



# WashU Spring 2018 Instructor Report for SP2018.E37.MEMS.5403.01 - Conduction and Convection Heat Transfer (Michael Wendl)

Project Title: **WashU Spring 2018 Course Evaluations**

Project Audience: **18**

Responses Received: **12**

Response Ratio: **66.67%**

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## Report Comments

Welcome to your Instructor Report for WashU Course Evaluations. Below you will find response data from the specified course section. Responses to personalized questions appear at the bottom of the report.

The intention of this report is to provide feedback, and also to prompt improvement in areas that may be lacking. This report is accessible to appropriate department level and school level users, as determined by your school. We appreciate your dedication to our learning community at Washington University.

If you have questions about this report, please contact [evals@wustl.edu](mailto:evals@wustl.edu)

Please Note: In order to protect student anonymity, course sections with fewer than 4 respondents have been excluded.

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Creation Date: **Tue, Jun 05, 2018**

## Course Administration

Was a course syllabus or a course information sheet distributed or available online?

Options	Count	Percentage
Yes	12	100.00%
No	0	0.00%

Did the syllabus explain the content and administration of the course (e.g., office hours, grading)?

Options	Count	Percentage
Yes	11	91.67%
No	1	8.33%

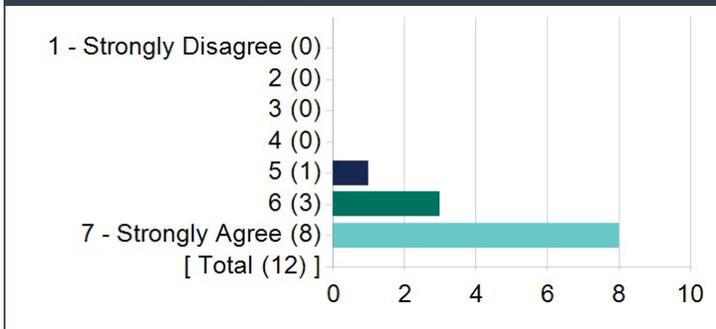
Early in the semester, did your professor explain the expectations for academic integrity?

Options	Count	Percentage
Yes	12	100.00%
No	0	0.00%

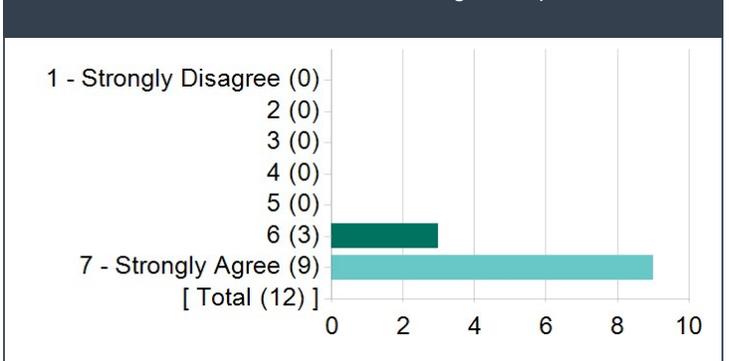
## Rating Scale Responses

Question	Score			
	Mean	Median	Response Count	Standard Deviation
In retrospect, the syllabus was an accurate reflection of how the course was actually taught.	6.58	7.00	12	0.67
The course matched the course catalog description.	6.75	7.00	12	0.45

1. In retrospect, the syllabus was an accurate reflection of how the course was actually taught.



2. The course matched the course catalog description.



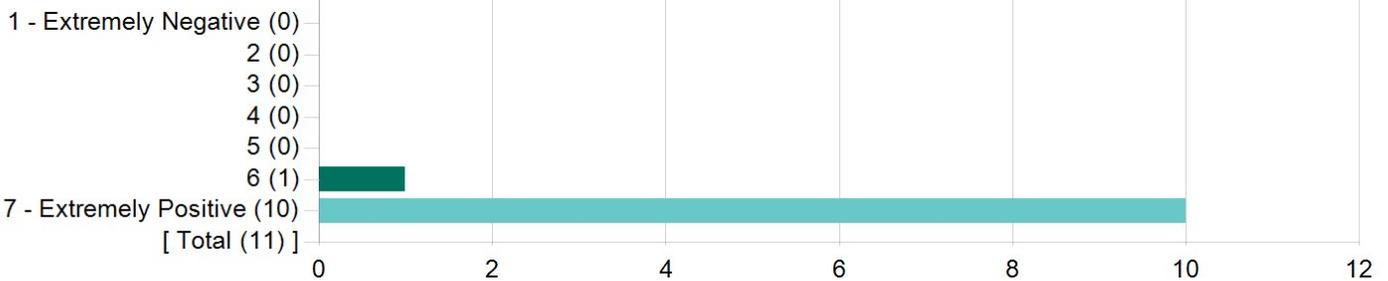
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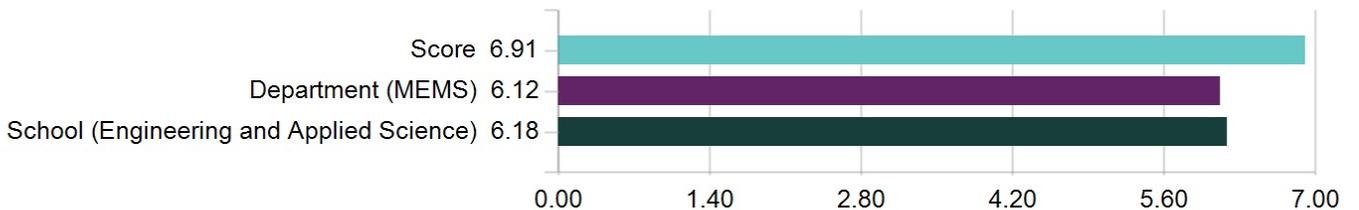
2. The course matched the course catalog description.



Please rate how well **Michael Wendl** promoted an inclusive learning environment with regard to the diversity of student personal backgrounds and identities.



Statistics	Value
Response Count	11
Mean	6.91
Median	7.00
Standard Deviation	0.30



Where relevant, please give specific examples to explain your answer above.

