Rutgers University Student Instructional Rating

Spring 2021

Charnley, Matthew - MPC163

Differential Equations For Engineering And Physics - 01:640:244:01, 02, 03

Survey Form: *Standard SIRS

Enrollment: 79

Responses Received: 36

The Student Instructional Ratings Surveys should be considered within the context of the global health emergency. Rutgers University has decided that some instructors have flexibility in choosing whether to include the Spring 2021 SIRS results in promotion and rehiring materials. Details may vary by campus, rank, or position; please confer with your department chair for more information.

Special University-wide Questions for Spring 2021

Due to the challenges created by the Covid-19 pandemic, three additional questions were added to the Spring 2021 survey.

Weight of responses: 1=SD (Strongly Disagree), 2=D (Disagree), 3=N (Neutral), 4=A (Agree), 5=SA (Strongly Agree), Resp=Number of Student Responses
Weighted Means: Section, Course, Level, Department

	SD	D	N	A	SA	Resp	**Section**	Course	Level	Dept
Given the content and level of the course, the course workload was manageable.	1	1	0	13	21	36	**4.44**	4.27	4.12	3.96
The course site used for this course, whether in Canvas, Sakai, or Blackboard, was well organized.	1	0	0	7	28	36	**4.69**	4.29	4.25	4.21
The instructions given for assignments, exams, quizzes, and other course activities were clear and easy to understand.	1	0	1	15	19	36	**4.42**	4.13	4.15	4.03

University-wide Instructor Questions

Weight of responses: 1=SD (Strongly Disagree), 2=D (Disagree), 3=N (Neutral), 4=A (Agree), 5=SA (Strongly Agree), Resp=Number of Student Responses
Weighted Means: Section, Course, Level, Department

	SD	D	N	A	SA	Resp	**Section**	Course	Level	Dept
The instructor Matthew Charnley was prepared for class and presented the material in an organized manner.	1	0	2	9	23	35	**4.51**	4.32	4.36	4.28
The instructor Matthew Charnley responded effectively to student comments and questions.	1	0	3	4	27	35	**4.60**	4.29	4.34	4.26
The instructor Matthew Charnley generated interest in the course material.	1	0	2	7	24	34	**4.56**	4.11	4.18	4.07
The instructor Matthew Charnley had a positive attitude toward assisting all students in understanding course material.	1	0	0	7	27	35	**4.69**	4.34	4.41	4.33
The instructor Matthew Charnley assigned grades fairly.	1	0	4	8	22	35	**4.43**	4.21	4.32	4.17
The instructional methods of Matthew Charnley encouraged student learning.	1	0	0	12	21	34	**4.53**	4.16	4.21	4.09

Teaching Effectiveness

Weight of responses: 1=P (Poor), 2=F (Fair), 3=A (Average), 4=G (Good), 5=E (Excellent), Resp=Number of Student Responses
Weighted Means: Section, Course, Level, Department

	P	F	A	G	E	Resp	**Section**	Course	Level	Dept
I rate the teaching effectiveness of the instructor Matthew Charnley as:	1	0	1	7	25	34	**4.62**	4.21	4.26	4.11

University-wide Course Questions

Weight of responses: 1=SD (Strongly Disagree), 2=D (Disagree), 3=N (Neutral), 4=A (Agree), 5=SA (Strongly Agree), Resp=Number of Student Responses
Weighted Means: Section, Course, Level, Department

	SD	D	N	A	SA	Resp	**Section**	Course	Level	Dept
I learned a great deal in this course.	1	0	0	11	23	35	**4.57**	4.22	4.19	4.01
I had a strong prior interest in the subject matter and wanted to take this course.	1	4	7	12	10	34	**3.76**	3.71	3.72	3.45

Course Quality

Weight of responses: 1=P (Poor), 2=F (Fair), 3=A (Average), 4=G (Good), 5=E (Excellent), Resp=Number of Student Responses
Weighted Means: Section, Course, Level, Department

	P	F	A	G	E	Resp	**Section**	Course	Level	Dept
I rate the overall quality of the course as:	1	0	1	12	20	34	**4.47**	4.01	4.03	3.82

What do you like best about this course?

These comments are intended for all instructors.

Comments
I like that there are many participation points
The professor's organization, fairness and kindness.
I liked how organized the system was and everything taught was relevant to exams and quizzes. I liked doing practice problems after class because it helped me see if I fully understand the material from lecture. In addition, I the grading system allows us to realize our mistake to do better next time.
workload isnt too bad
The mastery grading system.
Johnny Fonseca did an excellent job as our recitation teacher and I found that the credited engagement (i.e. poll questions and practice problems) were helpful in my learning.
Organization and set up. Also the professor and TA
Mastery based system, and overall Professor Charlney's style.
Learning online was actually very effective and this specific class run by Dr. Charnley was very well done. I really liked how he made us practice and learn calculus every day without overexerting ourselves. Poll questions, practice questions, and pre lecture videos really helped me understand and learn without having to reference the textbook. Pre–lecture was a good introduction to what I am about to learn. The lecture gave me a good understanding and broke down what I just saw in the pre lecture. The recitation was a great summary of how everything makes sense and how I can apply it to problems now.
the grading scheme is really a keeper for me. I'm not just saying this because I have the highest grades. I normally accel pretty well in math classes, and I don't think this grading scheme was easy to take advantage of. I really believe it took a lot of extra and unnecessary pressure/stress off of students. Prof Charnley wanted us to succeed, not to pin us against one another and have us compete for the highest grade. Especially during COVID, this was a great decision. Pre&Post class assignment structure is beautifully designed. never change that.
The mastery system– it emphasized learning over memorizing and was very forgiving with simple algebraic errors which I think a lot of math classes do not do.
The mastery grading system implemented really set the way this course was taught apart and I feel as though I didn't just learn the material just well enough to pass the next assessment or test, but I really gained a true understanding of what was taught and will retain this knowledge to use in future courses. The mastery system meant that your grade was built upon what you did do well and what you accomplished, rather than your grade suffering for what you got wrong or missed on a single assessment. Some courses can be difficult because certain problems or concepts are only seen or tested once before a major assessment or final, but the format of the course allowed for us to see material more than once and have more than one opportunity to demonstrate mastery of a topic or problem instead which was really encouraging as a student and pushed me to improve rather than dismiss something I got wrong until it resurfaced on the final. At first I wasn't sure how I would feel about the mastery grading system vs traditional grading conventions, but after having the opportunity to experience it, I do feel that I understand the course material so much more so than other calculus courses in the past that simply teaches a topic, tests it, moves on, only for it to show up once more on the final where you still lack understanding of the topic. I think that other courses (specifically math courses) that could benefit by using or trying the mastery grading system.
The fact it's almost over and I will never have to take a course structured like this ever again is what I like most about this course. I'm not even saying this for dramatic effect, this is genuinely the most stressful course I've ever taken despite the fact the material isn't that difficult, comparing to previous math courses. Good riddance.
I liked that I learned a quite a lot from this course. Even more than I did with Calc3. Very interested in matrices and how we can manipulate it like row echelon.
Professor Charnley.
Layout and the material.
The professor was good and understanding and actually helped students

