

Teaching Portfolio

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Teaching Philosophy

Sarah Strikwerda

As an instructor, I see myself as a guide who helps students unlock doors to knowledge. The way these doors open varies and it is my job to help students with all learning preferences excel. My teaching philosophies have been shaped by training I have had in both secondary math education and math. They've also been shaped by the wide variety of teaching experiences and certificates such as the teaching a communication certificate which involved over 100 hours of workshops and classes. Additionally, I participated in the inclusive teaching certificate. I participated in discussion boards, read articles on inclusivity, and reflected on tangible steps I could take to make my classroom more inclusive. I also participated in a nationally renown program called Preparing the Professoriate that helped me understand all aspects of working in academia. I have taught classes varying in size from 16 students to 120 students and have taught both in person and virtually. While teaching larger classes, I supervised graduate student TAs who served as recitation leaders and graders. I have been able to help students succeed as the instructor of precalculus and calculus courses, as well as an intro to proofs class that serves as a transition between calculus classes and upper-level theoretical classes. I have been a TA of Calculus I, Calculus III, and an MSRI summer school.

Examples of Active Learning Techniques Utilized

In all my classes, I use active learning techniques such as letting students work through problems with their neighbor or putting questions on the board that I collect and look through to gain understanding about the classes' comprehension. While teaching online, I had to adjust the ways I created an interactive class. I went to a training to gain ideas and implemented these ideas by putting students in break out rooms and having them use the whiteboard feature to work on problems together. I would then ask groups to present their whiteboard to the rest of the class in the main room. I also created polls which gave me a quick way to test understanding. Using these techniques allowed me to keep the learners engaged, even over Zoom. One student from my online class commented, "[She] has always helped [me] to understand the subject and has innovative ways to allow interaction between students."

Teaching an intro to proofs class was a switch from the previous classes I had taught since the problems are focused on proving statements rather than computations. I had to empower students to be able to think through the logic needed to write different arguments. This class was focused on giving the students time to build up the skills needed to look at a theorem and determine how to approach a proof. Therefore, I used half of my class time for group work. To keep a level of challenge that did not defeat my students, I provided them with guiding questions to help them think through the proof approach. One student commented on this class structure saying: "She always got the class involved and it felt like she was working with us instead of just talking to us."

Classroom Environment

I strive to create an environment where students feel safe to speak to me about how they are doing from a holistic perspective which allows me to support them properly. My students notice this and my course evals have many comments like the following "She wants

her students to be successful and is truly there if you need her.” I start each course with a welcome survey where I gather information about my students including what makes them excited or nervous about the course, how I can help them succeed, what inclusivity in the classroom means to them. Starting the course off in this way allows me to understand the learners better so that I am more effective and gives the students the chance to see that I do care about them which can lead to better communication in the future. I use the answers the students have provided about inclusivity to create an inclusivity statement that outlines what we expect in the course from each other. I follow up with optional surveys during the course where students can communicate their individual needs and tell me if they think we are adhering to our inclusivity statement. Early intervention in the difficulties a student is facing raises the probability of success. I respond to the surveys to provide suggestions or support for students. Sometimes I change what I have been doing to reflect a suggestion. For example, I used to give review sheets consisting of a list of the expected learning outcomes from the unit a week before each test. However, a student suggested I give them at the beginning of the unit so that she could understand the learning outcomes sooner. I began doing this.

Setting clear expectations for students helps cultivate good relationships. If a student fails to meet an unknown expectation, they could get frustrated with the instructor and feel defeated. I make sure expectations are known by writing a clear syllabus and by including learning objectives on worksheets. I want students to understand why they are contemplating the ideas or working on the specific problems I have chosen. I also make sure I am very clear about what learning objectives will be tested on exams.

When students fail to meet the learning expectations on homework assignments, I give them more attempts. I don’t want to enable students not working to get the correct answer the first time but giving partial credit for more attempts helps my students learn from their mistakes. In calculus classes, I give multiple attempts using WebAssign. In the intro to proofs class, I gave students the opportunity to resubmit proofs after I grade them. This ensures that students read my comments and learn from them.

Another key aspect to student success is having good classroom community. Discussing ideas with peers can help students excel. When asking students to work in groups, I walk around the room to make sure everyone has people to talk to and to initiate conversation in groups when needed. I make it clear to my students that they need to respect each other in these discussions. One student remarked, “I noticed there are people in this class who know almost everything already and others like me who knew none of it, but the way she taught made it so everyone could learn and feel included.” I make sure students have allies in each class by making them get to know those around them and offering to help form study groups.

Future Teaching

I’ve enjoyed the variety of classes that I have taught so far and look forward to adding to this variety in the future. I enjoy seeing students at all levels of math engage in my classes. No matter which courses I teach, I want to inspire students by giving them the understanding and tools to see the beauty in the ideas we are studying. Beauty is in the eye of the beholder and some students might never see the beauty. However, I hope to leave all students with a sense of accomplishment and confidence from seeing the ways they have grown in my course.

Precalculus

Recordings to classes from Precalculus can be found [here](#):

(<https://ncsu.hosted.panopto.com/Panopto/Pages/Sessions/List.aspx?folderID=5da7a89e-24dd-4d9c-8a03-ae90132007d>)

The 80 students of this course were given lecture videos to watch before Tuesday classes. On Tuesdays, they were given the opportunity to ask questions. On their own time they worked on WebAssign problems which were due on Thursday. On Thursdays, they asked questions. Then they worked together on problems that were more challenging than the original WebAssign problems. More challenging problems were then assigned on WebAssign for the students to complete after Thursday's class. The recordings show the Tuesday and Thursday sessions.

Calculus 1:

I lead Calculus 1 recitations where we reviewed content from the lectures in a variety of ways. For example, we used a worksheet to review conic sections from pre-calculus. This worksheet was meant to take information learned in class and synthesize it into two pages so the students could observe the similarities and differences between the types of conic sections. The worksheet can be found below.

In other recitations, we spent our time working on concrete examples. Sometimes this was done with group work. Other times, we did this using an online quiz game called Kahoot. Here is an [example of a quiz](https://create.kahoot.it/share/2-1-2-3/4a09223f-1dd9-4202-9de2-56fab5d7372) we went through as a class. (<https://create.kahoot.it/share/2-1-2-3/4a09223f-1dd9-4202-9de2-56fab5d7372>) The students had time to answer the question. I then received immediate feedback about the percentage of students who answered correctly. This helped guide me in leading a class discussion about how we got the correct example and what common mistakes may have been before moving on to the next question.

Conic Sections Review
Calculus I

Ellipse		
Picture		
Equation		
Vertices		
Foci		
Ends of Minor Axis		

Parabola		
Picture		
Equation		
Vertex/Center		
Focus		
Directrix		

Hyperbola		
Picture		
Equation		
Transverse/Major Axis		
Center		
Foci		
Vertices		
Asymptotes		

Circle	
Picture	
Equation	
Center	
Radius	

$$36x^2 + 9y^2 - 324 = 0$$

Find vertices, ends of minor axes, and foci. Then sketch the conic section.

$$y^2 + 2y - 12x + 37 = 0$$

Find focus, directrix, and vertex. Then sketch the conic section.

$$9y^2 + 18y - 4x^2 + 16x = 43$$

Find the center, foci, ends of major. Then sketch the conic section.

Calculus 2

My Calculus 2 course was during the COVID pandemic. I had the students watch lecture videos and then attend recitations live. Although we originally believed some recitations would be in person, they all ended up having to be done remotely. I created [this video](https://sstrikwerda.wordpress.ncsu.edu/files/2022/02/Syllabus-Video.mov) to talk through this semester's syllabus. (<https://sstrikwerda.wordpress.ncsu.edu/files/2022/02/Syllabus-Video.mov>) My class policies can be found in the syllabus below.

Math 241: Calculus II
Syllabus for Sections 002
Fall 2020

Instructor of Record:

Sarah Strikwerda

slstrikw@ncsu.edu

Office Hours: Monday, Wednesday from 8:30am-9:30am

Office Hours Zoom Link: <https://ncsu.zoom.us/j/93636168301> or use code 936-361-68301

Teaching Assistant:

Harley Hanes

hhanes@ncsu.edu

Office Hours: Monday, Wednesday from 1:00pm-2:30pm (please email one hour in advance)

Office Hours Zoom Link: <https://ncsu.zoom.us/j/2609619321> or use the code: 260-961-9321

Course Meeting Time:

Lectures are asynchronous.

