problematic as the book was very hard to understand in numerous instances. Finally, we would do relatively easy problems during class, but insanely difficult question for homework with no prior examples of how to carry out the assignment.

I think the detailed solution of the midterm may be posted.

Sometimes top hat was difficult to work with, there is no partial credit for being off by sig figs and thing like that

Fix the textbook

There was a ton of assignments near the end of the course. It is incredibly difficult to balance a mideterm (with unrealistically difficult problems), a final exam, the need to construct multiple bridges, and write an entire project report.

Maybe change some aspects of the bridge project. And have that second midterm before thanksgiving? Was very chaotic last few weeks of class.

Provide more complex problems for students to prep for exams

he is extremely disrespectful to students and thinks he is being funny, he also assigns an exam, a final, a HUGE project, and a 10 page long final report all within 7 days of each other while having to study for finals. This IMPEDES on my ability to thrive in other classes!

He needs to change his teaching stlye and attitude.

He could be a little more approachable, a little more understanding, have problems that are solvable during exams, but fair in the questions he asks.

Answer students questions directly instead of confusing them more. Try to not assign so many problems for one week.

A recitation section for the course may be helpful for going over homework problems rather than attending office hours just to go over it.

Create review guides or review sheets for students before exams, and provide more assistance with the beginning steps of the bridge project.

He was almost too thorough and there was little room for individuality. I think loosening the structure of the course could help a bit more.

Please do not make all the questions due the day of the lecture on top of all the homework assignments and the in–class worksheets. Also, I know that we were supposed to have teams to work on the worksheets but the examples took up the entire class, and then it was stressful to have the homework, questions, and the "in–class" worksheets due all at once. I know I missed a few assignments and that started to stress me out.

I think he could be more understanding. At times I felt like I was the only one struggling or I felt stupid for not understanding. Be encouraging rather than discouraging.

In the textbook and also when solving problems in class, it's very confusing when you plug in numbers before you get the formulaic solution (such as turning pi\*(d/2)^2 into (random number)/4. Just plug in at the end, after the formulaic solution!)

Have the stuff due right before class be the stuff discussed in class because few people will actually work ahead so they understand what is being said in class.

How much money do you make? (since you bring it up so often in class)

Things were generally very well organized, but for the bridge project, the design reviews should be scheduled via a spreadsheet where people can put their group in for whatever time works for them and you guys, instead of all this emailing/asking around—which was a waste of time both for TAs and students. Moreover, you shouldnt be booked in terms of office h, since if you will make it a mandatory assignment to come to office h, then you should have enough office h time open so everyone can complete the

mandatory assignment (unless this class is also trying to model the real world where the early bird gets the worm...). I wish TopHat was free but I think you had valid reasons for it not being free (like it wasn't in your control or something).

He can occasionally come off as condesending during lessons when asked questions, his tests are very difficult to finish within the alloted time frame.

Do more than just in-class examples. Maybe consider going over what was on the assigned readings briefly before going into the example.

actually want to help his students and not overload them with work when he is not planning on being genuinely helpful

if matlab code is provided as an answer to a reading, also working out the problem would be nice so we also know how to do it without matlab since that is how we have to learn how to do it. matlab should be extra on top of solution

I feel like Dr. Barry overcomplicates the concepts sometimes. It would be beneficial to over–simplify the problems when he was explaining them to us.

more office hours, his only office hours were on a day and time that i had class

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

#### Comments

No

Include more practice problems within the TopHat and have more explanations in the textbook.

I found that I learned a lot in this class and enjoyed the assignments and projects throughout this semester.

I know it was for testing, but I think it was a little unfair how the different sections were structured. I feel like there were advantages and disadvantages depending on which section you were in, in regards to having the textbook accessible and then having sig fig dependent questions.

Not much.

i did not appreciate the homework and quiz over break and we cant even go to office hours for the last 3 weeks of the semester because they were full of design reviews.