Comments
The grading scheme was a amazing, it made the grading understandable and fair
I liked how organized it was, and how everything was planned from the beginning without major changes.
I like the overall set up of the course and lectures. Having pre–lecture assignments gives a good overview of the concepts in lecture. Having this overview of the topic beforehand prepared me well to ask questions and clear doubts during lecture. This dynamic of lectures really helped me understand and become well prepared to exams. I didn't have to study much for midterms, just had to practice problems.
The questions were mostly straight forward so studying for exams was easier since we knew exactly what to expect.
After taking the first and second exam, the mastery system began to make sense. I think that this is the best aspect of the course. I also like the pre–lecture videos. I always took notes during those videos and found it much easier to focus on understanding the content when it was explained a second time in lecture. Finally, I liked the extra practice problem worksheet. I found that extremely beneficial when studying for the exams and saw my mastery level increase when doing those problems before quizzes and exams.
This course was executed very well, and the professor was very engaging and understanding
Everything was clear and concise, and I loved the mastery type of grading scheme.

If you were teaching this course, what would you do differently?

These comments are intended for all instructors.

Comments
I would not have students try to master core objectives 2 weeks before the semester is over and give them 2 tries to master them. Failing if core objectives are not complete is ridiculous.
nothing, it was perfect. Obviously not including the online part
add homework, it would be nice to have assigned examples to do, and can be another way to have a better grade in the class
N/A
I would completely and entirely avoid the mastery system.
Probably go back to the old grading system instead of mastery. The mastery system is cool and can definitely work it's just that as you go on with the course the longer the midterms become with harder material with the same amount of time. Which really doesn't make sense. But this system could work for sure if exams were made simpler and tested solely on just the concepts and not some tedious and time consuming problems in an 80 minute test period.
NOthing, excpet for maybe a little more guidance on MATLAB. I didn't have much experience with MATLAB outside of the intro to MATLAB freshman year which did not prepare me for things asked on the MATLAB assignments.
n/a
NOTHING!!!!! :)
Explain the mastery system more clearly early on.
While this course was generally positive overall, the greatest challenge was timing on exams and the MATLAB assignments. Even the first exam in which there were only new objectives and a reasonable amount of questions, I felt as though the timing vs what was asked in each question made it difficult to complete or even attempt all the questions. This improved slightly over the duration of the course, but the level of difficulty of the questions in comparison the time given for exam made it difficult to complete. (& while in other courses I would not necessarily want an additional midterm, in this case with the mastery system that was used having an additional midterm would be helpful / help solve this issue because it would not hurt students grades in any way to have another exam but rather just provide another opportunity to show mastery of test objectives.) Additionally, the MATLAB assignments were a bit difficult to understand or complete at times in part because of the assignment itself and in part because we did not have the complete background in MATLAB that some of the assignments involved.
I would do just about everything differently. Normal grading scheme, no attendance/"participation" grade, no matlab, less exams.
Nothing really, i like Charnley's grading system. It is very fair and keeps me motivated since it is different.
–
more exams and fewer new objectives on the exams
Slow down the pace a little bit as the information did get a bit overwhelming at times.
Give students more time on quizzes/exams. The pressure of online test taking is real and many kids get stressed with time in person as it is. A simple extension of 20–30 minutes would be extremely helpful in reducing test anxiety.
I think that the spacing for the Matlab project at the end was challenging. I would probably space them out so that projects 4 and 5 were not due so close together in case someone needed to do both of them.

In what ways, if any, has this course or the instructor Matthew Charnley encouraged your intellectual growth and progress?

These comments are unique to the instructor Matthew Charnley.