Recitations:

Section 002 A: Tuesday and Thursday 8:30am-9:20am

Instructor: Sarah Strikwerda

Zoom meeting: <https://ncsu.zoom.us/j/93636168301> or use the code 936-361-68301

Section 002 B: Tuesday and Thursday 9:35am-10:25am

Instructor: Harley Hanes

Location: Main Campus, Mann Hall 304

Classroom Capture: <https://mediasite.wolfware.ncsu.edu/online/Channel/rcpence-ncsu-edu-ma-241-b-002-fall-2020>

Section 002 C: Tuesday and Thursday 4:30pm-5:20pm

Instructor: Harley Hanes

Location: Main Campus, Park Shops 210

Classroom Capture: <https://mediasite.wolfware.ncsu.edu/online/Channel/rcpence-ncsu-edu-ma-241-c-002-fall-2020>

Prerequisite: MA 141 or its equivalent

GEP Category: This course does fulfill a General Education Program requirement.

Materials/book: *Calculus II for Engineers and Scientists* (Franke, Griggs, Norris; accessible via WebAssign under RESOURCES) Students actually pay for the WebAssign homework and the e-book at the same time.

Course Description: Second of three semesters in a calculus sequence for science and engineering majors. Techniques and applications of integration, elementary differential equations, sequences, series, power series, and Taylor's Theorem. Use of computational tools.

Course Structure: There are two types of content delivery for this course, Lectures and Recitations.

Lectures: Monday, Wednesday, and Friday of each week are considered lecture days. The lectures were recorded previously and links to the recordings are given in Moodle for each of the lectures. These lectures may be viewed at a time that is most convenient for you. However, you must keep up with the course schedule which can be found at the end of this document or on the Moodle page.

Recitations: Recitations are held on Tuesdays and Thursdays of each week. There will be times when content will be covered that is not covered in the lectures. Therefore, you should attend or view all recitations. For section A, they will be conducted synchronously via Zoom and will be interspersed with small group activities. For section B and C, they will be conducted in person. Sections B and C can also be viewed synchronously or asynchronously via classroom capture (see URL links above).

Course Delivery Changes Related to COVID-19: Please be aware that the situation regarding COVID-19 is frequently changing, and the delivery mode of this course may need to change accordingly, including possibly moving from synchronous sessions to an asynchronous format. Regardless of the delivery method, we will all strive to provide a high-quality learning experience.

Note: If I need to be out for an extended period of time, Dr. Leslie Kurtz will take over in my absence.

Rules of Course Engagement:

Homework: Graded homework is assigned via WebAssign, a web-based homework system. To access WebAssign you may follow this link: <http://webassign.ncsu.edu> which will open in a new webpage. On the first day of classes, you will be able to access your course on WebAssign and pay for access. This may be paid on the website with a check or a credit card. You will be allowed to use WebAssign for the first few days of class without paying, but you will be denied access to assignments if payment is not made by the due date listed on WebAssign.

You generally have **5 submissions** for each question. The final submission is the grade you receive on the assignment. I will set up a forum in Moodle for questions about the WebAssign assignments. You may post questions about exercises and give answers or hints to each other. I will chime in occasionally as needed, but this is primarily your opportunity to help each other out.

WebAssign problems make up a large portion of your final grade, so do not fall behind or skip ANY of these. That being said sometimes when entering answers incorrectly you may lose points on WebAssign even if your math was flawless. I will not go in and correct your score. Instead, I will grade the 858.5 WebAssign points out of 808.5 when computing your final grade.

Late Assignments: If you are unable to complete an assignment on time, you will have 2 weeks to request an extension on WebAssign. You will not need to email me. WebAssign will automatically grant the extension, but you will lose 10% the uncompleted points. You will have 48 hours from the time you request the extension to complete the assignment.

Tests: Tests will be given in a 50-minute format. They will be taken during recitation. If you are in section A, you will take your tests remotely, but they will be proctored via Zoom. Additional time will be given that is only to be used to upload your exam. Section B and C will take these tests in person. All students will be permitted to use their notes and the internet. However, communicating with other people during the tests or final exam is strictly prohibited. Please note that this testing policy is subject to change if needed.

Test 1: Sept 3 (Chapter 0, 1.1–1.3) – 50 min + 20 min for upload

Test 2: Sept 17 (Sections 2.1 – 2.6) - 50 min + 20 min for upload

Test 3: Oct 20 (Sections 3.1 – 3.6) - 50 minutes + 20 min for upload

Test 4: Nov 5 (Sections 4.1 – 4.6) - 50 minutes + 20 min for upload

Final Exam: Monday, November 16, 8:30 am-11:00am (Cumulative: All sections above plus sections 4.7, 4.8, 4.9)

**I expect all students to adhere to the University's regulations on academic integrity (i.e. No cheating or plagiarizing!). Talking during a test is not permitted for any reason. If a student talks or disrupts the test in any manner, that student's paper will be confiscated and he or she*

will be given a 0 on the test. If a student is cheating, then the matter will be referred to the Office of Student Conduct for further action

Missed Test: If a student qualifies for a makeup test, a test will be created and administered on Friday, November 13 at 8:00am. If the student misses test one or two, they will take a make-up test covering material from the first half of the semester. If a student misses test three or four, they will take a test covering material from the second half of the semester. A student qualifies for a makeup test if one of the following is true:

1. A student plans to miss a test for University duties or trips, court attendance, religious observances, or other similar reasons. The absence must be excused in advanced.
2. The student is unexpectedly sick and gets a note from a physician.
3. There is a family emergency that is documented with Parent and Family Services.

If a student oversleeps or has car troubles. They must schedule a time with me on the day of the test ONLY. The time of this test is subject to my availability and will result in an automatic 15 point deduction.

Grading: The final grade is based on Homework (20%), 4 Tests (60%), and a Final Exam (20%).

Standard Grading Scale: $97 \leq A+ \leq 100$, $93 \leq A < 97$, $90 \leq A- < 93$, $87 \leq B+ < 90$, $83 \leq B < 87$, $80 \leq B- < 83$, etc.

Attendance Policy: You are expected to attend all recitations on time. However, I understand that there will be times when you are unable to attend class. When these times arise, you do not need to contact me. I will respect that there is a good reason why you could not attend. You should still watch the recitation which can be found on your recitation specific Moodle page or using the Classroom Capture link above.

For complete attendance and excused absence policies, please see:

<https://policies.ncsu.edu/regulation/reg-02-20-03-attendance-regulations/>.

Communication: I will communicate with you through email, so please check your email regularly. You may also communicate with me through email. I will respond within 24 hours during weekdays. If you would rather talk via Zoom, please send me an email, and I will accommodate that.

Grading/Scheduling Changing Options Related to COVID-19: If the delivery mode has a negative impact on your academic performance in this course, the university has provided tools to potentially reduce the impact:

Enhanced S/U Grading Option: [Enhanced Satisfactory/ Unsatisfactory Grading Option](https://studentservices.ncsu.edu/your-resources/covid-19/spring2020-sat-grading/) (<https://studentservices.ncsu.edu/your-resources/covid-19/spring2020-sat-grading/>)

Late Drop: [Enhanced Late Drop Option](https://studentservices.ncsu.edu/your-resources/covid-19/spring2020-latedrop/) (<https://studentservices.ncsu.edu/your-resources/covid-19/spring2020-latedrop/>)

Be aware that if you use the enhanced S/U grading option, you will still need to complete the course and receive at least a C- to pass the course.

In some cases, another option may be to request an incomplete in the course. Before using any of these tools, please discuss the options with me and with your academic advisor.

Auditing the Course: To audit the course, you must have the approval of your advisor and the Mathematics Department. In order to receive an AU, you must attend the majority of the sessions, and

you must hand in all of the homework and take all of the tests. For more information concerning course audits, see:

<https://policies.ncsu.edu/regulation/reg-02-20-04/>

Incomplete Grades: Incomplete grades will be handled on an individual basis. Note, however, that if an extended deadline is not authorized by an instructor or department, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as attempted courses on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at:

<https://policies.ncsu.edu/regulation/reg-02-50-03/>.

COVID-19 Course Interruptions: If you have a personal or family situation related to COVID-19 that prevents you from attending our sessions and/or completing your homework for an extended period of time, please contact me. Together we will develop a plan to help you keep up with your coursework during any such absences.

Academic Integrity/Honesty: Students are required to comply with the university policy on academic integrity/honesty found in the Code of Student Conduct:

<https://policies.ncsu.edu/policy/pol-11-35-01/>.

It is my understanding and expectation that your signature on any test or assignment means that you have adhered to the Pack Pledge:

I have neither given nor received unauthorized aid on this test or assignment.

Violations of academic integrity will be handled in accordance with the Student Discipline Procedures ([NCSU REG 11.35.02](#)).

Digital Course Components: In this course we will use Zoom and Moodle. Please see the relevant [technology requirements](#) (<https://docs.google.com/document/d/1Bfrka-Y4qm3WouAGOnCm0YBAytkTjQjvEBErBkNDgc/edit>). If you need access to additional technological support, please contact the Libraries' Technology Lending Service ([Technology Lending](#), <https://www.lib.ncsu.edu/devices>).