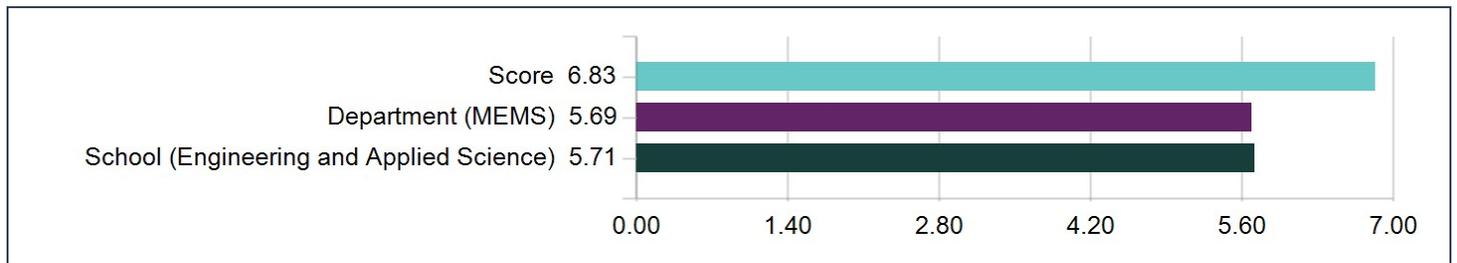
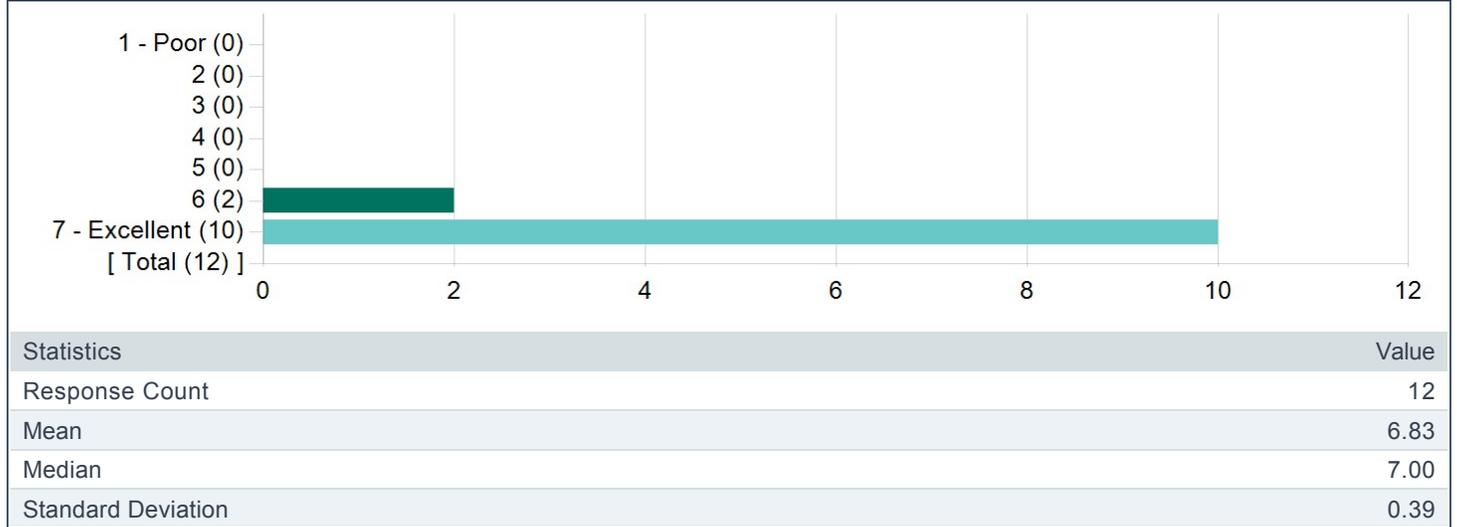
**Comments**

The professor focused on conveying higher concepts and abilities to understand the material and not busy work. The derivations didn't get too bogged down and I was able to see the importance in the minutia of the mathematics while appreciating the bigger picture "real-world" applications via his examples and discussion on how to program the math. Very good course.

His examples related to many industries.

## Instructor Evaluation

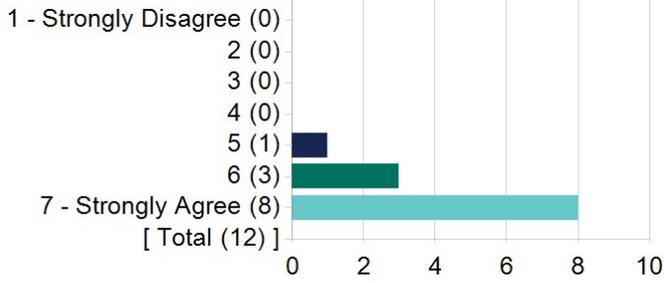
Overall rating for teaching quality of **Michael Wendl**.



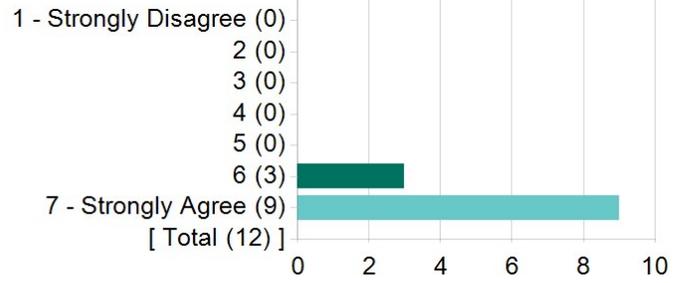
### Rating Scale Responses for **Michael Wendl**

Question	Score			
	Mean	Median	Response Count	Standard Deviation
The instructor made the course interesting.	6.58	7.00	12	0.67
The instructor was enthusiastic about the course.	6.75	7.00	12	0.45
The material was covered at a reasonable pace.	6.42	6.50	12	0.67
The instructor was available to answer questions (through office hours, email, etc.).	6.50	7.00	12	0.67
The instructor was well-organized and prepared for class.	6.42	6.50	12	0.67
The instructor explained the course material so that you could understand it.	6.75	7.00	12	0.45

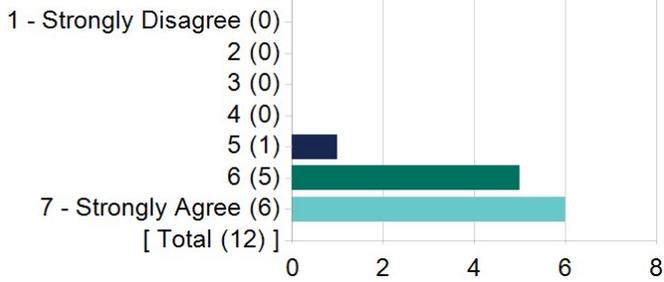
1. The instructor made the course interesting.



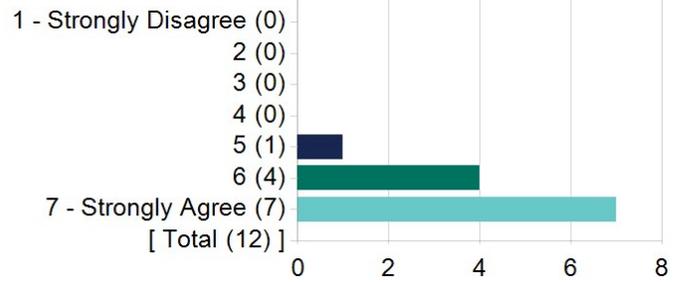
2. The instructor was enthusiastic about the course.



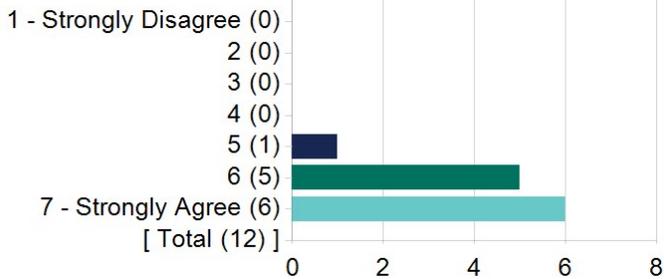
3. The material was covered at a reasonable pace.