Comments
He helped me understand calc 4 very well by using many in class assignments.
Definitely the nicest and most organized professor I have had at Rutgers in a while. He was very supportive, kind, engaged with students questions, organized tests/quizzes well and introduced another level of teaching with a new grading system that works, in my opinion, so much better than the traditional one. Everything was fair and he made a hard subject very easy and enjoyable. I actually looked forward to going.
Professor Charnley provides a lot of extra practice problems to allows us to understand the material better. Everything was straightforward and relevant to quizzes and exams. I think the MATLAB projects helped me to understand the material we learned in class more which is good.
N/A
Best math professor I've had so far at Rutgers for sure. Teaches the right way and really helpful when it comes to anything you are struggling with. Also a good set up in terms of an online course
His teaching style actually made me like Math more than other previous calculus classes that I took in Rutgers. His approach is like no other professor/assistant professor at Rutgers. I definitely can apply a lot of what I learned to my engineering classes and in real life.
I liked the mastery method however when we had concerns about the grading system because it was new and made suggestions he turned them down and did not try to listen and compromise with needs of the students.
One of the best classes I've taken at rutgers. so enjoyable. Love Prof Charnley. you can really tell he wants his students to succeed. even though we were guinea pigs to the new grading scheme, he definitely prepared it well enough so that I was able to understand it. It helped immensely in taking a lot of unnecessary pressures and stresses off the students, and also emphasized mastering concepts rather than being the best at standard test taking. Especially during these remote learning semesters, I appreciated it a lot. I really could go on and on about how amazing Dr. Charnley is.
Prof Charnley was an amazing teacher and his mastery system proves that he genuinely cares about learning the concepts over memorizing the process.
Professor Charnley really went above and beyond for this course. The mastery grading system implemented, while new to understand at first, was so well–suited for this course and I can say without a doubt my understanding of the course material is far greater because learning was with the objective of understanding and not just trying to do well enough for a certain grade. Professor Charnley was so considerate in listening to our feedback, always answered emails in a fast manner, and made class something to look forward to. It was evident that so much thought and preparation went into this course (especially with the pre–class videos which in my opinion greatly helped to solidify what we were learning because it meant we saw some of the new course content before lecture and it could be built upon and focus on more problem solving as well). We had so many materials and resources provided to us that were all so clear and extremely helpful. Professor Charnley was clearly so passionate about the course and mastery grading system, and it couldn't help but translate to the students— it was an absolute pleasure to have him as our professor!
Contrary to encouraging my intellectual growth and progress, Matthew Charnley has done the exact opposite. I have never taken a class purely to 'not fail' more than this one because of a multitude of reasons. First of all, his grading scale leaves no partial credit, and the fact you only really need to learn a handful of concepts. There is no point in me even attempting something I feel semi–confident with because I'll be branded with a "progressing" score, which means, in essence, I entirely failed it and need to try it again. I hate it. It's beyond stupid. Why doesn't it matter if I know 90% of the core concepts and material but mess up one step or make one mistake? Why would I deserve a zero for that? It's not like the assessments are multiple choice, so even if I send in my work and get the correct answer, but did something wrong along the way I get a zero. I've talked to Charnley in his office hours, and he claims this is the "compromise" from being able to attempt each subject more than once, but this just doesn't make sense. Why should a professor discourage a student to even attempt problems? It's not even worth learning most of the class concepts, because you get a C if you master the core concepts and like 5 others, out of like 30. Why should I, the student, care about learning the class material if a minor mistake is going to make attempting the problem on an exam, a total and complete waste of time? This grading system might work fine for people who are actually intelligent, but not the people that have to work very hard to get C's and B's. This system is a big F–you to me. It discourages learning and encourages just trying to master the 5 easiest topics so I don't fail. There's a reason most students dislike multiple choice exams in STEM courses, and that's because there's zero partial credit, it's either right or its wrong, and even though this isn't a multiple choice exam class, it sure feels like it, except instead of multiple choice, it's a meticulous scan of your paper for a single mistake just to screw you over. Another way the grading system is stupid, if a student were to master every single topic in the class, except D1, for example, since this is a core concept, the student would be given a D. How exactly is that fair whatsoever? It isn't at all. Passing in this class purely is based off not getting the 'progressing' grade on concepts you know twice or three times in a row