Students may be required to disclose personally identifiable information to other students in the course, via electronic tools like email or web-postings, where relevant to the course. Examples include online discussions of class topics and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

Moodle: All reading materials and videos are housed on the course website.

Zoom: Zoom will be used for all office hours, and for recitation A. Please enter Zoom using your NCSU account. When using zoom, I prefer that you turn your camera on. However, I will never require this in case it is not possible for you. Our recitations will be conducted synchronously (Tuesday and Thursday) via Zoom. I'll post a Zoom link in your recitation section for the meeting.

Recitation Recordings: Each recitation will have their own Moodle page. When possible, recitations will be recorded and posted on the recitation specific Moodle page. In order to help all students in the class feel comfortable asking questions, and making conjectures, etc., you may not share the links with

anyone outside of our class. These recordings are for use in our current class (and possibly for use in future educational purposes). By your continued participation in this recorded course, you are providing your permission to be recorded.

Diversity, Equity, and Inclusion: Diversity, equity, and inclusion are important to the success of our students at NC State. Every student, every faculty member, and every staff member who comes to NC State enriches us through their varied perspectives, knowledge, and backgrounds. Our classroom is one in which every student is respected and feels heard.

In an effort to affirm and respect the identities of transgender students in the classroom and beyond, please contact me if you wish to be referred to using a name and/or pronoun other than those listed in the student directory.

I understand that we all have different needs and perspectives due to our identities and life experiences. I want to affirm that I will listen to your perspectives and experiences if you would like to share them with me. I value your perspectives and I will advocate for your needs in our department.

I welcome any additional suggestions you have for including the value of diversity, equity, and inclusion in this course.

Accommodations for Disabilities: Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Disability Resource Office at Holmes Hall, Suite 304, 2751 Cates Avenue, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the [Academic Accommodations for Students with Disabilities Regulation \(REG02.20.01\)](#).

Non-Discrimination Policy: NC State prohibits discrimination, harassment, and retaliation based on a person's age (40 years or older), color, disability, genetic information, gender identity, national origin, race, religion, sex (including pregnancy), sexual orientation or veteran status. If you feel that you have been the subject of prohibited discrimination, harassment, or retaliation, you should contact the Office for Institutional Equity and Diversity (OIED) at 919-513-0574.

NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at <http://policies.ncsu.edu/policy/pol-04-25-05> or <http://oied.ncsu.edu/divweb>.

Health and Well-Being Resources: These are difficult times, and academic and personal stress are natural results. Everyone is encouraged to [take care of themselves](#) and their peers. If you need additional support, there are many resources on campus to help you:

- Counseling Center ([NCSU Counseling Center](#))
- Health Center ([Health Services | Student](#))
- NC State CARES Team: As members of the NC State Wolfpack community, we each share a personal responsibility to express concern for one another and to ensure that our campus remains a healthy and safe environment for learning. Occasionally, you may come across a classmate whose personal behavior concerns or worries you, either for your classmate's well-being, for your well-being or for the well-being of others. When this is the case, I would encourage you to report the behavior to the NC State CARES team: ([Share a Concern](#)).
- If you or someone you know are experiencing food, housing or financial insecurity, please see the Pack Essentials Program ([Pack Essentials](#)).

Additional COVID-19 Information: Due to the Coronavirus pandemic, public health measures have been implemented across campus. Students should stay current with these practices and expectations through the [Protect the Pack](https://www.ncsu.edu/coronavirus/) website (<https://www.ncsu.edu/coronavirus/>).

We are most concerned about your health and the health of the students, faculty, and staff across campus. If you test positive for COVID-19, or are told by a healthcare provider that you are presumed positive for the virus, please follow university guidelines, including self-reporting ([Coronavirus Self Reporting](#)): Self-reporting is not only to help provide support to you, but also to assist in contact tracing for containing the spread of the virus.

Community Standards related to COVID-19: We are all responsible for protecting ourselves and our community. Please see the [Community Standards](#) and Rule 04.21.01 regarding Personal Safety Requirements Related to COVID-19 ([RUL 04.21.01 – Personal Safety Requirements Related to COVID-19 – Policies, Regulations & Rules](#)).

NC State Rules and Regulations: Students are responsible for reviewing the NC State University Policies, Rules, and Regulations (PRRs) which pertain to their course rights and responsibilities, including those referenced both below and above in this syllabus:

- Equal Opportunity and Non-Discrimination Policy Statement <https://policies.ncsu.edu/policy/pol-04-25-05/> with additional references at <https://oied.ncsu.edu/equity/policies/>
- Code of Student Conduct <https://policies.ncsu.edu/policy/pol-11-35-01/>

Important Resources for Students:

- **NC State Keep Learning, tips for students taking courses remotely:** <https://dasa.ncsu.edu/academics/keep-learning/>
- **Introduction to Zoom for Students:** <https://youtu.be/5LbPzzPbYEw>
- **Learning with Moodle, a student's guide to using Moodle:** <https://moodle-projects.wolfware.ncsu.edu/course/view.php?id=226>
- **Protect the Pack FAQs:** <https://www.ncsu.edu/coronavirus/frequently-asked-questions/>
- **NC State Protect the Pack Resources for Students:** <https://www.ncsu.edu/coronavirus/reactivating-campus/resources-for-students/>
- **NC State Helpdesk:**
help.ncsu.edu
Phone number: 919-515-HELP

You may contact the helpdesk for one-on-one support for software, hardware, network connectivity, and Unity account issues.

Date	Topic	Video	Homework Due
Aug 10	Ch 0: (Review of Derivatives) Ch 0: (Review of Substitution) Ch 0: (Review of Integration by Parts)	Lecture 1	
Aug 11	Ch 0: U-substitution and Integration by Parts Examples	Rec 1	
Aug 12	Ch 0: Integration by Parts 1.1 Arc Length	Lecture 2	
Aug 13	1.1 Arc Length 1.3 Introduction to Springs	Rec 2	
Aug 14	1.3 Work (springs)	Lecture 3	
Aug 17	1.3 Work (emptying a tank)	Lecture 4	Intro to WebAssign Entering Symbolic Answers Homework 0.1
Aug 18	1.3 Work (emptying a tank)	Rec 3	
Aug 19	1.3 Hydrostatic Force	Lecture 5	Homework 1.1
Aug 20	1.3 Work (lifting chains, etc)	Rec 4	
Aug 21	1.3 Moments & Centers of Mass	Lecture 6	
Aug 24	1.3 Centers of Mass 1.2 Average Value	Lecture 7	
Aug 25	2.1 Trig Integrals	Rec 5	
Aug 26	2.1 Trig Integrals 2.2 Trig Substitution	Lecture 8	Homework 1.3
Aug 27	HW sessiona		
Aug 28	2.2 Trig Substitution	Lecture 9	Homework 1.2
Aug 31			
Sept 1			
Sept 2	2.3 Partial Fractions	Lecture 10	
Sept 3	Test 1 Review & HW session		

Sept 4	2.3 Partial Fractions	Lecture 11	Homework 2.1
Sept 7	Test 1		
Sept 8	No recitation... Watch lecture 2.5 Numerical Integration	Lecture 12	
Sept 9	2.5 Simpson's Rule and Error Estimates	Lecture 13	Homework 2.2
Sept 10	2.4 Integral Tables	Rec 6	
Sept 11	2.6 Improper Integrals	Lecture 14	
Sept 14	3.1 Intro to Differential Equations	Lecture 15	Homework 2.3
Sept 15	2.6 More Improper Integrals	Rec 7	
Sept 16	3.1 Slope Fields	Lecture 16	Homework 2.5
Sept 17	Test 2 Review & HW session		
Sept 18	3.1 Euler's Method	Lecture 17	
Sept 21	3.2 Separable Equations	Lecture 18	Homework 2.6
Sept 22	Test 2		
Sept 23	3.2 Orthogonal Trajectories	Lecture 19	
Sept 24	3.3 Exponential Growth	Rec 8	
Sept 25	3.3 Logistic Growth 3.3 Newton's Law	Lecture 20	
Sept 28	3.3 Mixing Problems	Lecture 21	Homework 3.1
Sept 29	3.3 Newton's Law Examples 3.3 Compound Interest	Rec 9	
Sept 30	3.4 2 nd Order Linear d.e.	Lecture 22	Homework 3.2
Oct 1	Problem session: 3.3		
Oct 2	3.4 Case 3	Lecture 23	
Oct 5	3.4 BVPs	Lecture	