Specifically for the portion of the course going over trusses and machines, a lot of the solutions for homework and in class relied on Matlab. While this was helpful to go over, I think it would have helped to post solutions that did not require Matlab, as we couldn't use the program during the exam and it is difficult to the homework using Matlab because TopHat requires significant figures.

I think he's awesome.

a midterm, a project, and a final in the course of a little over a week is very stressful

The exams were so damn hard it is like you enjoy students failing them

The exams were very challenging.

I know this is a very difficult class, but if you had more of an attitude like hey this is hard but we can all work through it and do it. Compared to the this is very difficult and i know many of you can't do well.

Having an exam, project, and a final all within one week of each other is not necessary and could have been scheduled better.

I really appreciated Dr. Berry's willingness to talk after class time.

His office hours were very helpful.

N/A

Be less gatekeepy, and explain the thought process behind how a problem is solved.

The significant digits class often took a lot of time figuring out how to get answers to submit which took time away from further review of questions. The educational study in that respect added stress and time to the classwork.

While I struggled to perform on exams, I found the class very interesting. I loved working on the project and building the bridge in the makerspace. I think more time should be allocated toward working on the project or it should be done earlier so that it is not directly on top of final exams. It makes it hard to study for other classes. Besides that, I thought this course was well done.

I would also like to add that I feel like often in class your energy and environment is negative. It makes the class harder when I feel that the teacher doesn't want to be there and feels as though this is somehow a burden. It came off as though you didn't like your job, which may not be true but is what I gathered through this year.

I felt that the sig figs in the tophat hindered my ability to learn the material. I was more worried on my sig figs and most of the time, I would get the question wrong because of sig figs.

N/A

Don't assign a group member that is not in the class

ПО

You are a really nice person, but sometimes, your jokes come off as mean. Also, please make the difficulty of the exams easier than the homework or the in–class examples.

N/A

No.

Make the makerspace bridge groups not have to write a technical report as a tradeoff for having to dedicate large chunks of time for building it already.

The assigned reading is more helpful than the videos, the videos should just be example problems and you have to learn the concepts from the readings

His attitude for the class is horrible. He always talks about how he hates his job and is often times rude to students. It just seems very unprofessional. Also, switch from a flipped class style.

I think more project and less report may work.

The need to do significant figures on assignments hindered my learning by forcing me to spend unnecessary time calculaing sig figs instead of focusing on the conceptual understanding of the problem.

I think the way you formatted the class and the amount of homework problems and assignments u have for this one class made it highly difficult to pass or even have time for other classes.

n/a

Have a good winter break:)

Please don't discourage your students or be condescending. It is hard enough to be put through the wringer as an engineer but when you know that your professor doesn't believe in you or doesn't believe that you can accomplish what they are teaching you, it does very little to help at all and it can make students question if they even want to be engineers. If a student isn't doing well, don't yell at them or swear at them.

3 stages of Prof. Barry statics 0135 class:

Cry me a river: cry about midterm 1 grade

Build me a bridge: bridge project

And get over it: take the final to finally get this class over with

I feel the videos we are supposed to be watching were hard to focus on since it was just listening to you read the slides. I feel if there was less text and more visuals to really get a better understanding of the material, it would force students to really focus and understand.

I felt no enthusiasm from Dr. Barry in wanting his students to actually succeed

Too many assignments

Sig figs don't matter

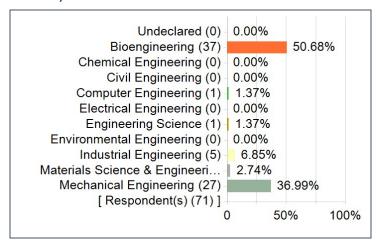
Matlab is a great tool and i am very happy it was incorporated into the course but I dont think that providing only matlab code as a answer to a problem is ever a good idea

I feel like the exams discourage me a lot. I spend a lot of my hours studying for this class only and I feel like the exams are sometimes harder than they should be.