Comments
because you made a minor mistake. No student needs to actually learn or attempt to learn most of the material, because when you're behind after getting progressing on every core concept twice in a row, you don't even have time to attempt many other concepts on exams. This isn't the fault of the student for not knowing the material, most classes would be reasonable and be like "take this 8/10 you had the right idea but messed up at some part" not "take this progressing which essentially means you failed despite knowing most of the concept." Along with that, it takes someone with a masters degree to decipher what "Achieve at least a P grade (progressing level) on 26 (20+5 above) out of the 30 course goals on tests (including the final exam), with an M grade on at least 21 of them, Achieve at least a P grade (progressing level) on 19 (12+6 above) of the 30 course goals on the final exam, with an M score on at least 13 of them," means on the syllabus. The entire concept is not only confusing, its incredibly unfair towards middling level students, and divides the class into two clear groups, people who are smart and understand everything perfectly immediately, and then everyone else, and everyone else is on a sinking ship trying not to drown. There's a reason the grading scale exists how it exists. It's because it works and it is fair to everyone, not those who get only everything 100% correct. Another gripe I have about this class is the matlab. Why should I be expected to be proficient at coding to pass a math class? If I was aware of this, I would have taken diff eqs at rutgers camden over the summer purely because I am unable to code no matter how much I try. My matlab grades reflect that. Fail. Fail. Fail. And I'm probably going to fail the 4th one and end up having to retake this dumb course anyways. Why? Not because I'm unable to grasp the course material. Not because I don't show up to class and try. Not because I don't study and do practice problems. Purely because I am unable to use a program that has absolutely nothing to do with the teaching of the class. I don't see how it's at all fair that I have to be able to proficiently use a program that is not taught in class or required to master for a prerequisite. I am totally clueless when it comes to trying to code in matlab, but I'm even more clueless when it comes to why the hell do I need to be able to code in matlab to pass a calculus course. The questions asked on the matlab usually only vaguely apply to the course concepts anyways, I find studying the concepts referenced on the matlabs relatively straightforward, but on the matlabs it makes no sense, it always seems to just exist so you can be like, "haha cool graph" and not to actually help students understand the purpose of the concepts. I might just be an idiot, but the purpose of giving the students matlab assignment aside from maybe just to say how much you like coding, seems to just entirely delude me. While Charnley isn't the worst professor on paper, his zoom lectures are understandable and all, but the structuring of the course are highly discouraging to learn and I'm worried for my future in calc 5 without needing to actually study and learn all this material.
Charnley offered aid in numerous ways. His lectures are very easy to understand. He takes time in the beginning of class for questions and manages to teach the course effectively with the time remaining. He allows time for concepts and many examples which helps me undeerstand Math. Polls are fun and helpful and challenging! I enjoy that he goes over the poll problems and always proceeds to ask if we have any questions. Very active professor and thank you!
Professor Charnley really made this course more enjoyable and more manageable.
The layout of the course was a bit iffy at first, but once you get used to it it's actually really nice having the course laid out in front of you.
He has helped me to understand where I was lacking and how to go about correcting it.
Prof. Charnley worried more about us learning and mastering the material more than grades, which is refreshing! I thoroughly appreciated his effort in the new grading scheme, I learned alot and was able to worry about mastering the material more than my grades.
I really liked the real–world applications and examples
Professor Charnley has easily been one of the best professors I've had at Rutgers so far. His course was organized very well and even though we had a new grading system, he explained it very well.
I really appreciate the grading system in this class. The mastery based system gives everyone the opportunity to earn back their missed questions on later exams in case they messed it up the first time. I also loved how each topic/objective was labeled and we didn't have to guess on what type of problem solving method to use on questions. The lectures were very well organized and the Poll Questions were great to keep the class engaged and check understanding. Professor Charnley also took time out of each lecture to help ease students' concerns about grading in the class and made sure everyone was on the same page. After the first exam, when a lot of students were a little bit upset on how things were run during the exam, such as having to type too many things in the answer box when we had our work shown on paper, or the questions were a bit too tedious, especially without having too many practice problems to do before the exam, Professor Charnley was willing to listen to students' feedback and change a few things. He gave us more practice problems before the exam, slightly changed the format of the exams, and overall made things easier for the students. Having a teacher listen to students' feedback and actively work on implementing them was a blessing. Especially during hard times with the Pandemic and online learning, it was nice to be able to have fair exams and great instruction.
Professor Charnley has simplified the ways to solve problems and has organized lesson plans that helped me understand concepts easily.
I think that the professor did a very good job at explaining all of the topics and always making sure that we had an understanding of what questions we would be tested on. I found the mastery system extremely beneficial to my progress in this course. After not doing too well on the first exam, I was able to learn from my mistakes using the uploaded solutions and earn the mastery that I missed on the second and third exam. I think that the mastery system will allow me to retain my knowledge of differential equations

Comments
because the questions always reappear, preventing me from forgetting the material. In general, I think that the professor's enthusiasm for the subjects being taught and ability to understand any concerns by other students was extremely beneficial.

Other comments or suggestions:

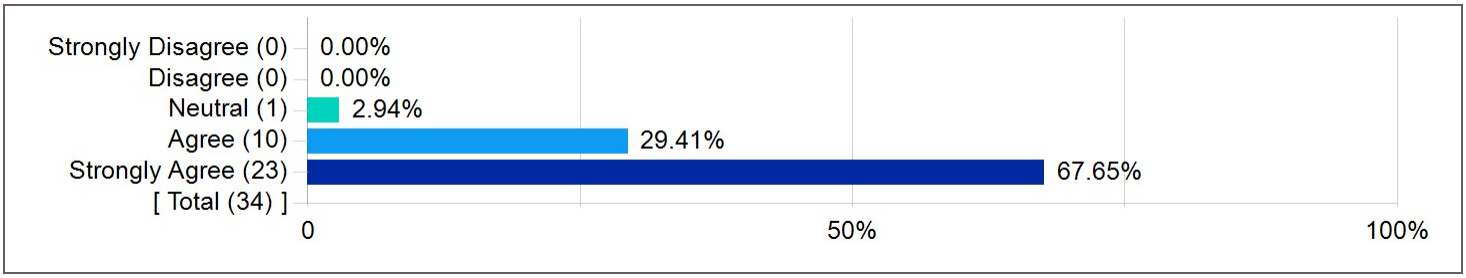
These comments are intended for all instructors.

Comments
Mastery system needs to be changed regarding the core objectives
n/a
The mastery grading system is a step in the right direction in terms of how grades should be distributed to students. It gives a clear picture of the development of the student and encourages the student to work harder to achieve mastery in certain categories.
I hope to have Professor Charlney again in other Math courses. I love his teaching style and all the resources he's made available to encourage our learning and help to deepen our understanding of course material. This class was truly a highlight so far at Rutgers, even under the COVID circumstances.
Learning calculus online and specifically for this class was outstanding to say the least. Dr. Charnley and Johnny Fonseca worked well together and probably the best duo (professor and TA) that I ever had in a math class. This teaching style should be done for all math classes at Rutgers. I am a lot more confident in taking on problems than I was in previous classes.
I just wanted to say that I never needed to study very hard outside of class. The pre and post class assignment structure was SOOOO helpful. These assignments basically did the studying for me. He taught so well that it really wasn't necessary to do more practice than what was assigned. That's the sign of an amazing professor. He also communicate a lot with his students which really made us feel like we were in a safe space and had our concerns listened to. that is extremely valuable, especially during our remote semesters.
Overall this course was really enjoyable and taught really well. It was presented in such a cohesive and understandable manner, and the focus was on understanding the material. Both Professor Charnley and our recitation instructor were so effective in teaching, approachable, and truly wanted their students to succeed. One of my favorite courses / class experience at Rutgers to date because of the way in which this course was taught and the absolutely exceptional professor!
Please just make this like a actual, normal, course. And for God's sake, this isn't a coding course. Remove the matlab. No one except you likes it and it doesn't have very much to do with the class. It's quite stupid that a student's grade is partially determined by coding proficiency, for a math class.
–
Prof Charnley did an amazing job with teaching us the material, and is the most understanding professor I have had during this time frame. He and Johnny went above and beyond to teach us, with many chances to prove our understanding of the material.
Professor Charnley was wonderful and a great professor

