

## 2251 - Teaching Survey Fall 2024

Fall 2024 - Matthew Barry MEMS 1140 - PRGMG  
PYTHON & MATLAB FOR ENG - 1100 - Lecture



Created Tuesday, December 24, 2024



Courses Audience: 16  
Responses Received: 11  
Response Rate: 68.75%

### Report Comments



#### Included in this report:

- Summary of responses to scaled questions
- Response breakdowns
- Student comments
- Results to instructor added custom questions (if applicable)

#### Understanding and using student feedback:

- We have [resources](#) to help you interpret and use results including our [faculty worksheet](#) with guided prompts and space to record summaries of feedback, actions, and outcomes.
- Members of our [Pedagogy, Practice, & Assessment](#) team are available for consultations and can help with:
  - Interpreting OMET results and developing a course of action if necessary.
  - Exploring various methods of assessment to improve teaching.
- In the future:
  - Discuss, teach, and model [giving meaningful feedback](#) with your students and give them multiple opportunities to practice giving feedback.
    - Gather important information about students at the beginning of the term by giving a [pre-course survey](#).
    - Check in with students half way through the term by giving a [midterm course survey](#).
- The [Teaching Center](#) offers multiple resources to support teaching and learning.

Office of Measurement and Evaluation of Teaching (OMET)

[Contact us](#)

## University Questions

### Summary table

Scale: strongly disagree (1), disagree (2), neutral (3), agree (4), strongly agree (5)

	Invited Count	Response Count	Response Rate	Mean	Mode	Median	SD
The instructor stimulated my thinking.	16	11	68.75%	4.45	4	4.00	0.52
The instructor was enthusiastic about teaching the course.	16	11	68.75%	4.18	5	4.00	0.98
The instructor presented the course in an organized manner.	16	11	68.75%	4.27	4	4.00	0.65
The instructor maintained an environment where students felt comfortable participating.	16	11	68.75%	4.45	4	4.00	0.52
The instructor maintained an environment where students felt comfortable seeking assistance.	16	11	68.75%	4.55	5	5.00	0.52
The instructor provided helpful feedback.	16	11	68.75%	4.45	5	5.00	0.69
Assignments contributed to my understanding of the subject.	16	11	68.75%	4.36	4	4.00	0.50
Overall of All Questions	112	77	68.75%	4.39	-	-	0.65

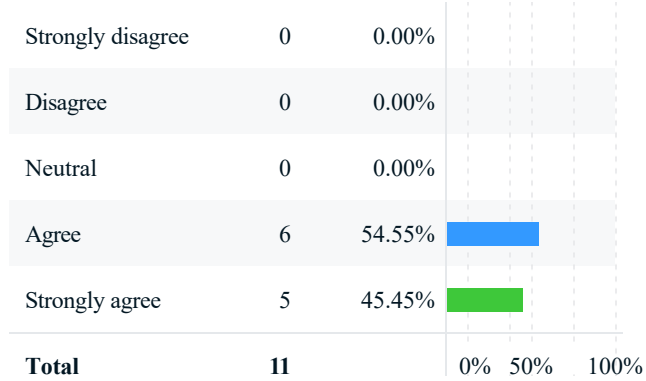
### Overall effectiveness

Scale: ineffective (1), only fair (2), competent (3), very good (4), excellent (5)

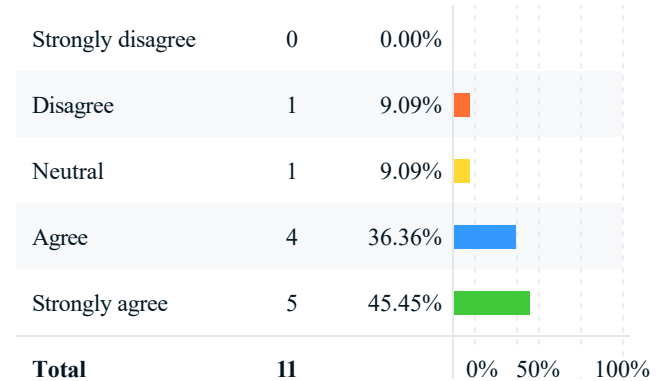
Question	Invited Count	Response Count	Response Rate	Mean	Mode	Median	SD
Express your judgment of the instructor's overall teaching effectiveness.	16	11	68.75%	4.18	4	4.00	0.75