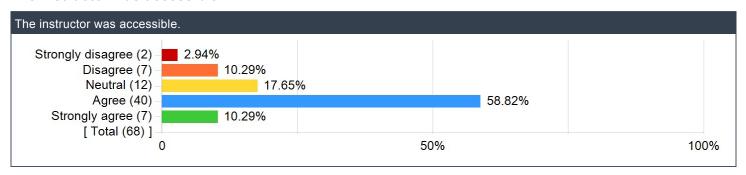
nope, thanks for a great semester! :)

# **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

Nothing, don't take his class. I did everything I could to understand the material, but his exams are just too unreasonable.

I could have gone to more office hours to help improve my learning in this class.

The TAs in this class were extremely helpful and their office hours are worth attending.

When reading the textbook and answering the questions, I recommend writing all of your work down and jotting down any questions you can think of so that you remember to ask them in lecture. This is more general, but I also recommend going to office hours whether it's with the instructor or a TA.

Don't be scared to go to office hours. I wish I had gone more.

Read the instructions on the exams

don't take this class

I would recommend doing the assigned reading before class (I think this was required for the beginning readings, with the way the assignments were set up, but later, the dates were delayed by one class period or so). I would also recommend starting the homework as soon as it's assigned and doing a few of the problems every day, especially with those later in the course, because it was really easy to underestimate the time the homework would take especially with the significant figures.

Get yourself a study group.

Make use of the TA's, they are very kind

Keep on top of top hat and watching lectures

read the book over and over

Go to office hours, Dr. Barry and the TAs have a lot of them

Go to office hours with TA and professor as often as possible

Just practice as much as possible

Go to more office hours with the TAs

I could have spent more time going over tophat material to prepare for exams

Use the textbook more thoroughly

Stay ahead of the workload it's a lot. And go to office hours(if they fit in your schedule) to ask questions.

Go to office hours, they are very helpful.

Actually do the pre-work. Definitely go to office hours — especially if you're in the sig-fig section.

Don't take him

Try to go to office hours as often as possible.

Study the material before and after class so that you can solidify your understanding while the material is fresh rather than wait a week or two before the exam

Go to office hours and do your homework/quizzes there. You can ask questions and see different ways of approaching problems.

The TAs are extremely approachable and there to help you. Use them!

Read the TopHat textbook! Do not underrate this resource. It is extremely helpful.

I would suggest reading the text book and to find a good study group. I think trying to do in all on your own will be hard. I would also say to start the HW and readings early because he assigns lots of work so it can pile up.

Do as many practice problems as you can!

Go to lecture. The way your section runs might be different from the other sections, so preferably seek help from people in your section. Read the assigned text, and do the practice problems that accompany it.

Actually do the readings and attend office hours

read the material more

Study everyday and go over some of the topics on YouTube or other platforms that provide the course.

Just stay on top of the work. Watch the videos and do the problems before class. Also, it helped me a lot to actually do the homework. Many students don't and just get the answers but the homework is the best way to learn the material and practice for the exams.

Actively take notes before class, the actual class itself will not make sense unless you read through and take notes ahead of time

Don't fall behind on lectures.

Do the assigned reading on time before class, and actually do the embedded questions.

Pay attention to Top Hat more

Put in the hours, but even then go to office hours to make sure you are understanding in the right way.

I would not take Dr. Barry. That is my advice.

review the assigned reading really carefully.

Watch youtube videos and do their practice examples, but the midterm questions are harder than the ones on youtube.

prepare for the worst on exams.

Just do the readings and watch the videos and you'll be fine.

Try your best to keep up with lecture videos and assigned readings throughout the semester.

stop making kids feel stupid

Do not take Barry. Take someone else. As a student in this class, you are left alone to drown with few resources for success outside of Barry himself or the textbook he wrote.

done practice textbook problems but since there was so many homework problems it made it difficult to have time for other classes or even space out learning. And the bridge project should be worth more and should replace the final.