Questions added for: *Standard SIRS

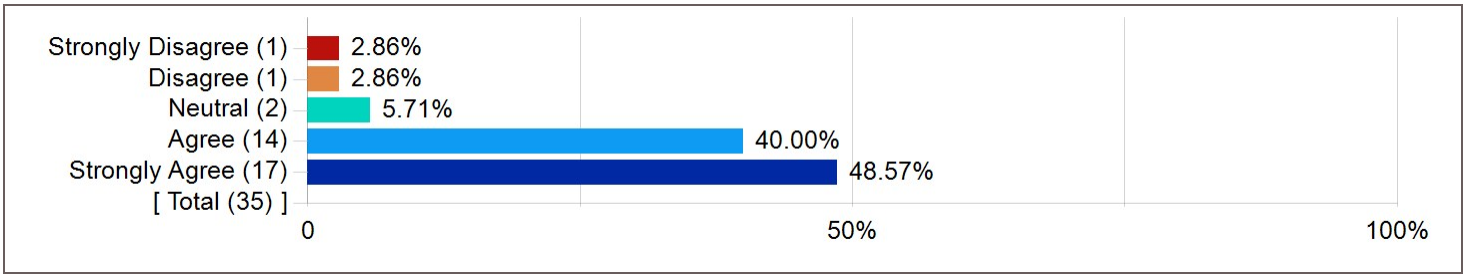
Weighted Means: Section, Course, Level, Department

The lecturer posted content that helped me understand the topics covered in the online lectures.



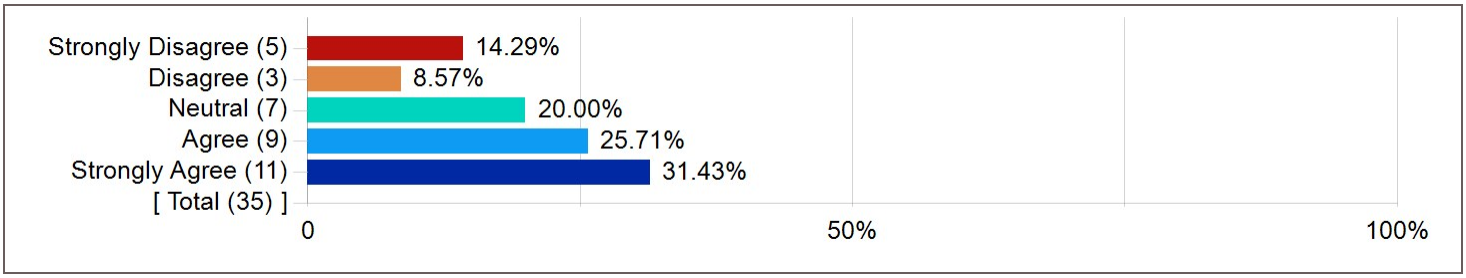
Section	Course	Level	Dept
4.65	4.11	4.13	4.05

The recitation/workshop instructor posted content that helped me understand the topics covered in the online recitations/workshops.



Section	Course	Level	Dept
4.29	4.11	4.07	3.89

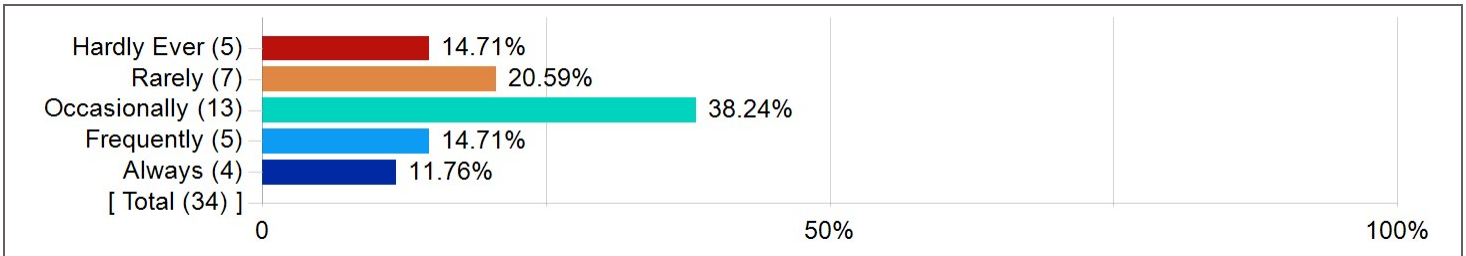
I was glad to take this course in an online format; for me it is the preferred format for this course.