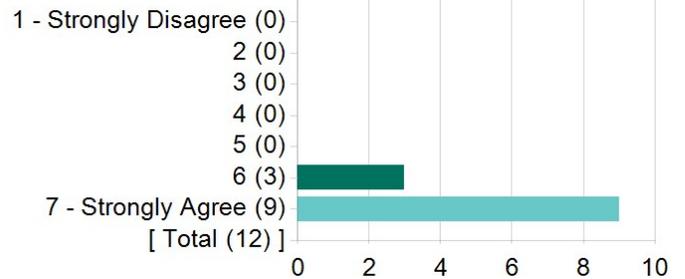
4. The instructor was available to answer questions (through office hours, email, etc.).



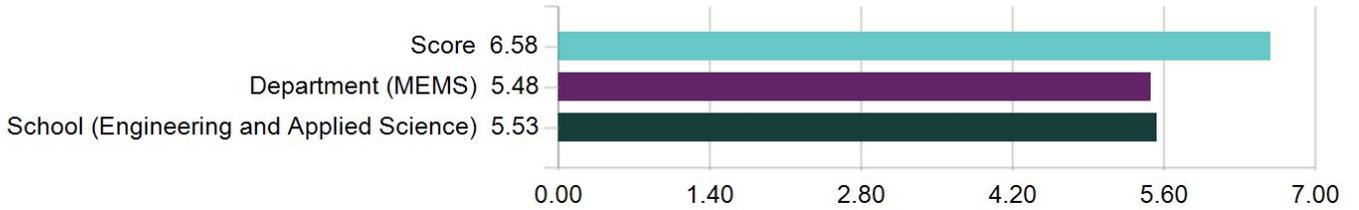
5. The instructor was well-organized and prepared for class.



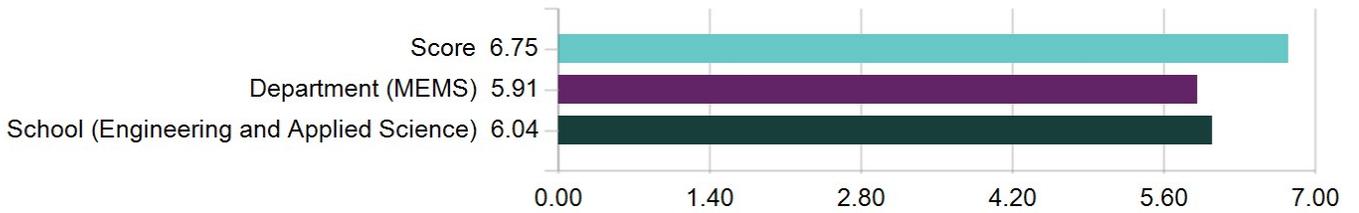
6. The instructor explained the course material so that you could understand it.



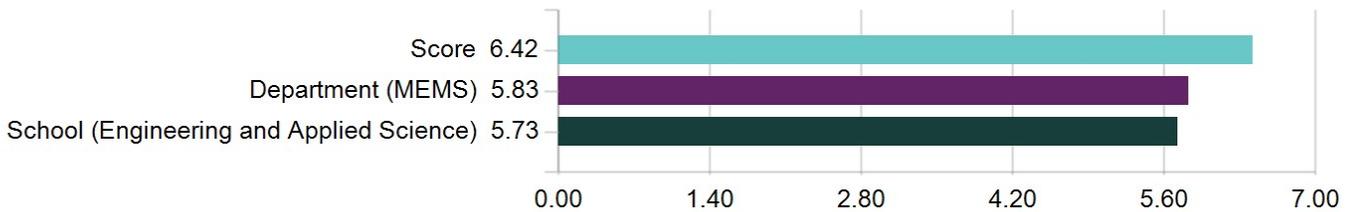
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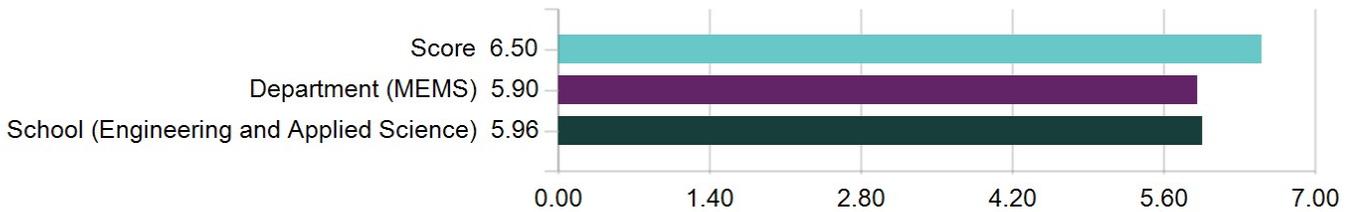
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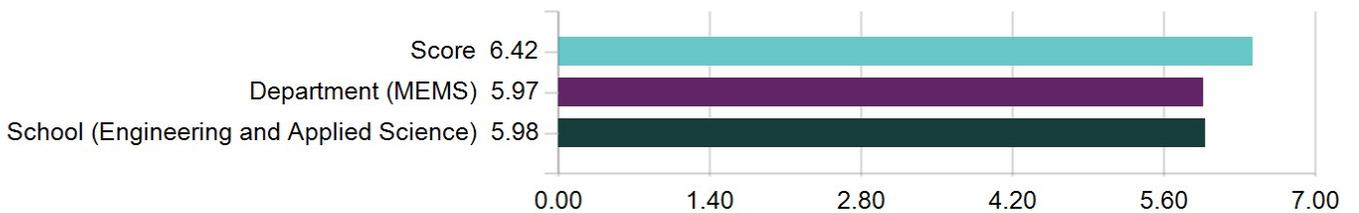
3. The material was covered at a reasonable pace.



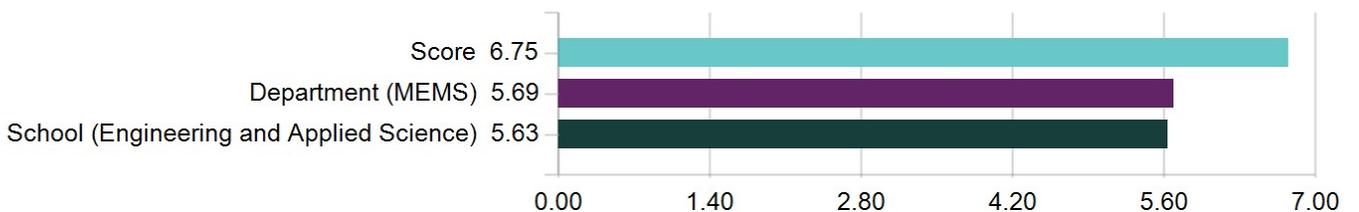
4. The instructor was available to answer questions (through office hours, email, etc.).