	3.5 Undetermined Coefficients	24 Lecture 24.5	
Oct 6	Problem Session 3.3, 3.4		
Oct 7	3.5 Undetermined Coefficients	Lecture 25	Homework 3.3
Oct 8	3.5 Undetermined Coefficients and the Superposition Principle	Rec 10	
Oct 9	3.5 cont 3.6 Springs	Lecture 26	
Oct 12	3.6 Springs	Lecture 27	Homework 3.4
Oct 13	Problem session		
Oct 14	3.6 Circuits	Lecture 28	Homework 3.5
Oct 15	Problem session		
Oct 16	4.1 Sequences	Lecture 29	
Oct 19	4.1 Sequences	Lecture 30 Lecture 30.5	Homework 3.6
Oct 20	Test 3 Review		
Oct 21	4.2 Series	Lecture 31	
Oct 22	Test 3		
Oct 23	4.2 Series	Lecture 32	
Oct 26	4.3 Integral & Comparison Tests	Lecture 33	Homework 4.1
Oct 27	Problem Session		
Oct 28	4.3 Integral Test Estimation 4.4 Alternating Series Test	Lecture 34	
Oct 29	4.4 Alternating Series 4.5 Absolute Convergence	Rec 11	Homework 4.2
Oct 30	4.5 Ratio Test	Lecture 35	
Nov 2	4.6 Power Series	Lecture 36	Homework 4.3

Nov 3	Problem Session		
Nov 4	4.7 Power Series Representations	Lecture 37	Homework 4.4
Nov 5	Test 4 Review & Problem session		
Nov 6	4.7 Differentiation/Integration of Power Series	Lecture 38	Homework 4.5
Nov 9	4.8 Taylor and Maclaurin Series	Lecture 39	Homework 4.6
Nov 10	Test 4		
Nov 11	4.8 Maclaurin Series	Lecture 40	
Nov 12	4.9 Taylor & Maclaurin Polynomials	Rec 12	
Nov 13	4.8 Binomial Series	Lecture 41	Homework 4.7
Nov 16	Review	Lecture 42	Homework 4.9
Nov 17	4.8 Binomial Series & Review	Rec 13	
Nov 18 - 24	Final Exams		
Nov 21			Homework 4.8
Nov 23	8:30-11:00am Final Exam		

Calculus 3:

While writing final exams, I try to focus on comprehensive questions that require skills learned from throughout the entire course. For example, on my Calculus 3 exam, I wrote a few questions utilizing the three big theorems studied at the end of the course: Green's theorem, Stokes' theorem, and Divergence theorem. Working with these three theorems requires the students to utilize many of the concepts learned previously in the course. In this way, they also serve as a great review for the course. Therefore, I made sure to pace my class in a way where we would have ample time for the students to understand and practice using these three theorems. The exam can be found below:

Please sign the inside cover of your blue book to indicate you agree to the Honor Pledge: "I have neither given nor received unauthorized aid on this test or assignment." **Graphing calculators are not allowed on this test.** Read and follow directions carefully. Use your time wisely! All communication devices and personal items outside of a water bottle, pencil, eraser, and allowed calculator must be put on the side of the room. Show ALL work in your blue book. Graders reserve the right to take off points when work is not shown. Write your name, your row, and test form on the outside. Good luck!

1. (6 pts) Let E be the region between the spheres $x^2 + y^2 + z^2 = 4$ and $x^2 + y^2 + z^2 = 9$. Set up the definite integral (integral with bounds) for $\int \int \int_E (x^2 + y^2 + z^2)^3 dV$.
2. (6 pts) Consider the rectangular prism (box) with corner vertices $(0, 0, 0)$, $(0, 1, 0)$, $(0, 0, 1)$, $(0, 1, 1)$, $(1, 0, 0)$, $(1, 1, 0)$, $(1, 0, 1)$, and $(0, 1, 1)$. Compute the flux of $\vec{F}(x, y, z) = \langle x, 2y, 3 \rangle$ from the inside to the outside of the box.
3. (8 pts) Find the global maximum and global minimum values of $f(x, y) = 5x^2 + 3y^2$ on the disc $x^2 + y^2 \leq 4$ and state where they occur.
4. (5 pts) Find the shortest distance between the plane $x + 3y + 2z = 14$ and the origin.
5. (8 pts) Let C be the closed curve formed from the line $y = 0$ and the upper halves of the circles $1 = x^2 + y^2$ and $4 = x^2 + y^2$. Let C be oriented counter-clockwise. Calculate the circulation of $\vec{F}(x, y) = \langle -x^2y, y^2x \rangle$ around C .
6. (7 pts) Exactly one of the following limit exists. Compute the limit that exists and show that the other limit does not exist.

(a)

$$\lim_{(x,y) \rightarrow (0,0)} \frac{xy}{x^2 + y^2}$$

(b)

$$\lim_{(x,y) \rightarrow (2,3)} x^2 + xy$$
7. (7 pts) Let S be the section of the cone $z = -\sqrt{x^2 + y^2} + 3$ above the xy -plane oriented with the downward facing normal vector. If $\vec{F}(x, y, z) = \nabla \times \langle x^2z + 3, e^z, yz^2 + 2z \rangle$, find

$$\iint_S \vec{F} d\vec{S}$$
8. (3 pts) Find the angle between the vectors $\langle 0, 4, 3 \rangle$ and $\langle 1, 1, 2 \rangle$. (You don't need to simplify your answer.)

9. (3 pts) If \vec{u} , and \vec{v} are non-zero and $\vec{u} \cdot \vec{v} = 0$, what is the relationship between u and v ? Justify your answer.
10. (3 pts) If \vec{u} , and \vec{v} are non-zero and $\vec{u} \times \vec{v} = 0$, what is the relationship between u and v ? Justify your answer.
11. (7 pts) Calculate the work done by the vector force field $\vec{F}(x, y, z) = \langle e^x, z \cos(y), \sin(y) \rangle$ on a particle that moves along the helix $r(t) = \langle \cos t, t, \sin t \rangle$ for $0 \leq t \leq \pi$.
12. (4 pts) Let $\vec{F}(x, y, z) = \langle x, x^2 \cos(x), 2z \rangle$ describe fluid flow. If the fluid expanding, compressing, or is it incompressible? How do you know?
13. (23 pts) Let $f(x, y) = e^{x^3+y}$.
- (3 pts) What is the domain of $f(x, y)$?
 - (3 pts) What is the range of $f(x, y)$?
 - (3 pts) What is $\Delta f(x, y)$?
 - (3 pts) What is $\nabla f(x, y)$?
 - (4 pts) What is the maximum rate of change of $f(x, y)$ at $(-1, 1)$
 - (4 pts) Compute the directional derivative of $f(x, y)$ at $(-1, 1)$ in the direction of $\vec{u} = \langle 1, 1 \rangle$
 - (3 pts) Find the equation of the tangent plane to $f(x, y)$ and $(-1, 1)$.
14. (4 pts) Find the equation of the tangent plane to the surface $3xyz + xy = 8$ at $(1, 2, 1)$
15. (6 pts) Consider the curve in the xy -plane given by the quarter circle from $(2, 0, 0)$ to $(0, 2, 0)$. If this curve is the base of a fence whose height is given by $f(x, y) = x^3 + xy^2$, what is the area of the fence?
- Bonus. (5 pts) Let F be an arbitrary vector field whose second partial derivatives are continuous on all of \mathbb{R}^3 . Let S be a sphere, oriented outward. Prove that

$$\int \int_S \text{curl } F \cdot d\vec{S} = 0$$

MA 225 (Foundations to Advanced Mathematics)

Recordings to classes can be found [here](#):

(<https://ncsu.hosted.panopto.com/Panopto/Pages/Sessions/List.aspx?folderID=6daf1ab9-8dc9-477a-982d-ae0000d0b610>)

The 16 students in this class were interested in taking upper-level math courses. In this course, they learned how to write proofs while exploring topics related to logic, functions, number theory, and equivalence relations. In class, my students learned these concepts through group work and class discussions. I let their curiosities and questions help guide our learning. The students were then given homework assignments due approximately once a week. For each class period, I told the students what the learning objectives were and assigned problems related to these learning objectives. The objectives and problems can be found below:

Class Session	Learning Objectives	Homework Problems Assigned	Homework Due Date
January 10	1. Understand class policies for a successful semester in MA 225. 2. Understand the fundamental properties for real numbers. 3. Understand what properties that hold for real numbers also hold for all integers and which ones hold for all natural numbers and which ones hold for all rational numbers.	Please tell me about yourself. Be sure to include: your preferred name, your hometown, an impactful mathematical experience you have had, 1-3 guidelines for how our class should operate in order to build a supportive, inclusive, and welcoming classroom environment, anything else you would like me to know about you.	January 14
January 12	Write proofs using fundamental assumptions and definitions	1. Prove that the sum of two even numbers is even.	January 21
January 14	1. Be able to determine if a statement is a proposition. 2. Practice justifying if propositions are true or false.	2. Consider the following conjecture: If x and y are rational numbers, then x/y is rational. a) The above conjecture is false. Why? b) Modify the conjecture so that we have a true proposition. c) Prove that your proposition in part b is true.	January 21
January 19	1. Learn definitions of logical connectives. 2. Be able to show the truth value of a proposition involving logical connectives given the truth values of the basic components.	1. Write a truth table to show that the statement a(i) of De Morgan's laws on page 5 of 1.2 Propositions packet is correct. Then write an argument that the statement is true without using a truth table. (If you are unsure what to write for this second part, try recording yourself explaining the argument to a friend, then write down the words you used. Afterwards, go back through and make sure all your statements are justified.) 2. Exercise 4 on page 7 of the Chapter 1 text found on the Moodle page. 3. Exercise 5 on page 7 of the Chapter 1 text found on the Moodle page. 4. Exercise 9 on page 9 of the Chapter 1 text found on the Moodle page.	January 28
January 21	1. It's important to be cautious in bad weather.	See Email	NA
January 24	1. Learn definitions of 2 new logical connectives. 2. Be able to show the truth value of a proposition involving logical connectives given the truth values of the basic components. 3. Be able write the converse and contrapositive of a proposition.	5. Consider the proposition: If $3^2 > 4$, then 3 is not a prime. Note: 3^2 is "3 squared" a) Is the proposition true or false? Prove it. b) What is the contrapositive of our proposition? c) What is the converse of our proposition? d) Is the converse true or false? Prove it.	January 28
January 26	1. Understand that definitions are biconditionals 2. Experience the process of struggling through a proof when the path is unknown	1. Is the converse of a proposition always equivalent to the original statement? If so, use a truth table to justify your answer. If not, find an example of a proposition where the truth value of the original statement is different from the truth value of the converse. 2. Is the contrapositive of a proposition always equivalent to the original statement? If so, use a truth table to justify your answer. If not, find an example of a proposition where the truth value of the original statement is different from the truth value of the converse.	February 4
January 28	1. Determine if two propositional forms have the same truth value. 2. Be able to write down what a truth set is for given open sentences.	3. Find the truth set of the following open sentence. x is odd implies $2x$ is a prime. Use as your universe the set N of natural numbers.	February 4

January 31	<p>1. Learn the definition of 3 mathematical quantifiers.</p> <p>2. Understand that the order of the quantifiers matters.</p>	<p>4. Prove that $\sim((\sim P) \text{ and } Q)$ and $P \vee (\sim Q)$ are equivalent without using a truth table. Note: You may use a truth table while brainstorming your proof.</p> <p>5. Proposition: If the square root of 2 is rational, then $2^2 = 4$. (Note 2^2 is "two squared") Write down the converse and contrapositive of this proposition. Then decide if the original proposition, the contrapositive, and the converse are true or false. Be sure to justify your answers.</p> <p>6. Homework Problem at the end of Chapter 1 Session 5 document.</p>	February 4
February 2	<p>1. Be able to turn a written out proposition into symbols using quantifiers.</p> <p>2. Learn what a useful denial is and how to change a proposition with a quantifier into a useful denial.</p>	<p>1. Exercise 22 on page 31 of the Chapter 1 text.</p> <p>2. Go through both quantifiers packets. Ask any questions you have on the Moodle forum. (Remember you'll lose points on your participation grade if you don't have enough posts by the end of the semester. Also, your posts can be you answering your classmates questions.) You don't need to turn in anything for this, but you may turn in your packets if you would like feedback on them.</p>	February 11
February 4	<p>1. Identify mistakes in pre-written proofs.</p> <p>2. Be able to understand the order of proofs and the language commonly used.</p>	<p>3. If x^2 is odd, then x is odd. Prove the contrapositive of the statement assuming our universe is integers. Is the original statement true?</p> <p>4. Suppose that a and b are integers. Is the following proposition true or false? If ab is even, then a is even or b is even. Prove your assertion. (Hint: What is the contrapositive?) You can use the fact that integers are even or odd but not both.</p>	February 11
February 7	<p>1. Learn what a proof by contradiction is.</p> <p>2. Be able to understand pre-written proofs by contradiction.</p> <p>3. Start to think through how you would write your own proofs by contradiction.</p>	<p>5. Prove that if n is an integer, then there is a unique integer m such that $n + m = 0$.</p>	February 11
February 9	<p>1. Write a proof by contradiction.</p>	<p>1. Consider the proposition: If n is an integer, then $2n \leq n^2$. What is the truth set for this proposition if the universe is all real numbers?</p> <p>2a) Prove that 3 is odd.</p> <p>b) Use a proof by contradiction to show that 3 is not even.</p> <p>If you would like to see more guidance on Proof by Contradiction outside of your textbook, check out this presentation: http://www.math-cs.gordon.edu/courses/mat231/notes/proof-contradiction.pdf</p>	February 18
February 11	<p>1. Identify ways to make an argument clearer to the reader of the proof.</p>	<p>3. Consider the proposition: There exist no integers a and b for which $4ab=1$.</p> <p>a) Write this proposition using quantifiers.</p> <p>b) Prove this statement. If you use the contrapositive to prove the statement, be sure to state the contrapositive. If you use proof by contradiction, be sure to state the denial of this proposition.</p>	February 18

February 14	1. Understand how to derive a useful denial of a proposition. 2. Be able to use a denial to prove something using proof by contradiction. 3. Learn the definition of a set.	4. Let our universe be integers. Consider the proposition If a does not divide bc, then a does not divide b. a) Write this proposition using quantifiers b) Write down a useful denial of the proposition using quantifiers c) Prove the proposition. Be sure to use the definition of divides that we have provided in our class. (Recall that we have defined divides in terms of multiplication.)	February 18
February 16	1. Understand the definition of a set 2. Be able to prove set inclusions.	1a) Use set notation to denote the set of numbers that are multiples of 4. b) Prove that the set of numbers that are multiples of 4, which we will call A is contained in the set of even numbers which we will call B i.e. prove $A \subset B$.	February 28
February 18	1. Find intersections and unions of infinite collections of sets.	2. Let $A = \{1, 2, 3\}$ and let $B = \{1, \{2\}, 5\}$. Find $A \cup B$ and $A \cap B$. 3. Let $A = (1, 4]$ and let $B = (-\infty, 2]$. Find $A \cup B$ and $A \cap B$.	February 28
February 21	1. Understand the importance of the order of statements in proofs 2. Understand why it is difficult to prove that something does not exist and what proof methods help us overcome these difficulties.	Review for Test (pgs 3-22, 27-38, of the Chapter 1 text as well as Chapter 0 packet)	February 28
February 23	1. Learn the definition of a complement. 2. Learn the definition of a Cartesian Product. 3. Learn the definition of a function. 4. Be able to prove if a set is a function.	1. Let the Universe be $U = \{1, 2, 3, 4, 5\}$ and $A = \{1, 4\}$. Find the complement of A.	March 7
February 25	Celebrate the learning we've done so far this semester.	NA	
February 28	1. Be able to find and prove what the domain of a function is. 2. Be able to find and prove what the range of a function is.	2. Let $f(x) = x^2$. a) Write out what f equals using the notation shown in our definition of a function. b) Prove that f is a function. c) Find the domain and range of f. d) Prove that the domain of f is _____. e) Prove that the range of f is _____.	March 7
March 2	1. Be able to find and prove what the domain of a function is. 2. Be able to find and prove what the range of a function is.	Continue Working on Homework Problem 2.	March 7
March 4	1. Understand composition of functions. 2. Understand inverses of functions.	1. Finish Compositions packet. I will be collecting it. I know this may feel intimidating, but there are no proofs.	March 23
March 7	1. Understand inverses of functions. 2. Be able to show if a function is injective or not.	2. Determine if $f(x) = x^3$ is an injection or not. Then prove your answer. 3. Determine if $f(x) = x^2 + 3x$ is an injection or not. Then prove your answer.	March 23
March 9	1. Be able to write proofs using the definition of surjective.	4. Find sets A, B, and C, and functions f and g such that f is a function from A to B, g is a function from B to C, $g \circ f$ (g composed with f) is onto C, but f is not onto B.	March 23
March 11	1. Be able to walk through the 6 steps to work on writing a direct proof.	Enjoy Spring Break! If you have time, work through more proofs for parts of the Chapter 3: Big Theorems Packet.	March 23