### Response breakdown

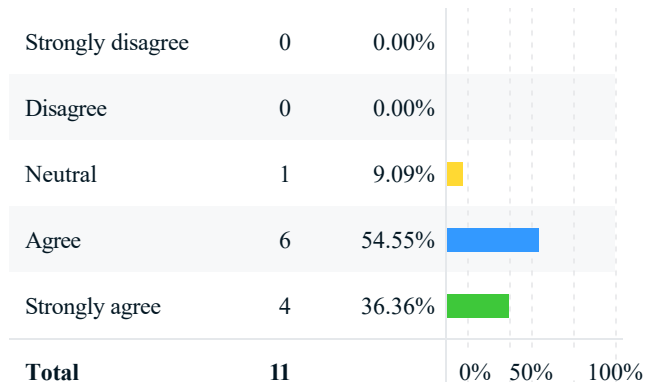
### 1. The instructor stimulated my thinking.



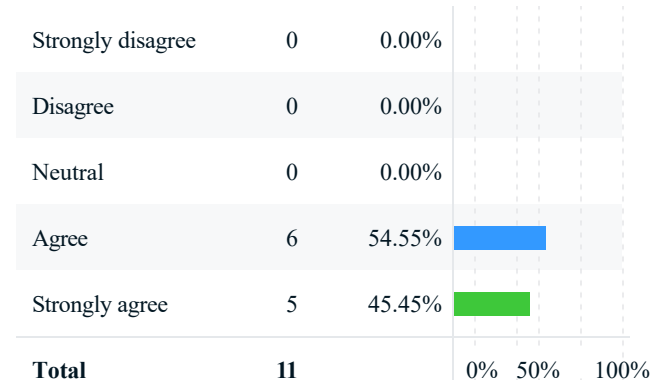
### 2. The instructor was enthusiastic about teaching the course.



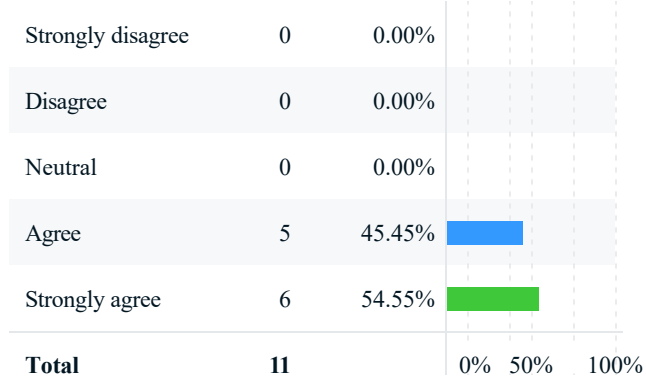
### 3. The instructor presented the course in an organized manner.



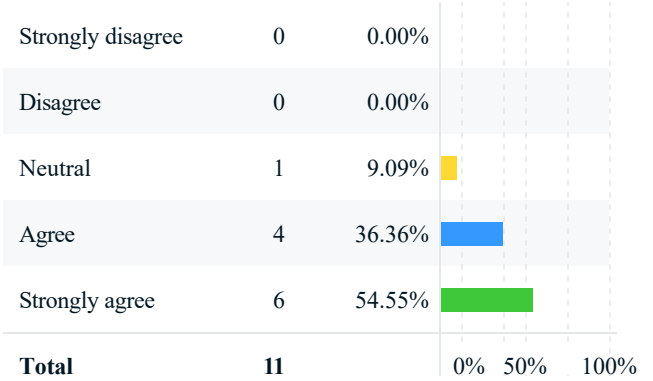
### 4. The instructor maintained an environment where students felt comfortable participating.



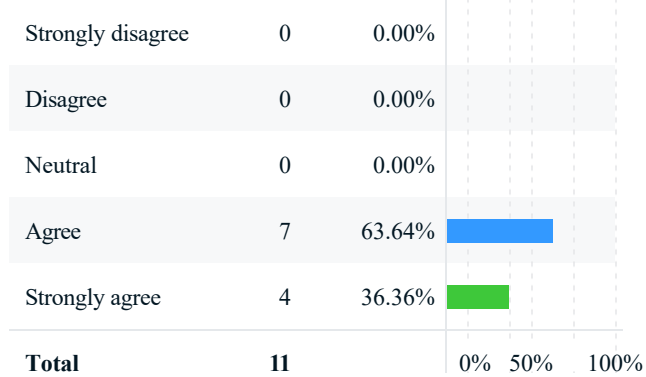
### 5. The instructor maintained an environment where students felt comfortable seeking assistance.