5. The instructor was well-organized and prepared for class.

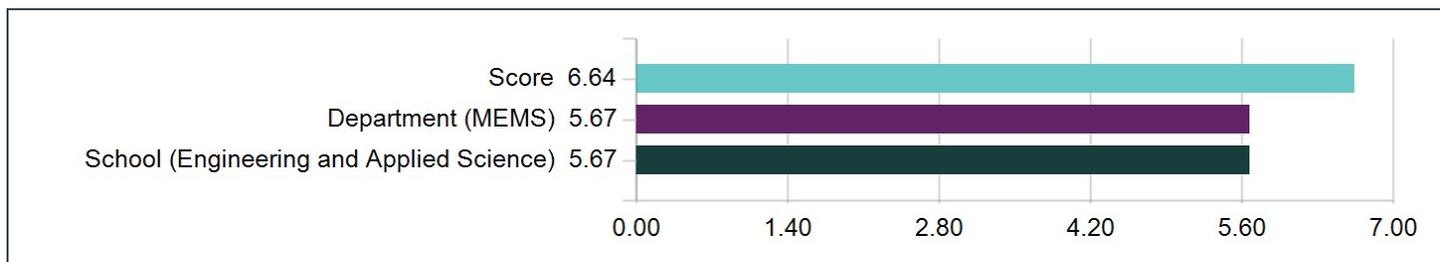
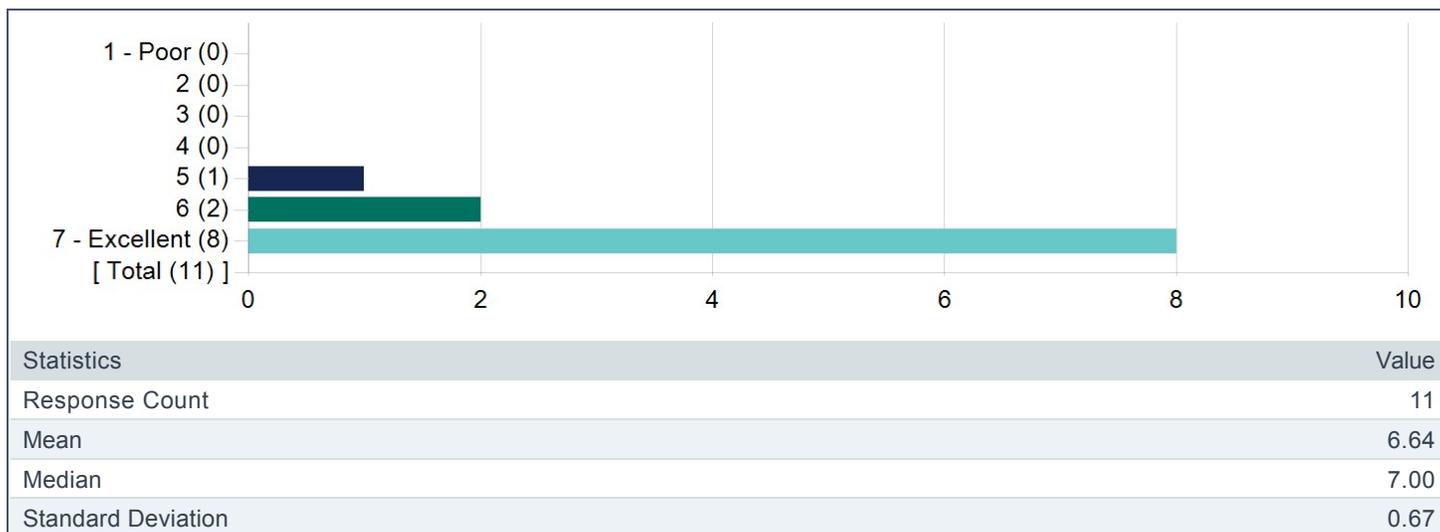


6. The instructor explained the course material so that you could understand it.



## Course Materials and Assignments

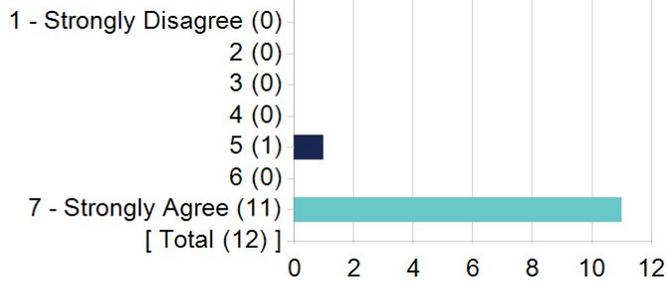
Overall rating of course content.



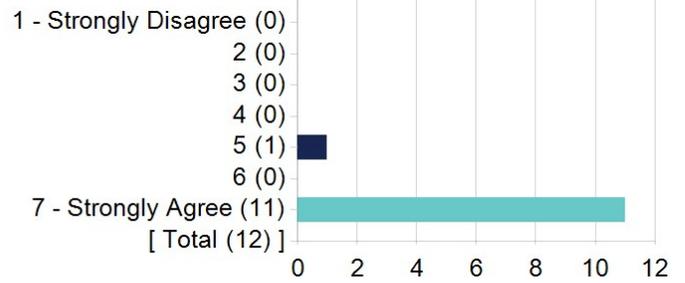
## Rating Scale Responses

Question	Score			
	Mean	Median	Response Count	Standard Deviation
Textbooks/readings complemented the lectures.	6.83	7.00	12	0.58
Textbooks/readings were useful.	6.83	7.00	12	0.58
Assigned homeworks were helpful and relevant to the course.	6.67	7.00	12	0.65
There was reasonable time to complete assignments.	6.75	7.00	12	0.45
Assignments were returned within a reasonable period of time.	5.83	6.50	12	1.59
Comments on graded work were helpful.	5.82	6.00	11	1.47
Labs were an effective supplement to the course.	6.67	7.00	3	0.58
The course material drew upon real world applications.	6.33	6.50	12	0.78

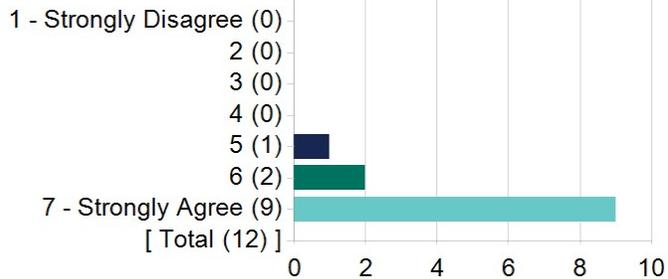
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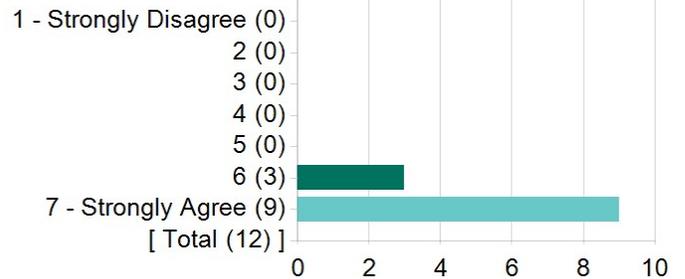
2. Textbooks/readings were useful.