March 21	1. Think through how to approach proofs using function definitions.	1. Prove Theorem 2 part 2 from the Big Theorems Packet. I encourage you to use the 6 steps however it is not required. 2. Prove Theorem 2 part 3 from the Big Theorems packet. Check out Calista, Skylar, and Elise's proof from the class recording. Complete their proof by either showing that the inverse of g composed with f is f inverse composed with g inverse or by using a different approach.	March 28
March 23	1. Continue working on proofs using definitions from functions chapter. 2. Understand how bijections can show if two sets have the same number of elements.	3. Find all the bijections from $\{1,2,3\}$ to itself. You can denote it with arrows as we did in class.	March 28
March 25	1. Learn the definitions of countably infinity and uncountable. 2. Think through how to prove something is a bijection.	4. Find a bijection from $(-1,1)$ to \mathbf{R} . Is $(-1,1)$ countably infinite or uncountable? 5. Prove that $f(x)=-3x+4$ is a bijection from $[0,1)$ to $(1,4]$.	March 28
March 28	1. Learn the mathematical principle of induction.	Problem 1 and 2 have 5 proofs by induction. Please complete 3 total, but at least 1 must come from number 2. Make sure you understand them all before the test, but I will send solutions Monday night. 1. Exercise 6 from Chapter 2 text. (I will write up a proof on Wednesday, but at least start brainstorming your answer.)	April 4
March 30	1. Practice the mathematical principle of induction.	For help with mathematical induction, check out this website: https://www.ck12.org/c/calculus/induction-and-inequalities/lesson/Induction-and-Inequalities-MAT-ALY/ Note that they don't write out what each p_n statement is. I still think it is clearer to the reader if you do, but you don't have to. Remember that everyone needs 2 posts on the continued class discussion forum (and an additional 2 for each time you are absent) before the end of the semester. Discussing some of the examples on this website would be a great way to earn that participation grade. 2a) Use the principle of mathematical induction to show n^2 is greater than or equal to $2n$ for all integers $n > 1$. 2b) Use part a and the principle of mathematical induction to show $3^n > n^2$ (i.e. 3 to the n th power is greater than n squared) for all natural numbers n . 3) Find the unique prime factorization of 471.	April 4
April 1	1. Learn the well-ordering principle 2. Understand the proof of part 1 of the division algorithm	1a) Use quantifiers to write out the Division Algorithm for Integers Theorem. 1b) Reorder the quantifiers (the for all or there exists part) 1c) Prove that your new statement is not true (please ask for help if you get stuck) 2) Find the q and r referenced in the division algorithm if $a=8$ and $b=391$	April 15
April 4		Review for Test	
April 6			

April 8	1. Learn the definition of an equivalence relation. 2. Be able to prove or disprove if something is an equivalence relation.	3. Prove that $I=\{(a,b) \text{ in } A \times A: a=b\}$ is an equivalence relation.	April 15
April 11	1. Learn the definition of modulo. 2. Understand how we can use modulo to come up with equivalence relations.	4. Fill in the blank with an integer: $3x$ is equivalent to $1 \pmod{7}$ if and only if x is equivalent to $__ \pmod{7}$ and explain how you know. 5. Prove that $R=\{(a,b) \text{ in } \mathbb{Z} \times \mathbb{Z}: a-b \text{ is divisible by } 5\}$ is an equivalence relation.	April 15
April 13	1. Given an equivalence relation, be able to find equivalence classes.	1a. Complete Exercise 9 in Chapter 4 text (Utilize pages 10 and 11 for help) 1b. Using the same relation as part a, find the equivalence classes of $[(1,1)]$, $[(2,2)]$, $[(2,3)]$ and $[(3,1)]$	April 25
April 15	1. Be able to explain the proof of Theorem 4.1 2. Be able to show when two equivalence classes are equal. 3. Gain understanding about the process of doing a proof by induction, so that you are able to do proofs by induction on your own.	2. Let $R = \{(a, b) \in \mathbf{R} \times \mathbf{R} : \text{there is an integer } k \text{ such that } a - b = 2k\pi\}$. a) Prove that R is an equivalence relation on \mathbf{R} b) List two elements of $[\pi/4]$. c) List two elements of $[1]$. d) Which elements, if any belong to the intersection of $[\pi/4]$ and $[1]$? Prove your answer. 3. Prove that if x is in $[b]$, then x is in $[a]$ using the assumptions from page 8 of the Equivalence Classes packet.	April 25
April 18		Consider the equivalence relation $a \equiv b \pmod{3}$. Prove that for each natural number n , $[10^n] = [1]$.	April 22
April 20	1. Define the set of the set of equivalence classes for congruence relations. 2. Define addition and multiplication on these sets.	4. Consider the equivalence relation $a \equiv b \pmod{4}$. a) Find all congruence classes $[a]$ for which there exists a congruence class $[b]$ such that $[a][b]=[1]$. b) Find all congruence classes $[a]$ for which there exists a congruence class $[b]$ such that $[a][b]=[0]$ c) Find all congruence classes $[a]$ for which there exists a congruence class $[b]$ such that $[a]+[b]=[0]$	April 25
April 22	1. Review Proof by Induction Technique 2. See that addition for equivalence classes is well-defined 3. Appreciate some properties of equivalence class addition and multiplication	Review for Final Exam	
April 25	1. Ask any questions pertaining to this class 2. Learn how to study for the final exam	Review for Final Exam	

North Carolina State University - ClassEval Report

Course Information		OUC														
Term: 2022 Sprg Instr: Sarah Strikwerda Emplid: 200263949 Course: MA 225 004 Courses evaluated: MA 225 004 Title: Found Advance Math Undergraduate Course		170301														
Responses= 14 Enrolled= 17 Resp. Rate= 82.4%																
#	Question	Mean	5	4	3	2	1	NA	BL	StDev	SEM	Nq	Dept N	Dept Mean	Dept StDev	
1	The instructors teaching aligned with the courses learning objectives/outcomes	4.8	11	3	0	0	0	0	0	0.4	0.11	14	2,258	4.4	0.9	
2	The instructor was receptive to students outside the classroom	4.8	11	3	0	0	0	0	0	0.4	0.11	14	2,231	4.2	1.0	
3	The instructor explained material well.	4.7	10	4	0	0	0	0	0	0.5	0.13	14	2,254	4.0	1.3	
4	The instructor was enthusiastic about teaching the course	4.9	12	2	0	0	0	0	0	0.4	0.10	14	2,253	4.3	1.0	
5	The instructor was prepared for class	4.7	10	4	0	0	0	0	0	0.5	0.13	14	2,256	4.4	0.9	
6	The instructor gave useful feedback.	4.8	11	3	0	0	0	0	0	0.4	0.11	14	2,236	4.1	1.2	
7	The instructor consistently treated students with respect	4.6	10	3	1	0	0	0	0	0.6	0.17	14	2,257	4.5	0.8	
8	Overall, the instructor was an effective teacher	4.8	11	3	0	0	0	0	0	0.4	0.11	14	2,255	4.1	1.2	
9	The course materials (e.g., readings, videos, class notes, course packs, FAQs, websites, course webpage, and blogs) were valuable aids to learning	4.3	8	3	2	1	0	0	0	1.0	0.27	14	2,220	4.2	1.0	
10	The course assignments (e.g., homework, exams, quizzes, lab reports, papers, presentations, projects, portfolios, artistic impressions, critiques, blogs, and videos) were valuable aids to learning	4.6	9	4	1	0	0	0	0	0.6	0.17	14	2,207	4.2	1.0	
11	This course improved my knowledge of the subject	4.8	11	3	0	0	0	0	0	0.4	0.11	14	2,233	4.3	1.0	
12	Overall, this course was excellent	4.5	8	5	1	0	0	0	0	0.7	0.17	14	2,235	4.0	1.2	
13	Course concepts were related in a systematic manner.	4.6	8	6	0	0	0	0	0	0.5	0.14	14	14	4.6	0.5	
14	Compared to the beginning of the semester, my knowledge of this course's subject matter has improved appreciably.	4.8	11	3	0	0	0	0	0	0.4	0.11	14	14	4.8	0.4	
15	The instructor gave clear explanations to clarify concepts.	4.6	9	5	0	0	0	0	0	0.5	0.13	14	14	4.6	0.5	
16	The instructor provided a good mixture of lecture and discussion.	4.7	11	2	1	0	0	0	0	0.6	0.16	14	14	4.7	0.6	
17	The instructor established a welcoming learning environment for students from all populations.	4.6	9	4	1	0	0	0	0	0.6	0.17	14	14	4.6	0.6	
18	The exams concentrated on important aspects of the course.	4.6	8	6	0	0	0	0	0	0.5	0.14	14	14	4.6	0.5	
19	This course has increased my capacity for analytic thinking.	4.4	7	6	1	0	0	0	0	0.6	0.17	14	14	4.4	0.6	

20	I enjoyed going to class.	4.1	4	8	2	0	0	0	0	0.7	0.18	14	14	4.1	0.7
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Note: 1. Results based on low response rates may not reflect the true class mean. Dept mean is for all undergraduate, or all graduate courses, offered by dept and is weighted by class size.

2. Results from cross-listed courses are included in the mean for the department whose course prefix appears first in the alphabet (e.g., for a course listed as HI and REL, the results are included in History's mean). To find the department mean for the other department (in this example, Philosophy and Religion), go to http://www2.acs.ncsu.edu/UPA/classeval/faculty/college_univ_means.htm .