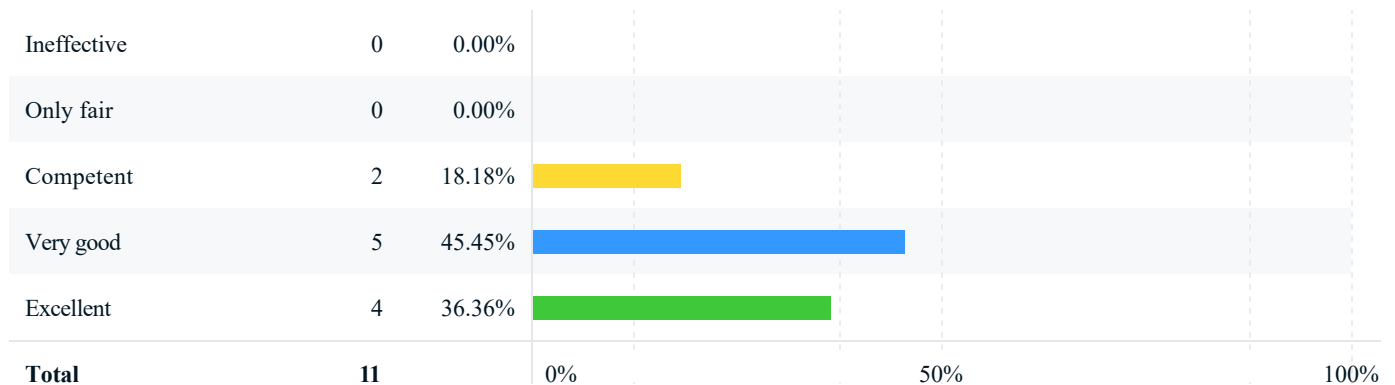
### 6. The instructor provided helpful feedback.



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



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





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

Comments
The teaching staff of 1140 helped me to better learn how MATLAB can be applied in mechanical engineering through application style problems where I was actually applying MATLAB to something I was doing in Statics I or Differential Equations or some similar class.
He was always available for questions and helped me work through problems.
All three instructors were excellent at not giving the answers which is lowkey useless for coding but instead guiding people in the right direction. They always encouraged people to ask for help no matter what even shaming me multiple times for trying to struggle through a problem instead of getting help sooner. The lecture videos were always quick and to the point and corresponded well with the engr 0135 also taught by Dr. Matthew Barry PhD. Solving symbolic systems was helpful because we saw it in a lecture video for this then did an assignment based on it then in the statics class we got a lecture video on it then a lecture on it and so that made coding that particular part significantly easier which relieved significant stress in the bridge project.
Having instructors available to answer questions was very helpful.
For me, the hybrid class structure (where we learned the concepts prior to class via the video Natan recorded) were very helpful. The class time allowed me to ask any questions I had, and the TA's (Natan and Carter) were very helpful in class and out of class. The assignments were also thought out, and the assignments contributed to my understanding of the concepts.
Published presentations of content
Instructor was effective with explaining concepts during class when confused, the videos provided by instructor were helpful, but I used the lecture slides the most and the videos as an additional resource, they were helpful for understanding the slides when confused. The templates provided along with clear expectations (usually, there were exceptions to clarity of expectations for deliverables at times, but was always clarified by end of class) for deliverables provided an effective guideline and goal for the assignment, it helped me know what I needed to do, and what I was missing, in an easy to visualize method.
Providing prelecture videos that were related to the in class assignments. Also, giving the assignments during class made it easy to ask for help if needed.
Lecture videos and slides were posted and contained numerous examples that were easy to look back on.
We did the classwork on our own but they were there for assistance when needed.
Interactive office hours