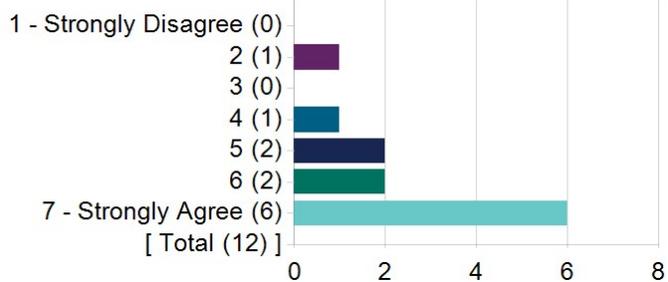
3. Assigned homeworks were helpful and relevant to the course.



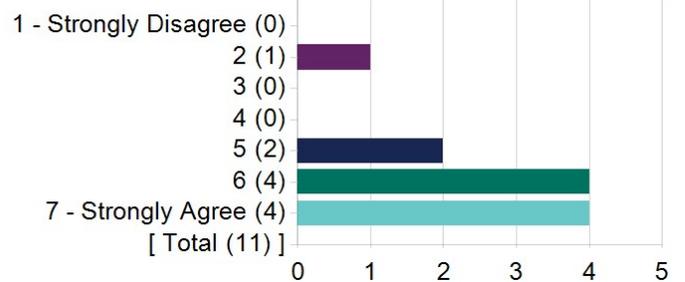
4. There was reasonable time to complete assignments.



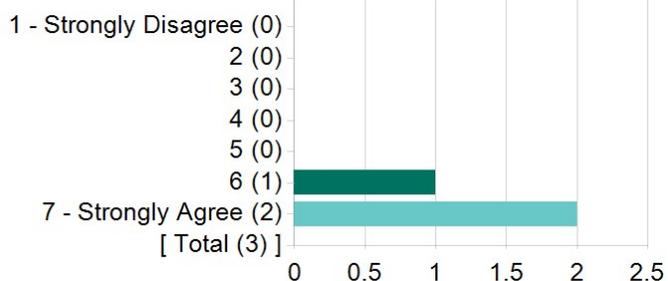
5. Assignments were returned within a reasonable period of time.



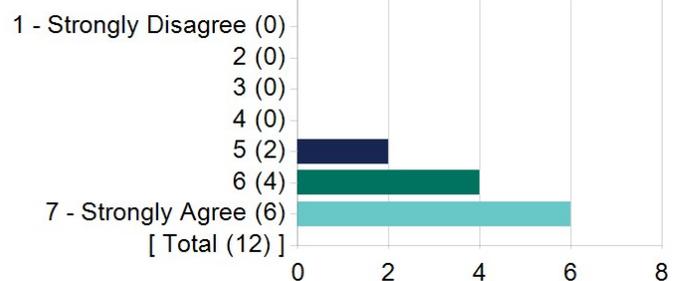
6. Comments on graded work were helpful.



7. Labs were an effective supplement to the course.



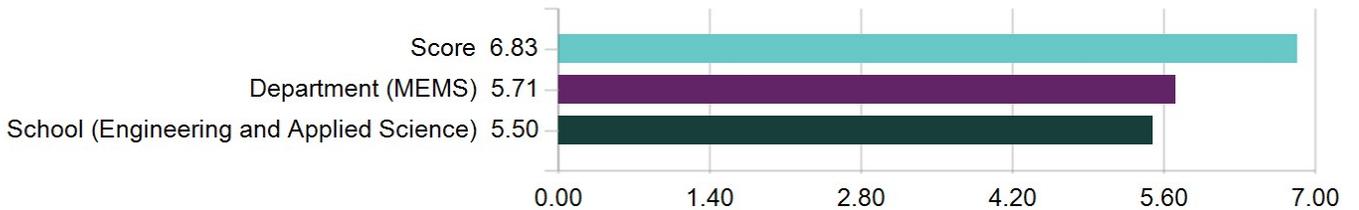
8. The course material drew upon real world applications.



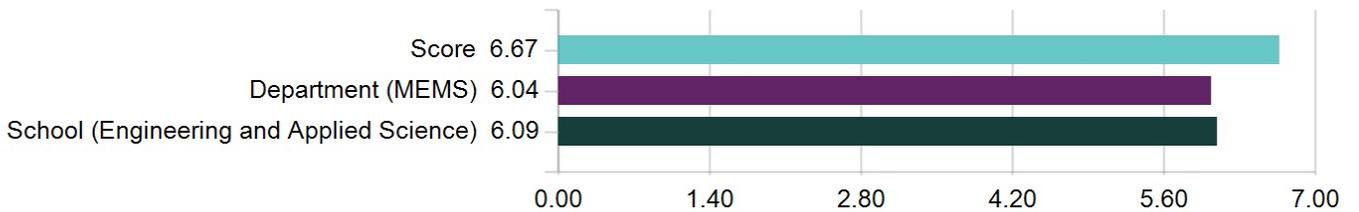
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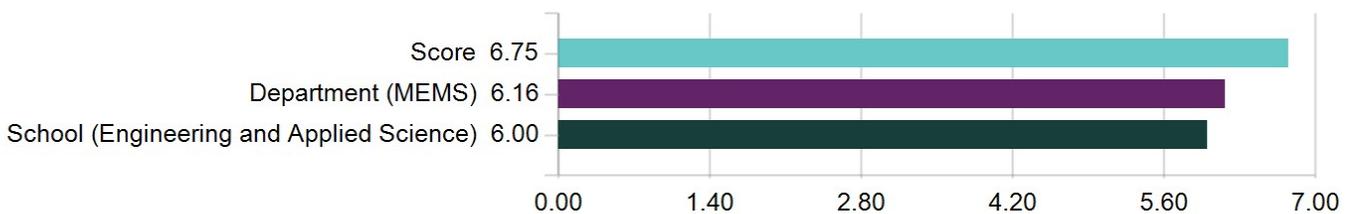
2. Textbooks/readings were useful.



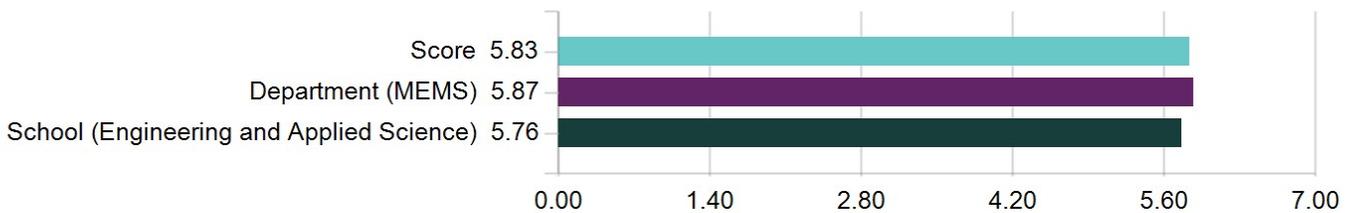
3. Assigned homeworks were helpful and relevant to the course.