Section	Course	Level	Dept
3.51	3.25	3.25	3.10

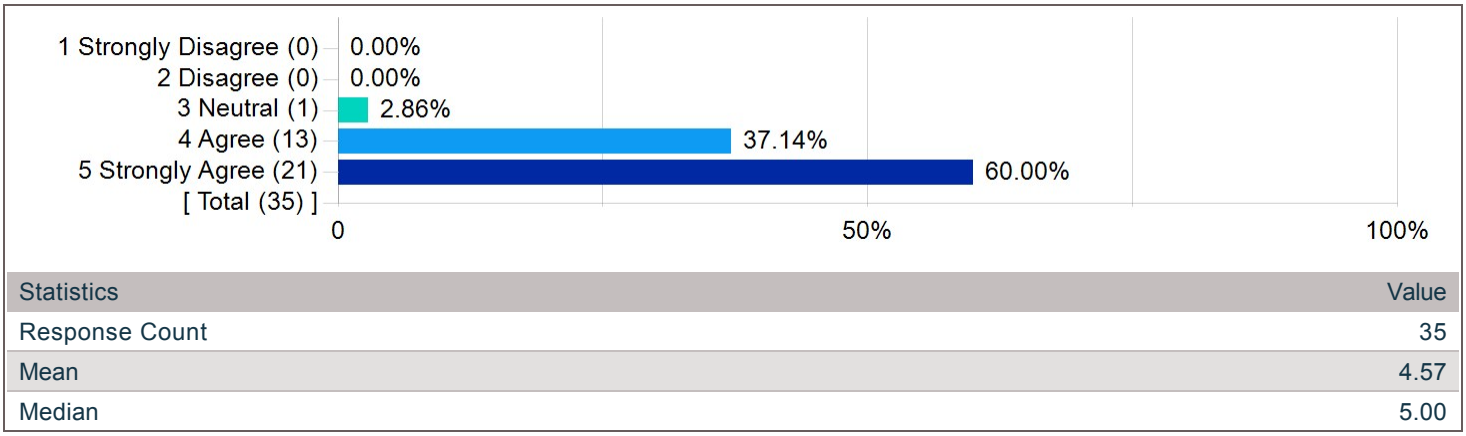
Questions Chosen by Instructor

How often did you use the recommended texts?



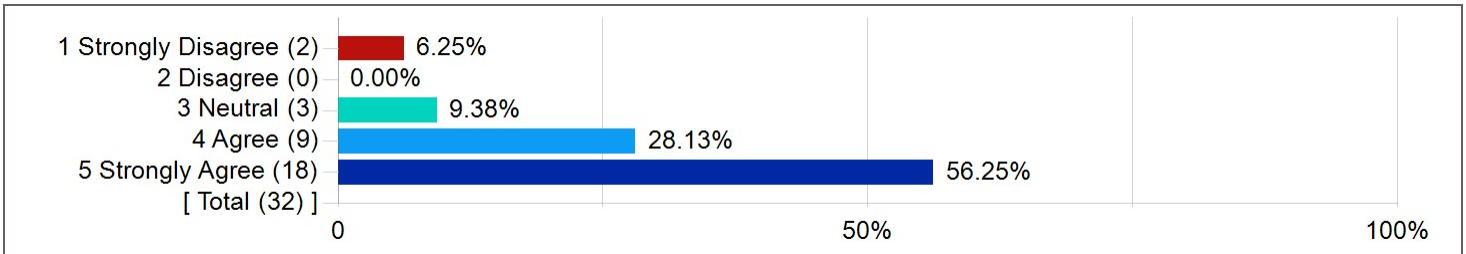
Statistics	Value
Response Count	34
Mean	2.88
Median	3.00

Course assignments (e.g. quizzes, tests, essay topics, or midterm exams) accurately reflected material taught.



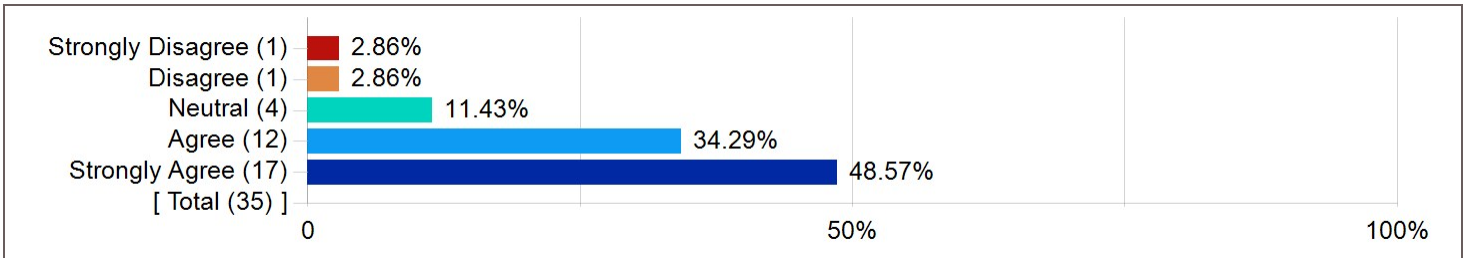
Statistics	Value
Response Count	35
Mean	4.57
Median	5.00

The classroom environment supported my learning.



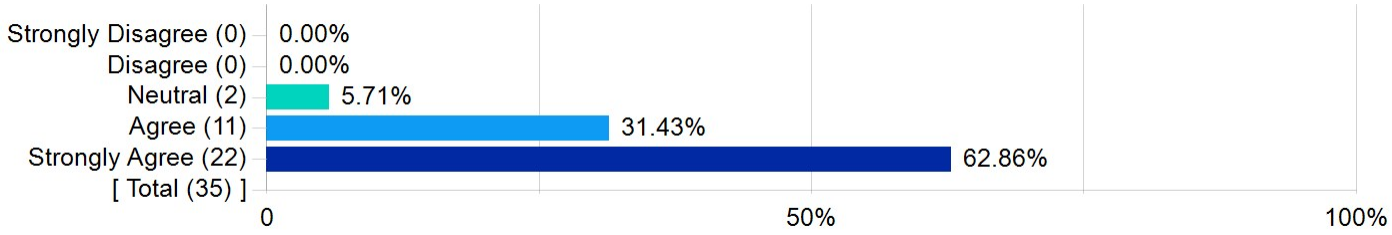
Statistics	Value
Response Count	32
Mean	4.28
Median	5.00

My remote environment allowed me to use the remote course effectively.