## What could the instructor do to improve?

Comments
I think that there could be a greater focus on completing something before lecture such as having TopHat questions like in Statics if this someday becomes a class that is fully integrated into the mechanical engineering curriculum.
not much.
Make the lecture videos less boring please please please get Natan to read like he has the desire to be alive. Also, there were some lessons that I felt like should be combined like when there were back-to-back assignments based on the same thing solved differently. Although I understand that the math/engineering topic was identical the coding had 0 similarities. Better organize the topics so that it does not have a hard assignment followed by something extremely easy like deep into the semester. Scale the assignments better so that people do not go from doing kinematics and vector multiplication to solving heat equations that they have no understanding of. I feel like it could have gone better if the instructors all had the same destination like if they all decided okay here is how we will code this and guide people so you do not have people pulling you in different directions. Type through the code in the lecture videos in my humble opinion it makes it significantly easier to understand and would save from having to rewatch. Drop an assignment that is always fun.
Including the python part in the next run would make the course much more useful.
N/A, Natan and Carter were amazing instructors, and every week of the class was thought out.
More examples
Instructor was effective but Instructor could at times be a bit unaware of the difficulties students may face with the assignment, which made it more challenging than expected at times, but was still relatively manageable. Instructor towards the end of the semester (both via student feedback and other instructors feedback) improved with this, and it was greatly appreciated.
Sometimes the assignments were pretty different from the videos and there were things that were not as easy to comprehend.
I think the instructors were helpful and provided ample assistance in class.
I think this class would do better with a small example done in class maybe or something similar like further explanation on the topic. Or, more specific directed questions in the classwork assignment. I feel like just the pre lecture videos is not enough. Maybe doing something like how Barry does his flipped classes where there are videos but also pre lecture questions that are pretty straightforward but with coding instead of questions.
I liked the casual pace of the course overall.

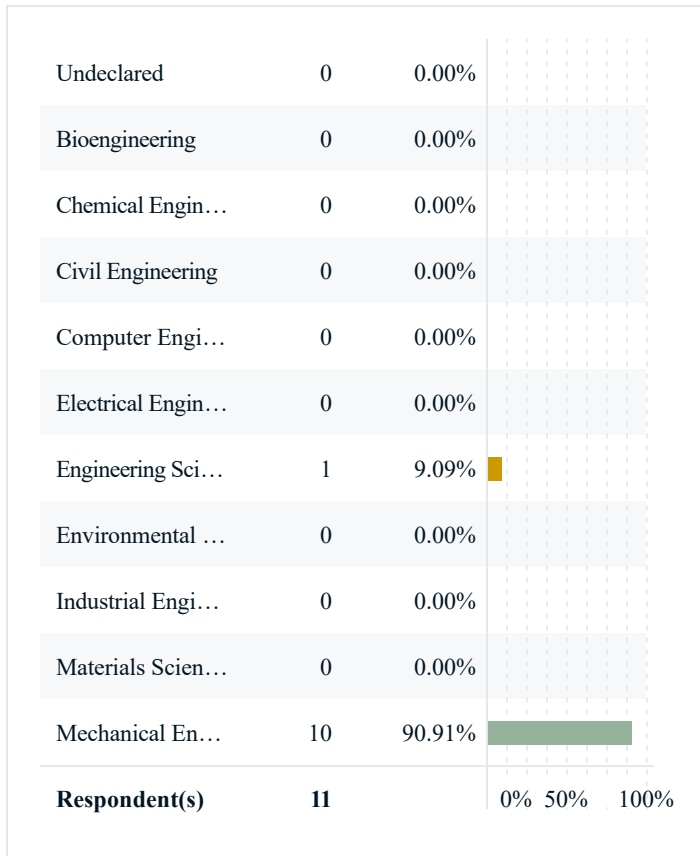
## Do you have any other information that you would like your instructor to know?