Realize that this class is very hard before you take it

Rewatch the lecture slides, and make sure to review the homework (since you will get some problems wrong, and you can revisit the homework on Tophat after the due date). Also, do the practice midterms but focus on problems you don't understand (otherwise it may seem tedious).

Ask more questions and interact more

I went to office hours a lot. Office hours are what got me through. But, I could have put more effort in to in class worksheets.

Do the problems early enough before the deadline so that you don't rush to complete them and wind up not completing a few before

midnight...

Make sure to read the book and study the examples. Also, do not wait until the last second to complete the tophat assignments to make sure you are fully understanding the material and so you can go get help if you are confused on a problem.

taken a different teacher

Stay on top of materials

prepare

practice

read all the material and watch all the videos before class

Do problems from Youtube or go to office hours

Do all the HW and assigned readings, just practice, also on exams you will have 2 quite simple straight forward questions and then 1 simple question that's wrapped in a complicated setup

# **Engineering Undergrad Courses**

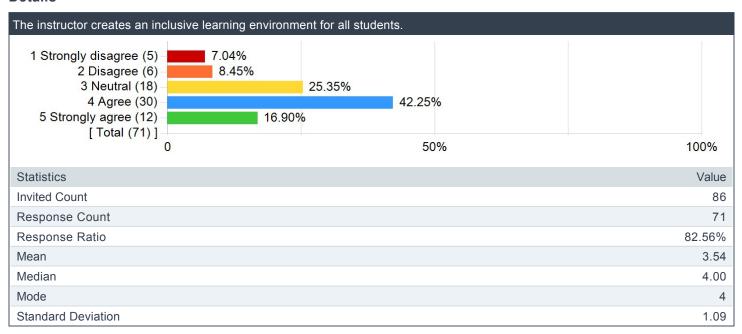
Please rate the degree to which this course has improved...

		Results		
Question	Response Count	Mean	Standard Deviation	
Your ability to identify, formulate, and solve complex engineering problems by applying principles of engineering.	71	3.83	0.86	
Your ability to identify, formulate, and solve complex engineering problems by applying principles of science.	71	3.58	1.00	
Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics.	70	3.79	0.99	
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare.	71	3.34	1.04	
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).	71	2.90	1.14	
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of environmental and economic factors (i.e., sustainability principles).	68	3.03	1.13	
Your ability to effectively communicate verbally with a wide range of audiences.	71	2.85	1.20	
Your ability to effectively communicate in writing to a wide range of audiences.	71	2.87	1.13	
Your ability to recognize ethical and professional responsibilities in engineering situations.	71	3.08	1.22	
Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles).	71	2.92	1.18	
Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles).	69	2.93	1.15	
Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership.	71	3.73	1.13	
Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives.	71	3.77	1.03	
Your ability to develop appropriate experiments.	70	3.37	1.13	
Your ability to conduct appropriate experiments.	71	3.37	1.14	
Your ability to analyze and interpret data and use engineering judgment to draw conclusions.	71	3.66	1.01	
Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems.	71	3.61	1.02	

# **Diversity and Inclusion**

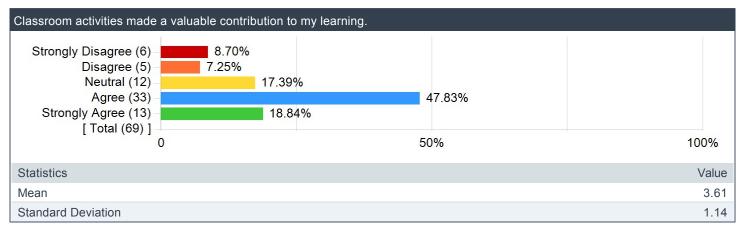
Question	Response Count	Mean	Standard Deviation
The instructor creates an inclusive learning environment for all students.	71	3.54	1.09