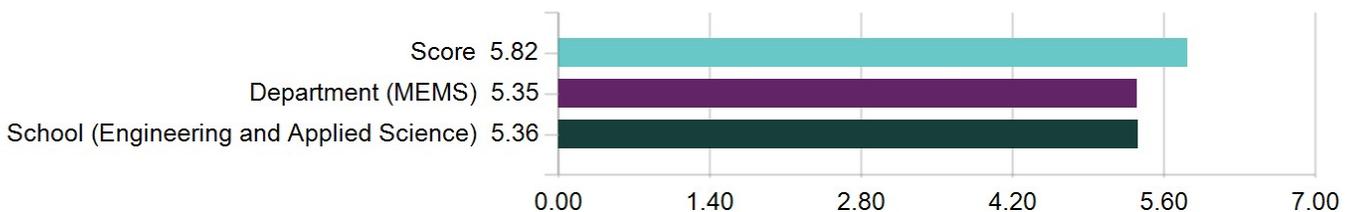
4. There was reasonable time to complete assignments.



5. Assignments were returned within a reasonable period of time.



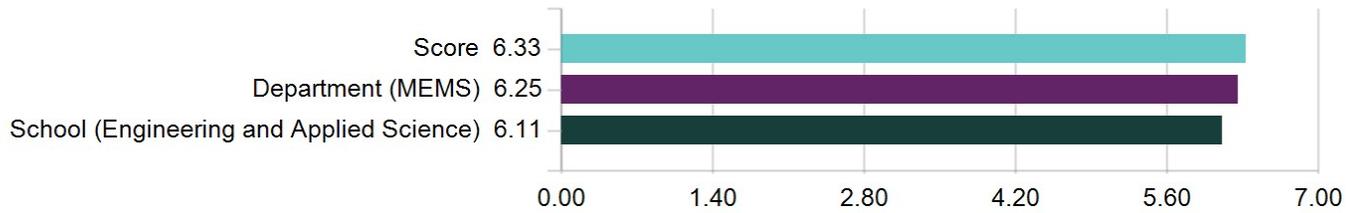
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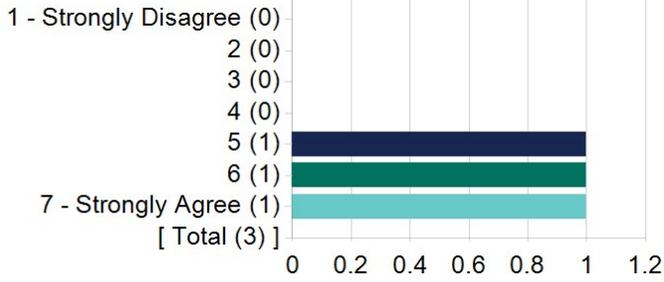


## TA and Recitation

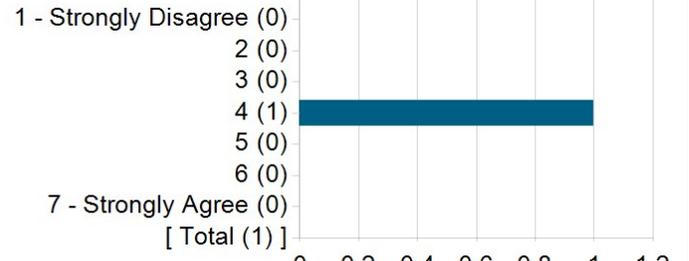
### Rating Scale Responses

Question	Score			
	Mean	Median	Response Count	Standard Deviation
The assistant to the instructor was effective.	6.00	6.00	3	1.00
The assistant to the instructor was available and responsive to questions.	4.00	4.00	1	0.00
Recitation section served to enhance your understanding of the course material.	7.00	7.00	1	0.00

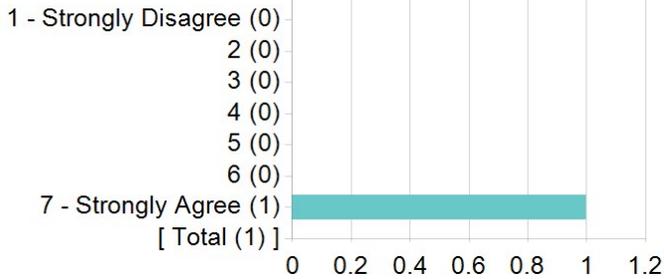
1. The assistant to the instructor was effective.



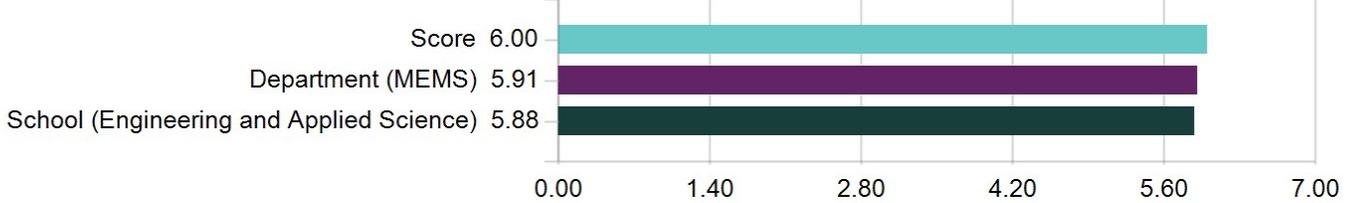
2. The assistant to the instructor was available and responsive to questions.



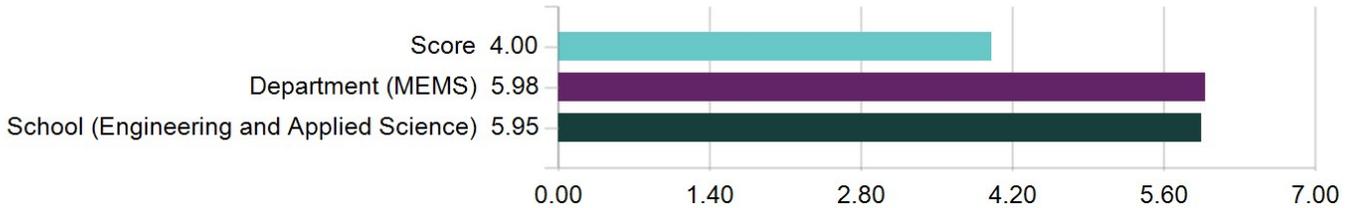
3. Recitation section served to enhance your understanding of the course material.



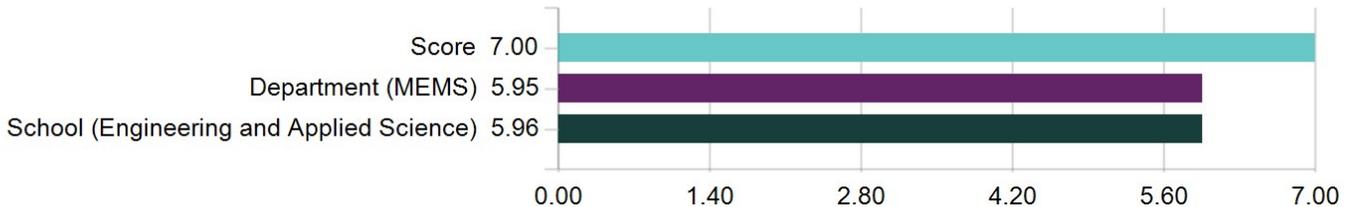
1. The assistant to the instructor was effective.