Statistics	Value
Response Count	35
Mean	4.23
Median	4.00

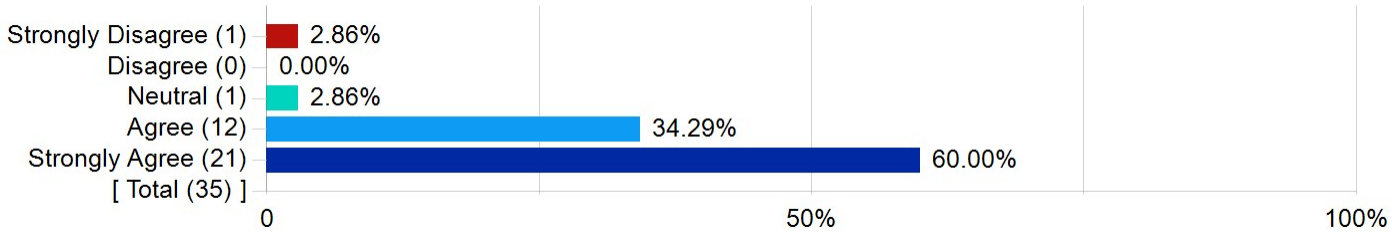
I had access to technology that allowed me to use the remote course effectively.



Statistics	Value
Response Count	35
Mean	4.57
Median	5.00

Questions Created by Instructor

I knew what I needed to study and learn to be successful in this course.



Statistics	Value
Response Count	35
Mean	4.49
Median	5.00

Enter any comments that you specifically have about the Mastery Grading scheme of this course here.

Comments
Core objectives should be be done in the second half of the semester. They give students an easy way to fail the class
I loved it, so much more effective and fair then the traditional grading system. I highly recommend and would prefer going forward using this one compared to the standard one.
While the Mastery Grading scheme was confusing to understand at first, I liked how it provided us with many opportunities to improve our grade throughout the semester as opposed to the traditional A–F grading scheme.
I think the mastery grading scheme is an interesting approach because it was new to me at first, but after a few exams it made sense. I like that we are given more than one chance to figure out our mistakes to do better on the next exam.
the core mastery makes sense, but it adds a lot of stress, because if u get like 25/30, but u miss 1 core, you can fail.
Much more prefered method than standard grading.
As a student I had, and still have, no idea how I am actually doing and have spent more time worrying about failing this class because of 1 objective than should ever be reasonable. It is simply terrible and I have found it as more of a detriment to my mental health than anything else. I was very open to this system in the beginning of the semester but as the semester went on, I found it less and less reasonable as the "second chances" you get are never really there because there are so many topics added to each exam that there is no time left to go back and finish previously missed mastery objectives. Knowing this now, I will have to return back to the mastery questions I have missed which will ultimately affect my score on the final because I will have to cover those missed topics rather than ones I am familiar with and can complete more effectively. With this system, the entire semester has felt like an uphill battle since I am simply trying to catch up and make it to the bare minimum to pass this class, rather than seeing where I am and aspiring for a good grade, I have simply been trying to make it to the passing mark. I think it is unfair for a student to work hard throughout the entirety of a class and still fail because of something from the first 2 weeks of the semester.

Comments
Could work but only if done correctly on exams. It is good for the quizzes and the core ideas. But once it gets to exams it kind of makes no sense unless you make the exams simpler. It's physically not possible for the typical student to get through 10+ problems of any kind on an 80 minute exam when you are trying to make up for missed masteries on passed exams. Screwing up on an exam early in the semester sets you up for failure.
I liked the ample opportunities I had at certain objectives. Allowed me to truly understand mistakes and fully understand the concepts of the problems.
The Mastery grading should be adjusted. I understand how this class is constructed for engineers but it should mainly focus on the physical math that we need to study and not the MATLAB assignments. The MATLAB assignments are a good supplement for learning but there is not a lot of focus on how to code these assignments. If these were to stay, I would try to put more hints or even list out what exactly you need to do just like MAPLE in previous years. The fact that one or two of these lowers our grade no matter how we do in other sections is kind of unfair since there is no focus in this plus other majors have advantage over others with this course since they study this more often. The last thing I would add is that mastering all the core objectives adds a lot of pressure since if you miss one, you automatically fail the course. The core objectives should either be more lenient in grading or there should be less core objectives in the grading scheme.
I overall liked the mastery system but I think that the overall credits should be that if there are two categories that dont meet the standard that should still be considered a plus since it is out of 5.
The grading system laid out exactly what was expected of you instead of being confusing. Everything was completely crystal clear and students were able to succeed better because we knew exactly what we needed to study. Eliminated a lot of the extra and unnecessary stresses that students go through with testing and test anxiety, etc. it definitely made all the students learn a lot more effectively than regular grading schemes.
–Would take more time to explain it because students were confused on how it works till the very end. (Meaning students finally had a real understanding of it once the last exam was taken) – The idea of progressing doesnt really make sense to most students its like if you dont get mastering on the objective you have to do it again. (Meaning students dont really see the point of anything below mastered). –Would give more chances for mastery. Specifically Y2 we only have two chances too get it right so if we messed up on both you could fail the class even if you did well on every other objective. Some objectives were seen three times. —> Maybe you could put extremly hard quiz questions that cover diffrent objectives that if students are able to complete it it would count as a test mastery. Additionally the weekly quiz questions would be on that quiz. These are just my personal reccomendations on ideas that I would think about. But my main concern is the idea of progressing to students it felt as if you didnt get mastered on the objective you failed it didnt really see the point of anything below mastered.
i love it :)
Many of my other comments reflected my thoughts on the Mastery Grading System but it truly contributed to the success of this course and general understanding of the course material. This grading system put the focus on understanding what is being taught rather than understanding problems long enough to do well enough on a single exam. The mastery grading system was SO incredibly well–suited for online learning and I can imagine would be just as effective for in person learning, as well. The mastery grading system encourages students to understand each topic fully—- and there is such a difference in motivation knowing that your grade is determined on what you are able to do well and demonstrating mastery of a topic, rather than being penalized for problems you do not get or have time to complete on a particular exam. It allows the course material to build on itself in a way that it's clear how different problems and topics relate to one another and you have more than just a single opportunity to show mastery which is really helpful as a student. (Even though you do need to earn mastery in all objectives eventually, having more than one opportunity allows you to learn from what you got wrong and get help or clarification if needed). I truly feel as though I understand the content taught in this course far greater than some previous calculus courses here at Rutgers, and that I will retain the information taught for use in future courses. At first, I was a bit intimidated by this different grading system but so grateful I had the opportunity to experience it in this course. Such a wonderful experience overall and think other problem–based courses could benefit by implementing it too!
Well, I commented on this previously, but I'll briefly rephrase it here. It's beyond stupid for so many reasons. It discourages students to actually learn. If I just want to pass the class, why wouldn't I just learn the 5 or so easiest non–core objectives? I don't know about you, but I think it's signifgantly better to have students show at least partial proficiency in the entire course of material rather than master the easy stuff and not even bother attempting the harder ones. Another reason, for a A–student, say they master everything but a single core objectively, say Y2, since there are only 2 chances to master that objective. Why would the student deserve a D from mastering 29/30 objectives? Any other class, that would be an obvious A. One of my main gripes with this system is how a progressing grade means essentially nothing, and the repercussions of progressing. How getting a progressing is the equivalent of getting a zero. I for one, have fallen behind on exams since I get progressing on the same objectives more than 2x in a row. Why can't I just get my 8/10 on that objective and actually be encouraged to learn a different objective. For my midterm 3, I barely attempted any new objectives, I just tried to master the same ones I got