#### **Details**

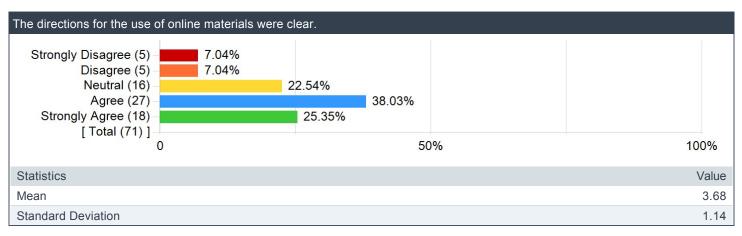


#### **Personalized Questions**

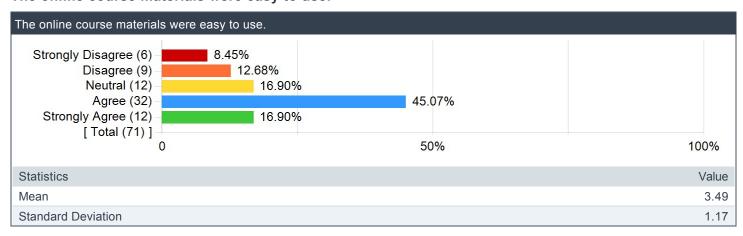
Classroom activities made a valuable contribution to my learning.



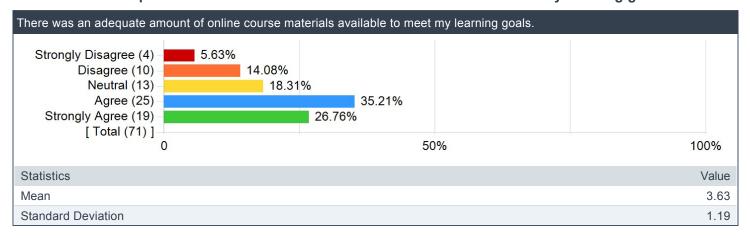
#### The directions for the use of online materials were clear.



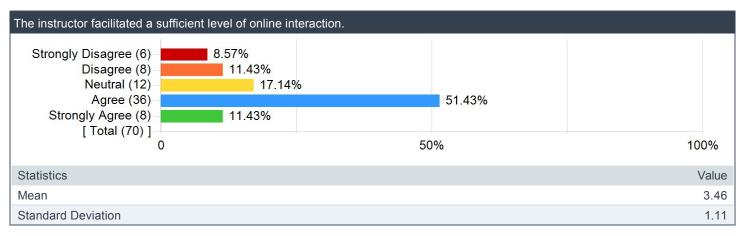
#### The online course materials were easy to use.



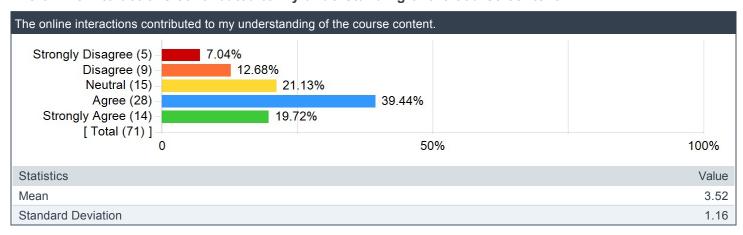
# There was an adequate amount of online course materials available to meet my learning goals.



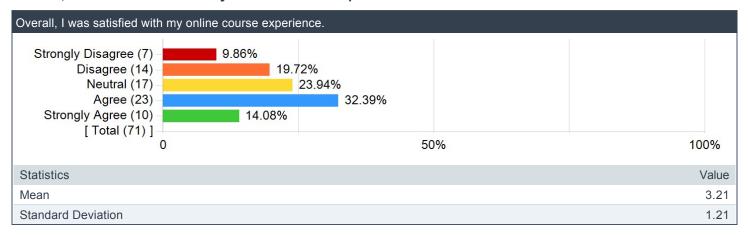
#### The instructor facilitated a sufficient level of online interaction.