2. The assistant to the instructor was available and responsive to questions.



3. Recitation section served to enhance your understanding of the course material.



**Please comment on the effectiveness of the TA.**

Comments
Grader was great. Would have been nice to get things back a little quicker though.

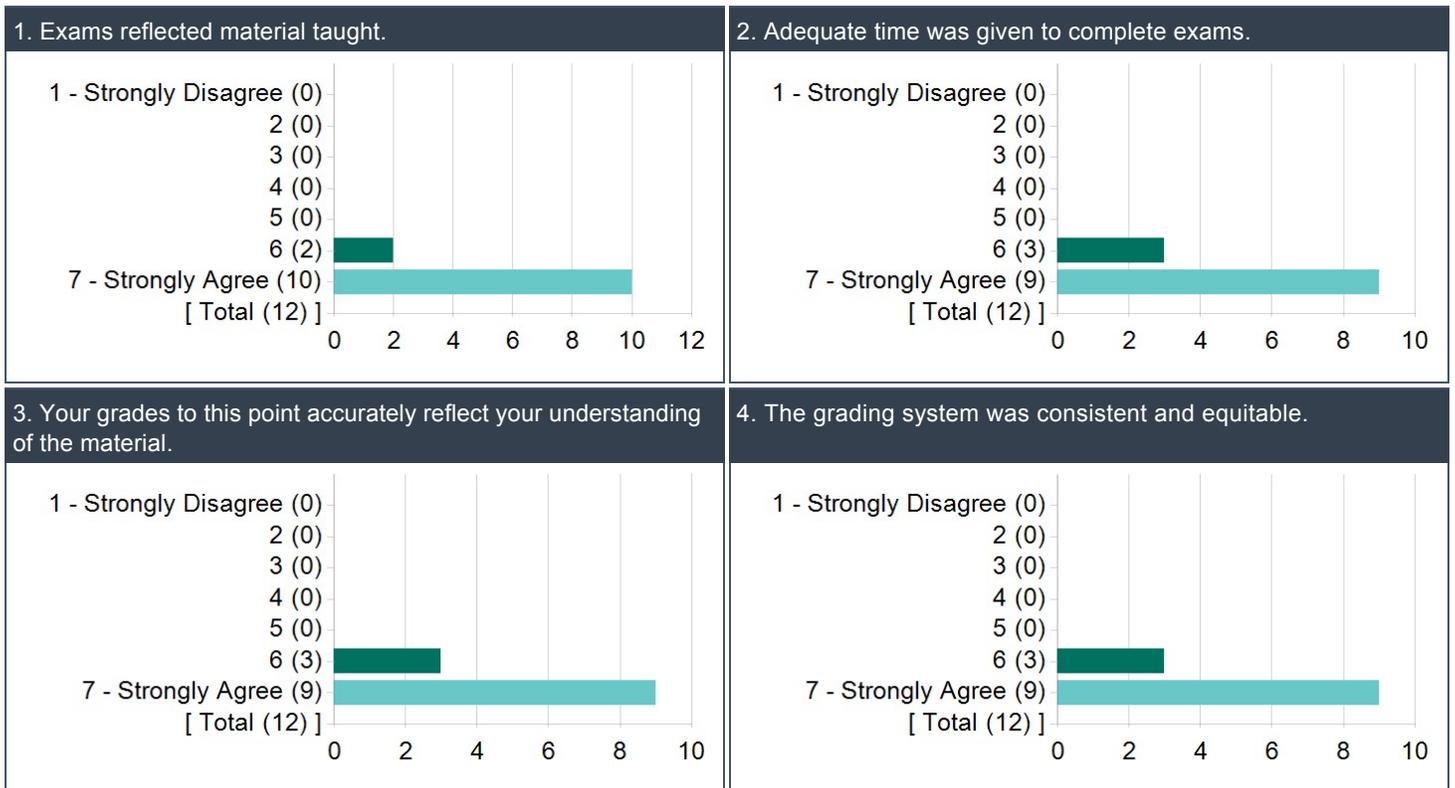
**Exams and Grade**

**Expected grade for this course.**

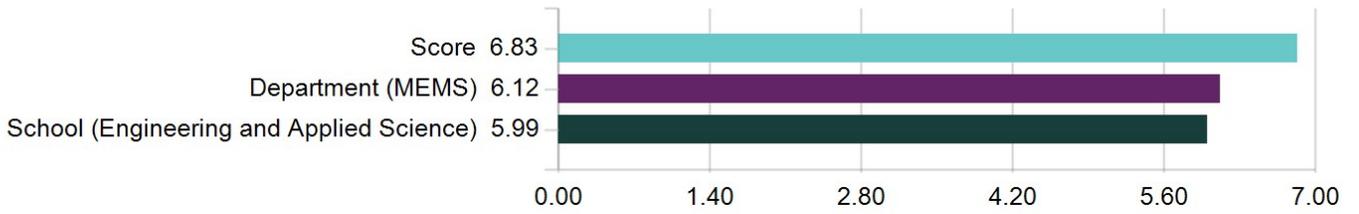
Options	Count	Percentage
A	10	100.00%
B	0	0.00%
C	0	0.00%
D	0	0.00%
F	0	0.00%
P	0	0.00%

**Rating Scale Responses**

Question	Score			
	Mean	Median	Response Count	Standard Deviation
Exams reflected material taught.	6.83	7.00	12	0.39
Adequate time was given to complete exams.	6.75	7.00	12	0.45
Your grades to this point accurately reflect your understanding of the material.	6.75	7.00	12	0.45
The grading system was consistent and equitable.	6.75	7.00	12	0.45



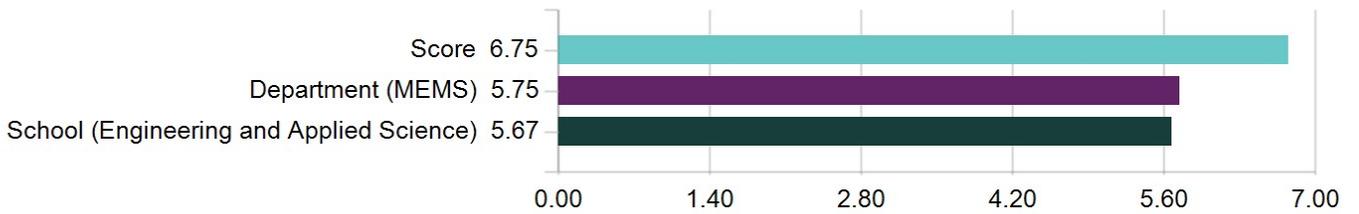
1. Exams reflected material taught.



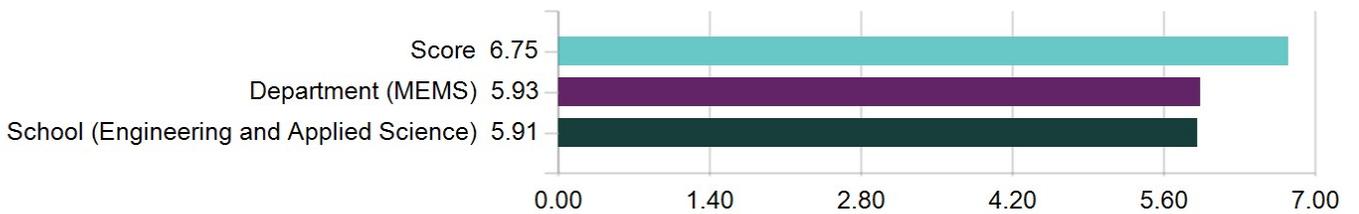
2. Adequate time was given to complete exams.