North Carolina State University - ClassEval Report	
Emplid: 200263949	Name: Sarah Strikwerda -- Course: Found Advance Math
Term: 2022 Sprg	MA 225 004 Courses surveyed - MA 225 004
Question	Response
Comment on strengths and weaknesses of the instructor	She was overall an extremely great teacher who knew how to explain the material well, was also extremely nice to all students. One of the best instructors I've had so far.
Comment on strengths and weaknesses of the course	It doesn't over complicate the material like some courses do. It gets straight to the point and helps whoever learning it to understand the fundamentals of mathematics by asking them to teach others. Very useful
Which activities and/or assignments in this class helped you the most?	The Homeworks and the Tests always helped a lot, also working in groups allowed me to try and solve the solutions with others, and while sometimes we were stuck, we eventually were able to learn.
Was there a subject that you wish the instructor had covered in more detail?	I don't think I can list one
How does the instructor's level of energy and enthusiasm impact the engagement of the class?	She was very enthusiastic which led to me and the other classmates being more interested.
How kind, specific, and helpful did you find the instructor's feedback and why?	She was extremely kind and helpful. Very polite
Give suggestions on how the course or how the instruction could be improved.	I'm not sure if I can
Please comment on your instructor's effectiveness in creating an inclusive learning environment.	She was very effective at this because she encouraged group work but it wasn't mandatory, and she made sure everyone understood that being kind and inclusive was important.
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Comment on strengths and weaknesses of the instructor	I think that using class time to work in groups helped a lot especially with the smaller size of this class compared to others.
Comment on strengths and weaknesses of the course	I really think the recordings helped a lot as being able to go back through previous classes were a huge value to the class.
Which activities and/or assignments in this class helped you the most?	I think the homework really helped me prepare for the tests.
How kind, specific, and helpful did you find the instructor's feedback and why?	Extraordinarily as going over previous assignments and answering questions on the discussion forum were very helpful.
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Comment on strengths and weaknesses of the instructor	She had a very effective teaching style that really helped me benefit in learning the materials. She always got the class involved and it felt like she was working with us instead of just talking to us. She assigned homework that would help you learn the material and prepared you for the tests, but it was not an overwhelming amount either. There were very few strengths, but maybe for some people there were not enough out of class resources, as the only one really provided was the pdf of the textbook. However, if you communicate with Sarah, she will likely

	be able to find resources to help, or there will be resources online that are available.
Comment on strengths and weaknesses of the course	The course really help me develop math skills in fields where I was inexperienced. Because it is early on, seeing how some the proofs will apply to my future career are somewhat difficult, but it does help you think about math in a different way.
Which activities and/or assignments in this class helped you the most?	Working through packets together in class.
Was there a subject that you wish the instructor had covered in more detail?	Going over what kind of things can be done for the project.
How does the instructor's level of energy and enthusiasm impact the engagement of the class?	She is very passionate about the class and does whatever she can to get everyone involved. It is one of the strengths of the class.
How kind, specific, and helpful did you find the instructor's feedback and why?	Very specific and helpful in how to improve you work. Her comments are always respectful and her criticism is always constructive.
Give suggestions on how the course or how the instruction could be improved.	Giving more structure to the project could be helpful.
Please comment on your instructor's effectiveness in creating an inclusive learning environment.	She always emphasized being inclusive and not leaving anyone behind. She had us work in groups so we could learn from each other, which was very valuable.
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Comment on strengths and weaknesses of the instructor	Overall she was great! She always responds to my emails quickly and gives good feedback on homework and tests. The only thing is that while I like the amount of group work, I wish we would do a little more learning of the concept before we are thrown into a group to discuss something we know nothing about. But besides that, she did great, and graded things very quickly and provided many opportunities for extra learning.
Comment on strengths and weaknesses of the course	This course has been great, and I know how to write proof much better now than I did before. I like that she lets us have the recordings of the class so we can go back and rewatch them. The homework is for the most part very useful, and I do more learning with that even that I get in the class room. I have liked learning in groups, but often I get put with two people who are not good at being a group and I end up learning nothing. That's not the class's fault though. But I do like to learn more as a class before having to work with other people. I also think that we should have more examples of all the different things we have to know how to do. Like for examples I was asked how to prove domain but we never did an example in class. I think that we should go over everything that we are expected to do on our own just a little bit.
Which activities and/or assignments in this class helped you the most?	I felt like sometimes the groupwork was very helpful, but sometimes when the group was horrible it was very not helpful. But in general I think that went better than I thought it would. Also, the homework was the thing that helped me learn most in the class.
Was there a subject that you wish the instructor had covered in more detail?	I wish we worked on proving domain and range for a long time because I struggled with that and it turns out everyone else did too. Also everything in chapter 4 is especially confusing when you haven't heard of it before so I wish we had more time to spend on that. A lot of the class knows some about it though so I feel like we kind of skimmed on it.

How does the instructor's level of energy and enthusiasm impact the engagement of the class?	She is always enthusiastic and I do think thgat helped people to participate in class. i think everyone was very comfortable and felt welcome to ask questions. More people participated in discussions than I was expecting and I think that is because of how she ran the class.
How kind, specific, and helpful did you find the instructor's feedback and why?	I thought her feedback was always helpful and definitely constructive. WHEN I did homeowrk correction I always knew exactly what I shoul dhave been doing because her comments were very helpful. Nothing she said was ever unnecessarily harsh, and she never made me feel stupid about my questions.
Give suggestions on how the course or how the instruction could be improved.	I thought she did a great job of teaching and explaining the concepts well. Like I mentioned I just wish we did more examples and did not dwell on things more than we had to so we could havem more time learning the important things.
Please comment on your instructor's effectiveness in creating an inclusive learning environment.	Like I said she never tried to make anyone feel stpid for what they dont know and she encourage everyone to do the smae to others who may not be on their level. I noticed there are people in this class who know almost every thing already and others like me who knew none of it, but the way she taught made it so everyone could learn and feel included.
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Comment on strengths and weaknesses of the instructor	She was great at receiving all questions and answering them to her best ability.
Which activities and/or assignments in this class helped you the most?	Group/partner work
How does the instructor's level of energy and enthusiasm impact the engagement of the class?	Knowing she was excited to teach the material, inspired me to go to every lecture possible.
How kind, specific, and helpful did you find the instructor's feedback and why?	Extremely helpful. It guided me to the correct answer.
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Comment on strengths and weaknesses of the instructor	Awesome teacher.
Comment on strengths and weaknesses of the course	We'll done course
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Comment on strengths and weaknesses of the instructor	gave good feedback
Which activities and/or assignments in this class helped you the most?	class discussions/ proof examples
Was there a subject that you wish the instructor had covered in more detail?	functions, in general I just felt that the beginning of the course was better explained.
How does the instructor's level of energy and enthusiasm impact the engagement of the class?	The class is pretty engaged and the instructors level of energy does not hurt but people likely participate for their own understanding.
How kind, specific, and helpful did you find the instructor's feedback and why?	I found the feedback very useful and specific on the homework specifically
Give suggestions on how the course or how the instruction could be improved.	Less packets that we never even finish.

Please comment on your instructor's effectiveness in creating an inclusive learning environment.	The instructor included everyone but despite doing a lot of group work and having a small class, nobody really knows each other.
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Comment on strengths and weaknesses of the instructor	Very enthusiastic
Comment on strengths and weaknesses of the course	It's a little dull, since it's based on proofs, and those aren't necessarily as engaging as something like calculus.
Which activities and/or assignments in this class helped you the most?	Homework
Was there a subject that you wish the instructor had covered in more detail?	Test material
How does the instructor's level of energy and enthusiasm impact the engagement of the class?	It was very effective in getting the best out of people
How kind, specific, and helpful did you find the instructor's feedback and why?	It was helpful.
Give suggestions on how the course or how the instruction could be improved.	I think with more experience the instructor would be amazing.
Please comment on your instructor's effectiveness in creating an inclusive learning environment.	Very effective.
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Comment on strengths and weaknesses of the instructor	I had taken this class before during the covid semesters and struggled. I eventually ended up dropping it and deciding to retake it back when I could take this class in person. This was probably the best decision I could have made because regardless of what I end up with in the class I learned so much and this was a great experience for me. The difference in instruction this semester from what I had the last time was incredible. Sarah did an excellent job. She explained material in a way that made sense and lead class conversations in a way that was easy to follow and understand. I remember on the first day of class Sarah said that she was excited to teach this course because back in her undergrad when she took it, it almost made her switch majors because she didn't understand so she was excited to teach the class because she knew how to teach it in a way that would click. She did just that and more. I will walk away from this class with an understanding of mathematics that I did not have before because of her.
Which activities and/or assignments in this class helped you the most?	Homeworks and homework review sessions for exams.
Was there a subject that you wish the instructor had covered in more detail?	Injections, surjections, bijections.
How does the instructor's level of energy and enthusiasm impact the engagement of the class?	This class was enjoyable and went by fast. It often seemed like class went by so fast because of how engaging each class was. Probably the best classroom experience I have had at NC State thus far. I would take a class with Sarah again and again!
How kind, specific, and helpful did you find the instructor's feedback and why?	Always motivating and I liked how she gave feedback that helped us for the future.