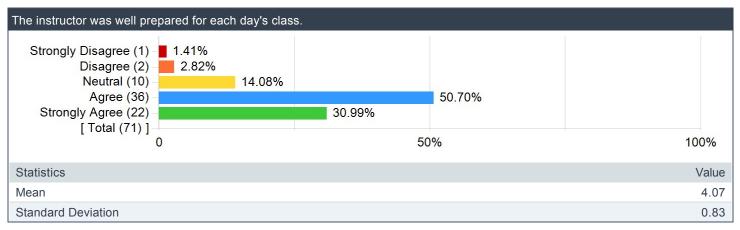
#### The online interactions contributed to my understanding of the course content.



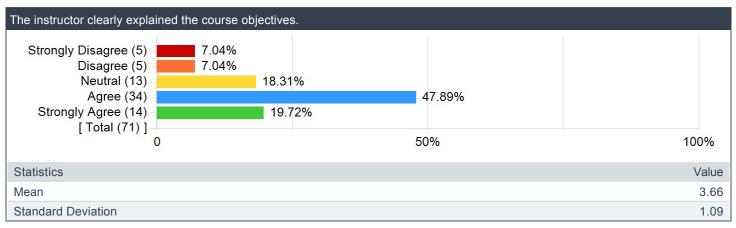
#### Overall, I was satisfied with my online course experience.



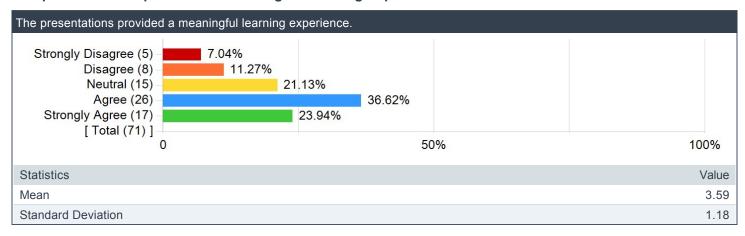
# The instructor was well prepared for each day's class.



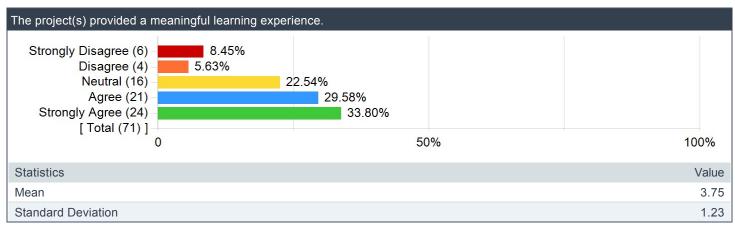
# The instructor clearly explained the course objectives.



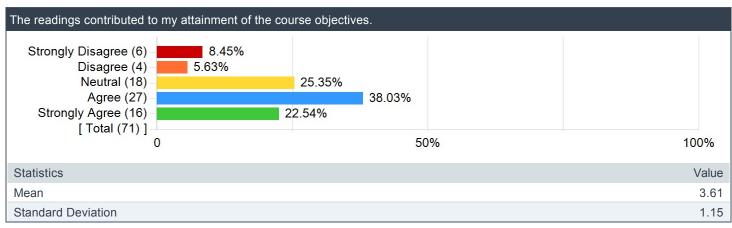
#### The presentations provided a meaningful learning experience.



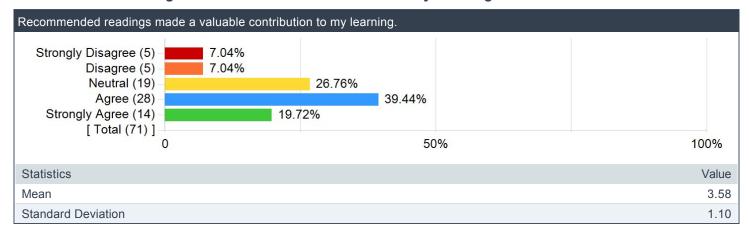
# The project(s) provided a meaningful learning experience.