Comments
None.
no
<p>I did the bubbles based on Carter and Natan not really Dr Matthew BBarry's PhD since they taught more. Carter was super good and honestly did quite a good job hiding the fact that none of the instructors had a strong desire to teach this class or much prep for it either.</p> <p>I think it would be like super super funny if you made an assignment stupidly hard like unreasonable to do and just see how many people wack it into chatgpt but that accomplishes nothing.</p>
No.
No
<p>I took this course for fun expecting a Python course, and while it was not unpleasant, it wasn't quite what I expected, however that being said I am glad I took this course, as it did provide a very helpful and informative basis for the intermediate basics of engineering coding, beyond what we learn in Engineering 11. I do feel that this course probably should be required for students, as I feel that engineers should know this content, and while it is tedious and stressful at times, I do not deny that the content in this class will (hopefully) be helpful in my career. I am not a Sophomore, and this class was structured and meant for sophomores, and I feel that it would be helpful for sophomores much more than it was helpful for me now, since it would've been useful in the bridge assignment, and other engineering classes I took in the past. To answer what (I presume) you're looking for, this class was an effective pilot for what it was intended to be, and while it wasn't the fun easy python class I hoped for, it was still a relatively not difficult intro to matlab, and I believe that it has a good amount of strong potential for future students (especially sophomores or freshman, maybe even juniors?), and should be repeated. Personally, I do not expect to take any future class for this, as it does not fit in my schedule and I am graduating soon, and I felt that this class would have been more helpful if I had taken it earlier.</p> <p>In short, this class was effective and in my opinion met its goal of being a successful pilot class.</p>
No.
<p>1. As long as the class is mandatory at the sophomore level, I think keeping the problems statics-based is helpful. They are easier in nature and relevant to sophomore level classes. If the class is open to older students, more problems like the heat transfer problem we did in class would be more beneficial.</p> <p>2. I personally thought the templates gave away too much of the assignment and made it too easy. I would rather have done the whole assignment myself.</p>
N/A
<p>The work for some weeks varied a lot. I think it would have been helpful to have examples directly based on the bridge project before the bridge project started, but overall I like the course.</p>

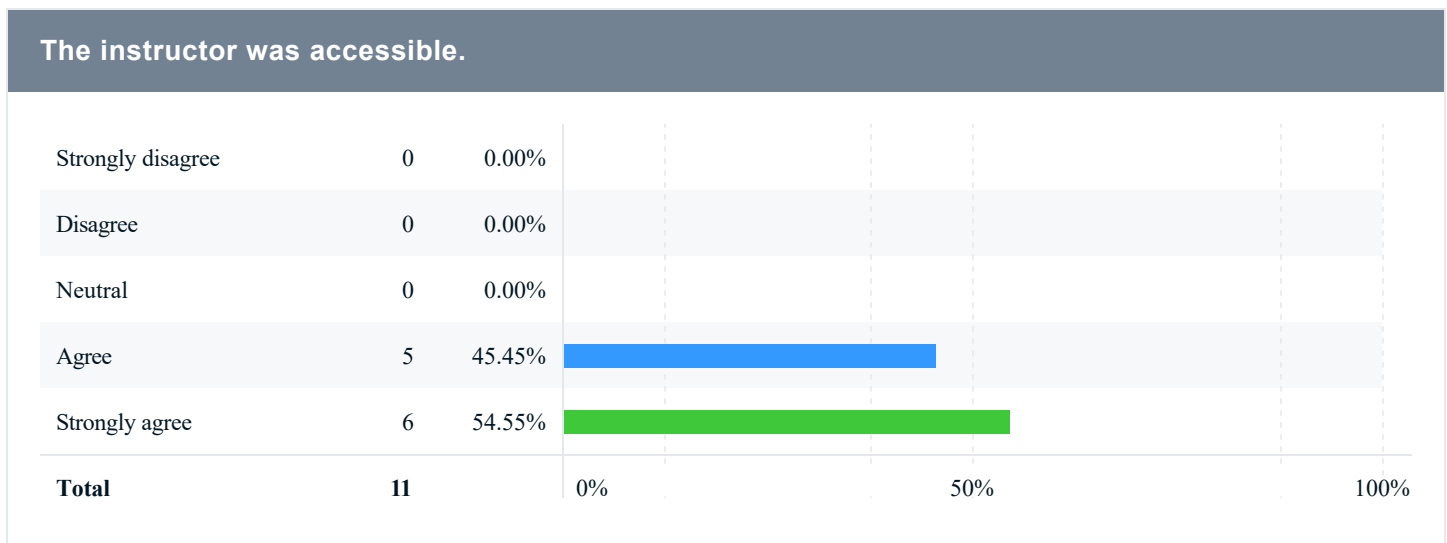


## Swanson School of Engineering Questions

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
I think that taking notes on the lecture and following along in MATLAB would have been better for overall retention but it is not necessary as you always have access to the material while doing the in-class assignments.
Don't be afraid to ask questions during class.
Ask for help quicker instead of banging your head into a metaphorical brick wall
Watch the videos a few days before class so you have time to digest the information.
Make sure to ask any questions in class. The TA's are amazing and constantly willing to help, and make sure to take advantage of them as a resource. Though this is a one credit class, you learn a lot through engaging with the material, and I found the concepts that I learned to be applicable to other classes (like Statics 1 – ENGR 0135)
Do earlier, go to class
Make sure to watch the videos and reread the lecture slides! Additionally finish the assignments before the due date so you aren't cramming to finish!
Pay closer attention to the videos and ask for more help to make sure I know what to do.
N/A, all work was done in class.
Go to office hours more.
Done the work earlier in the week