Comments
progressing on the last time, just to get progressing again. It's really stupid. Seeing you need to master every core objective to not fail the class, I have attempted like two objectives like 6 times and gotten progressing on them like 5. Shouldn't the goal of the instructor be to actually have the students learn? Why would I care about learning these new objectives if I still have to attempt the same dumb objectives just to pull out a C instead of striving for a better grade. Not in any other class except this one have I not bothered even attempting to learn a lot of the material. The class is structured so I don't need to even attempt half the material. Another issue I have with the mastery system is how it's incredibly confusing. I had no idea what almost any of it meant until I spend 30 minutes trying to decipher the hieroglyphics of the syllabus after I realized I'm doing badly in the class. Like I still have no idea what this means: "• Achieve at least a P grade (progessing level) on 26 (20+5 above) out of the 30 course goals on tests (including the final exam), with an M grade on at least 21 of them, • Achieve at least a P grade (progressing level) on 19 (12+6 above) of the 30 course goals on the final exam, with an M score on at least 13 of them" All in all, I think the mastery system is stupid and shouldn't ever be used again. No student who passed 8th grade needs such a convoluted grading system, especially one that's ineffective as hell. I would give ideas to alter the system to make it better, but it's so bad I think it should be entirely scrapped and replaced with a normal class structure. Normal class structures are the most popular because it works. You don't need to try and fix something that isn't broken.
The mastery system used for grading was quite confusing and does not reward students for partial credit. Maybe adding something where two progressing grades can add up to a test mastery or overall Mastery could be helpful.
The mastery grading scheme is good and helps students bounce back from bad scores very easily.
It was amazing, it relieved any stress I had
I dislike that missing a single core Mastery would bring my grade down to a D. I understand it is important but no other classes had this issue. I struggled a great deal on D2 and if that was the only issue I had, I do not think it is fair for me to get a D for the whole course just by missing that one objective
I really like this grading scheme, it took out the stress for a lot of the test taking
I feel like the mastery grading scheme is good, but a bit stressful in that the core mastery all has to be passed in order to pass the class. While algebra errors can still lead to mastery, it is a bit scary not knowing where you stand numerically.
I absolutely love the Mastery Grading scheme. This was my first class having this system and it has been a far less stressful class than it would have been had I not had this grading system. I often make silly mistakes on some exams and unfortunately that ends up costing me points; however, with this system, I get multiple attempts to get credit for one type of problem. So, one bad day will not affect me in the long run. I like how doing well on tests will overwrite my performance on the quizzes. Another great thing was how the students received a list of objectives that would be on a quiz or test. Having each question on the quizzes/tests being labeled with the objective name meant we knew exactly what to expect. There was no guessing game to be played on what solving process to use and I really appreciated that. It tested us on the knowledge of each topic individually. The only minor advice I have is to clearly define what it would take to get a B+ or C+ in the syllabus. Also, maybe the requirements of an A or B could be changed based on what the average is looking like each semester. It is far easier to pass this class having this grading system than a regular one.
The best part of this grading system is that I am not penalized for making silly mistakes on exam problems. I like how I am being graded on whether or not I understand the concepts and process of doing the problems instead of getting points off for small calculating mistakes. Sometimes, it is difficult to become adjusted to the new semester and classes. So, having a chance to improve my grade to any letter grade at any point in the semester is a huge advantage with this grading system. I think it is fair and very considerate of students' situations.
I feel as if it was easier to gain masteries on the quizzes than on the exams and it could be a little subjective rather than concrete. that was just my impression but maybe there was an actual rubric of things you were looking for. Overall though i did like it.
The mastery system is pretty interesting in theory but I am not too sure how beneficial it is in the long run. I think it puts too much pressure on the students since they can't really get an idea of what their current grade is per say. I also think the final exam mastery set up is asking a lot from the students. A 30 question exam is quite a lot and having to at least complete 20 questions to possibly get an A grade is stressful/
The mastery system works really well in this course and I wish it was something that I could have had during pre–calc, calc 1, calc 2, and calc 3. The mastery system encouraged me to keep up with the course work and makes me feel like I am coming out of this class with a lot of knowledge. The learning objective always made it clear what was necessary to be understood in order to succeed, which is not something that I feel occurs in other math classes. I believe that if this system was enforced across the engineering math sequence, I would have felt more confident going into quizzes and exams, and likely would have done better.