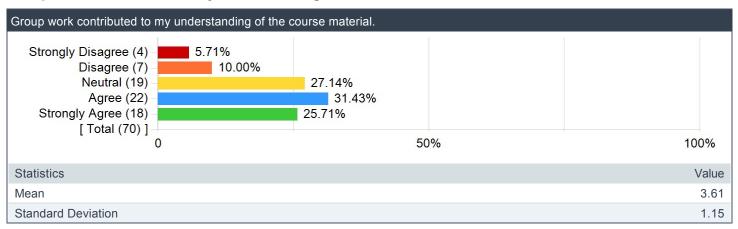
# The readings contributed to my attainment of the course objectives.



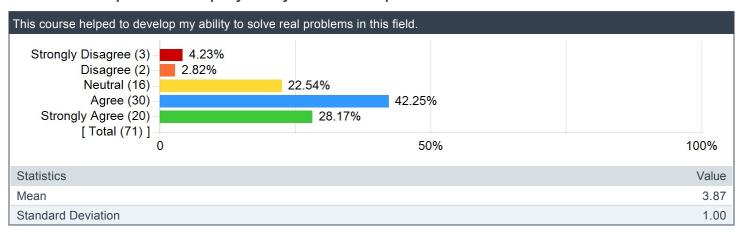
#### Recommended readings made a valuable contribution to my learning.



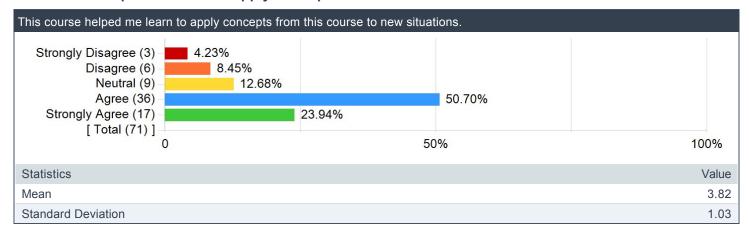
# Group work contributed to my understanding of the course material.



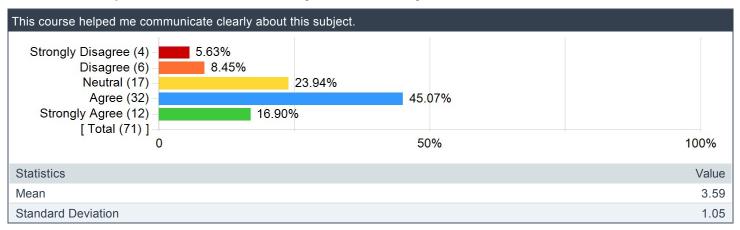
#### This course helped to develop my ability to solve real problems in this field.



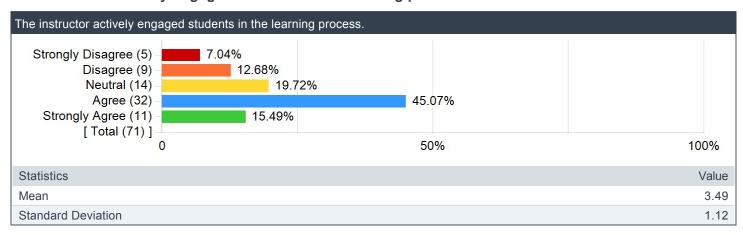
#### This course helped me learn to apply concepts from this course to new situations.