3. Your grades to this point accurately reflect your understanding of the material.



4. The grading system was consistent and equitable.



**Overall**

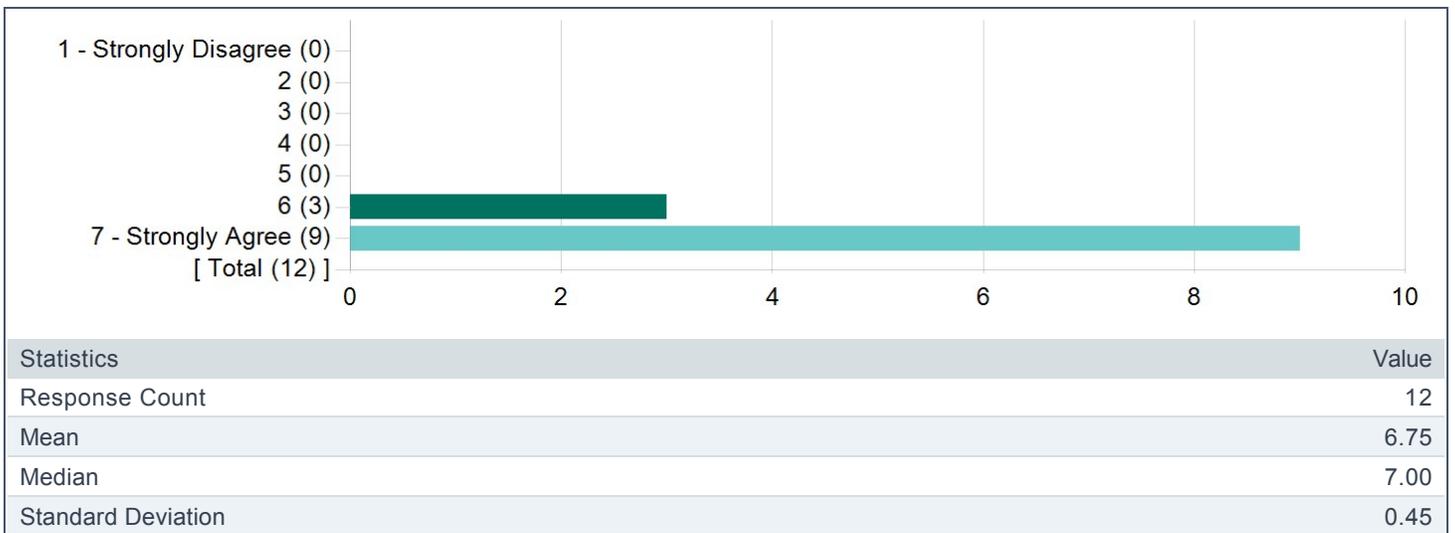
**About how many hours per week did you spend on this course outside of class?**

Options	Count	Percentage
0	0	0.00%
1-3	1	8.33%
4-6	8	66.67%
7-9	2	16.67%
10-12	1	8.33%
13-15	0	0.00%
Over 15	0	0.00%

### What percentage of the lectures did you attend?

Options	Count	Percentage
0%	0	0.00%
10%	0	0.00%
20%	0	0.00%
30%	0	0.00%
40%	0	0.00%
50%	0	0.00%
60%	0	0.00%
70%	0	0.00%
80%	2	16.67%
90%	2	16.67%
100%	8	66.67%

### Would you recommend this course to others?



### Any comments on why you did or did not attend lecture?

Comments
Lectures were great with explaining very difficult material.

## Comments

### What did you like most about this course?

Comments
Step by step examples of how to solve problems.
Mathematics explanation of heat transfer
We got to dive deep into some problems in lecture, using mathematical techniques that I never had before.
very organized textbook, interesting math with numerical considerations
Detailed explanation of the math made the material very approachable
Made a difficult subject approachable and interesting
I enjoy the lectures and the homework. I find myself looking forward to doing the work for this class. I especially like the little asides we take into the computational aspects of our solutions.
I liked that the material was interesting and was made engaging by the professor, and I felt like the homework was very useful to understanding and not just busy work.

### How could this course improve?

Comments
Videos showing examples of the heat transfer.
Maybe talk about a little on the conceptual things.
This is the first time I've ever said this, but it could stand to be a little more difficult. Perhaps the homework could come more often or something.
More hands on experience with numerical computation
Better classroom
Honestly, I can't believe I am saying this but I think there could stand to be more HW assignments for this class.
There wasn't enough time to cover all of the material and it felt rushed at times.

### What did you like the most about Instructor **Michael Wendl**?

Comments
He worked through problems and did not simply copy from the book.
Professor Wendl is a really nice and enthusiastic professor. He respect any comments from the students and always gives explanation with full of patience
Strong mathematics background.
One of the best professors I've had– incredibly enthusiastic about the material, and eager to make sure everyone understands it.
Personable, helpful, understanding of students, clearly knowledgeable on the math and real life numerical application
Very knowledgeable and answered questions well.
Was able to present heat transfer in an intuitive and thoughtful way.
He is one of the best professors I have had at Wash U. His lecture style is interactive in a stimulating way. He makes me want to ask more questions and learn more because I know that he has a lot of good answers to offer. He poses questions that really make you think conceptually about a problem and is willing to take the time to answer a complicated question.
Professor Wendl make the course and material interesting and engaging. I liked that we discussed the material as we took notes.

### How could Instructor **Michael Wendl** improve?

Comments
Very little to improve on. Maybe provide videos of CFDs showing heat transfer.
Talk a little on the conceptual heat transfer.
Sometimes the lectures were a little hard to follow when he would selectively erase lines and parts of equations. This could probably just be solved by getting a classroom with more boards, so he could just rewrite the line.
Should spend a little more on concepts and numerical application since much of the tedious math is given in the textbook. Lectures should be more to complement rather than work purely through the textbook. Overall very good teaching quality that said.
Office hours
He is fantastic.
It could be hard to follow the notes on the board when he began writing on multiple boards at the same time.

### What would you tell another student who asked you to describe this course?

Comments
Describes the basics of heat transfer and how the equations were derived.
It's a very good class if you want to learn deeper in heat transfer
Really good, and as interesting as a math/engineering course can get. The timing (7PM) made it difficult for me to give it 100%, which was a bummer because he gave it 110%. Keep your head up and ask questions, and you'll be fine.
Gives interesting analytical/math perspective of physics we learn in engineering. Interesting considerations of numerical computation
Surprisingly Excellent
Easy and fun, but also worthwhile.
It will give you a good understanding of methods to solve differential equations and how heat transfer equations are solved.

### Have you observed any violations of academic integrity (e.g., cheating) in this course?

Comments
No

### Any additional comments?

Comments
I love this class. I honestly want it to be harder at times though. I would love to explore some of the computational methods.