## Engineering Undergrad Courses

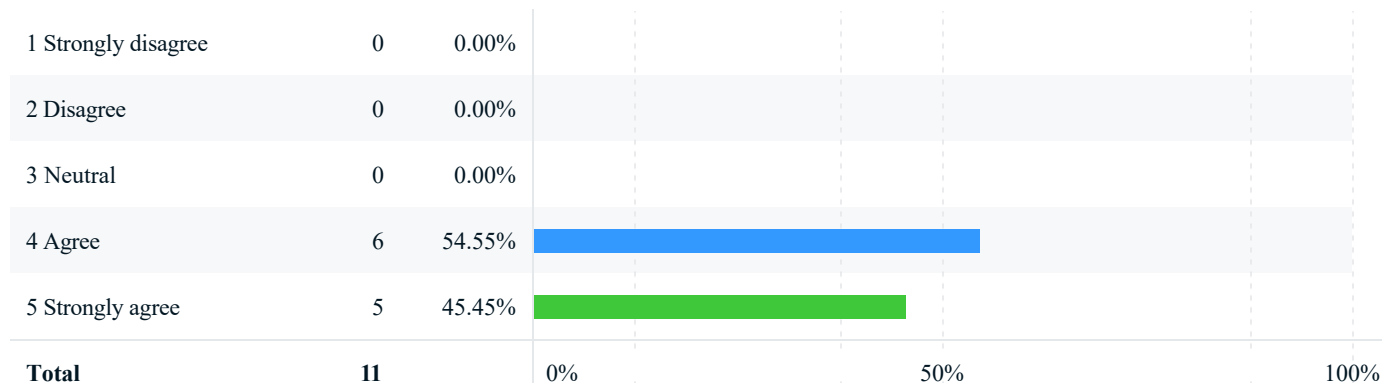
Please rate the degree to which this course has improved...

Question	Results		
	Response Count	Mean	Standard Deviation
Your ability to identify, formulate, and solve complex engineering problems by applying principles of engineering.	11	4.27	0.65
Your ability to identify, formulate, and solve complex engineering problems by applying principles of science.	11	3.82	0.87
Your ability to identify, formulate, and solve complex engineering problems by applying principles of mathematics.	11	3.82	0.87
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare.	11	3.09	1.38
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).	11	2.55	1.37
Your ability to apply engineering design to produce solutions that meet specified needs with consideration of environmental and economic factors (i.e., sustainability principles).	11	2.82	1.40
Your ability to effectively communicate verbally with a wide range of audiences.	11	2.55	1.69
Your ability to effectively communicate in writing to a wide range of audiences.	10	2.70	1.34
Your ability to recognize ethical and professional responsibilities in engineering situations.	11	2.36	1.43
Your ability to make informed judgments that consider the impact of engineering solutions in global and societal contexts (i.e., sustainability principles).	10	2.50	1.35
Your ability to make informed judgments that consider the impact of engineering solutions in economic and environmental contexts (i.e., sustainability principles).	11	2.45	1.29
Your ability to function effectively on a team whose members together provide an inclusive environment, collaboration, and leadership.	11	2.36	1.36

Question	Results		
	Response Count	Mean	Standard Deviation
Your ability to function effectively on a team whose members together establish goals, plan tasks, and meet objectives.	11	2.45	1.44
Your ability to develop appropriate experiments.	10	3.00	1.25
Your ability to conduct appropriate experiments.	11	2.91	1.22
Your ability to analyze and interpret data and use engineering judgment to draw conclusions.	11	3.82	1.25
Your ability to embrace new learning strategies to independently acquire and apply new knowledge to solve engineering problems.	11	4.09	0.94

## Diversity and Inclusion

The instructor creates an inclusive learning environment for all students.



Statistics	Value
Invited Count	16
Response Count	11
Response Ratio	68.75%
Mean	4.45
Median	4.00
Mode	4
Standard Deviation	0.52