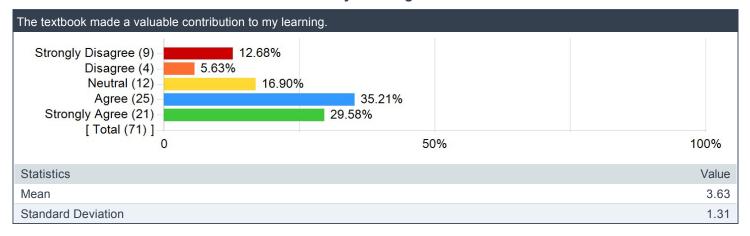
# This course helped me communicate clearly about this subject.



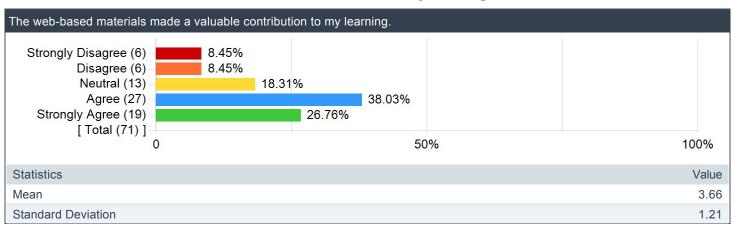
#### The instructor actively engaged students in the learning process.



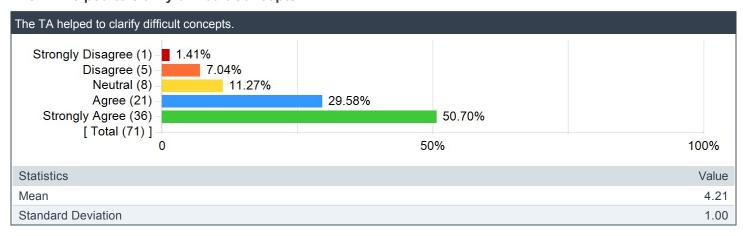
#### The textbook made a valuable contribution to my learning.



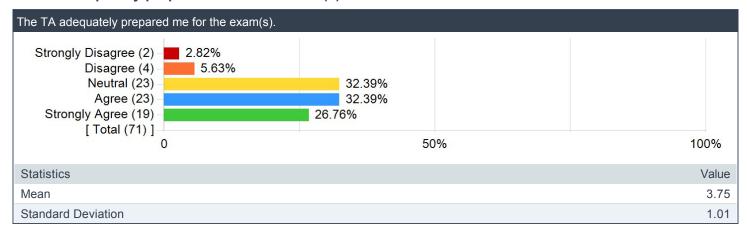
# The web-based materials made a valuable contribution to my learning.



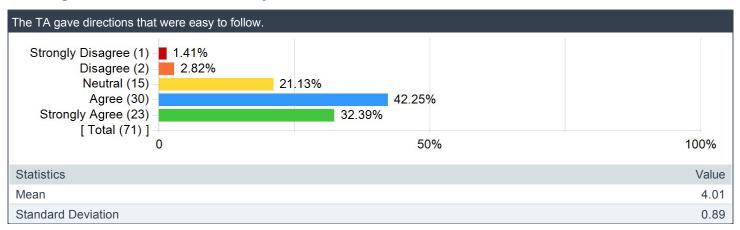
#### The TA helped to clarify difficult concepts.



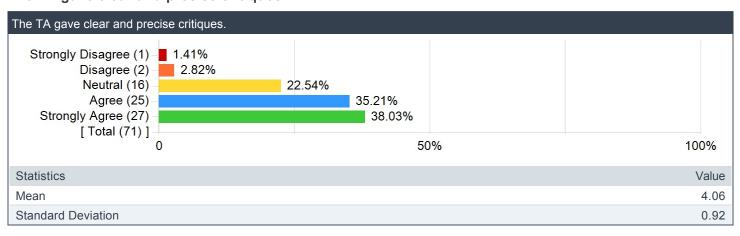
#### The TA adequately prepared me for the exam(s).



# The TA gave directions that were easy to follow.



#### The TA gave clear and precise critiques.



# The TA was readily available for assistance.