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Comment on strengths and weaknesses of the instructor	I believe that Sarah is extremely good at teaching this subject to her students. Her homework consistently challenges the students on the relevant material taught in class, but not to the point where there is unnecessary pressure on the students. She is extremely receptive to students outside of the class and makes sure that each individual student is reaching their full potential in regards to the course material.
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Comment on strengths and weaknesses of the course	Good lectures that actually converted the textbook material into actual English.
Which activities and/or assignments in this class helped you the most?	Group proof sessions.
Was there a subject that you wish the instructor had covered in more detail?	Touching on topics in upper level courses more so we would know what we were getting ourselves into.
How does the instructor's level of energy and enthusiasm impact the engagement of the class?	Makes the class seem really short.
How kind, specific, and helpful did you find the instructor's feedback and why?	Very helpful and specific without being annoyingly general.
Give suggestions on how the course or how the instruction could be improved.	Keep the small group problem sessions during class. It really helps getting to what one would be confused about in class as opposed to outside of class.
Please comment on your instructor's effectiveness in creating an inclusive learning environment.	Very effective.

North Carolina State University - ClassEval Report

Course Information		OUC														
Term: 2018 Fall Instr: Sarah Strikwerda Emplid: 200263949 Course: MA 141 006A Courses evaluated: MA 141 006A Title: Calculus I Undergraduate Course		170301														
Responses= 27 Enrolled= 35 Resp. Rate= 77.1%																
#	Question	Mean	5	4	3	2	1	NA	BL	StDev	SEM	Nq	Dept N	Dept Mean	Dept StDev	
1	The instructors teaching aligned with the courses learning objectives/outcomes	4.2	8	17	2	0	0	0	0	0.6	0.11	27	5,418	4.5	0.8	
2	The instructor was receptive to students outside the classroom	4.2	8	14	4	0	0	1	1	0.7	0.13	26	5,267	4.4	0.9	
3	The instructor explained material well.	4.0	6	16	3	2	0	0	0	0.8	0.16	27	5,399	4.1	1.1	
4	The instructor was enthusiastic about teaching the course	4.4	12	13	2	0	0	0	0	0.6	0.12	27	5,411	4.4	0.9	
5	The instructor was prepared for class	4.3	9	15	2	0	0	0	1	0.6	0.12	26	5,402	4.5	0.8	
6	The instructor gave useful feedback.	4.1	8	15	4	0	0	0	0	0.7	0.13	27	5,344	4.2	1.0	
7	The instructor consistently treated students with respect	4.3	10	15	1	0	0	0	1	0.6	0.11	26	5,399	4.6	0.7	
8	Overall, the instructor was an effective teacher	4.1	7	17	2	1	0	0	0	0.7	0.13	27	5,403	4.3	1.0	
9	The course materials (e.g., readings, videos, class notes, course packs, FAQs, websites, course webpage, and blogs) were valuable aids to learning	4.0	5	18	4	0	0	0	0	0.6	0.11	27	5,303	4.3	0.9	
10	The course assignments (e.g., homework, exams, quizzes, lab reports, papers, presentations, projects, portfolios, artistic impressions, critiques, blogs, and videos) were valuable aids to learning	4.0	6	16	4	1	0	0	0	0.7	0.14	27	5,301	4.2	1.0	
11	This course improved my knowledge of the subject	4.1	7	16	4	0	0	0	0	0.6	0.12	27	5,348	4.4	0.9	
12	Overall, this course was excellent	4.0	6	16	4	1	0	0	0	0.7	0.14	27	5,363	4.1	1.1	

Note: 1. Results based on low response rates may not reflect the true class mean. Dept mean is for all undergraduate, or all graduate courses, offered by dept and is weighted by class size.

2. Results from cross-listed courses are included in the mean for the department whose course prefix appears first in the alphabet (e.g., for a course listed as HI and REL, the results are included in History's mean). To find the department mean for the other department (in this example, Philosophy and Religion), go to http://www2.acs.ncsu.edu/UPA/classeval/faculty/college_univ_means.htm.

North Carolina State University - ClassEval Report

Course Information		OUC	
Term: 2018 Fall Instr: Sarah Strikwerda Emplid: 200263949 Course: MA 141 006B Courses evaluated: MA 141 006B Title: Calculus I Undergraduate Course		170301	
Responses= 28 Enrolled= 31 Resp. Rate= 90.3%			
#	Question	Mean	5 4 3 2 1 NA BL StDev SEM Nq Dept N Dept Mean Dept StDev
1	The instructors teaching aligned with the courses learning objectives/outcomes	4.8	21 7 0 0 0 0 0 0 0 0.4 0.08 28 5,418 4.5 0.8
2	The instructor was receptive to students outside the classroom	4.7	18 9 0 0 0 0 1 1 0.5 0.09 27 5,267 4.4 0.9
3	The instructor explained material well.	4.6	18 9 1 0 0 0 0 0 0.6 0.11 28 5,399 4.1 1.1
4	The instructor was enthusiastic about teaching the course	4.7	21 6 1 0 0 0 0 0 0.5 0.10 28 5,411 4.4 0.9
5	The instructor was prepared for class	4.7	21 6 1 0 0 0 0 0 0.5 0.10 28 5,402 4.5 0.8
6	The instructor gave useful feedback.	4.6	18 10 0 0 0 0 0 0 0.5 0.09 28 5,344 4.2 1.0
7	The instructor consistently treated students with respect	4.8	21 7 0 0 0 0 0 0 0.4 0.08 28 5,399 4.6 0.7
8	Overall, the instructor was an effective teacher	4.6	19 7 2 0 0 0 0 0 0.6 0.12 28 5,403 4.3 1.0
9	The course materials (e.g., readings, videos, class notes, course packs, FAQs, websites, course webpage, and blogs) were valuable aids to learning	4.5	13 13 0 0 0 0 0 2 0.5 0.10 26 5,303 4.3 0.9
10	The course assignments (e.g., homework, exams, quizzes, lab reports, papers, presentations, projects, portfolios, artistic impressions, critiques, blogs, and videos) were valuable aids to learning	4.5	13 12 0 0 0 0 2 3 0.5 0.10 25 5,301 4.2 1.0
11	This course improved my knowledge of the subject	4.6	16 12 0 0 0 0 0 0 0.5 0.10 28 5,348 4.4 0.9
12	Overall, this course was excellent	4.4	13 13 2 0 0 0 0 0 0.6 0.12 28 5,363 4.1 1.1

Note: 1. Results based on low response rates may not reflect the true class mean. Dept mean is for all undergraduate, or all graduate courses, offered by dept and is weighted by class size.

2. Results from cross-listed courses are included in the mean for the department whose course prefix appears first in the alphabet (e.g., for a course listed as HI and REL, the results are included in History's mean). To find the department mean for the other department (in this example, Philosophy and Religion), go to http://www2.acs.ncsu.edu/UPA/classeval/faculty/college_univ_means.htm.

North Carolina State University - ClassEval Report

Course Information		OUC													
Term: 2018 Fall Instr: Sarah Strikwerda Emplid: 200263949 Course: MA 141 006C Courses evaluated: MA 141 006C Title: Calculus I Undergraduate Course		170301													
Responses= 19 Enrolled= 22 Resp. Rate= 86.4%															
#	Question	Mean	5	4	3	2	1	NA	BL	StDev	SEM	Nq	Dept N	Dept Mean	Dept StDev
1	The instructors teaching aligned with the courses learning objectives/outcomes	4.4	10	8	0	1	0	0	0	0.8	0.18	19	5,418	4.5	0.8
2	The instructor was receptive to students outside the classroom	4.7	15	2	0	1	0	1	1	0.8	0.18	18	5,267	4.4	0.9
3	The instructor explained material well.	3.9	7	7	2	3	0	0	0	1.1	0.25	19	5,399	4.1	1.1
4	The instructor was enthusiastic about teaching the course	4.6	12	7	0	0	0	0	0	0.5	0.11	19	5,411	4.4	0.9
5	The instructor was prepared for class	4.4	12	4	2	1	0	0	0	0.9	0.21	19	5,402	4.5	0.8
6	The instructor gave useful feedback.	4.5	11	7	1	0	0	0	0	0.6	0.14	19	5,344	4.2	1.0
7	The instructor consistently treated students with respect	4.8	16	3	0	0	0	0	0	0.4	0.09	19	5,399	4.6	0.7
8	Overall, the instructor was an effective teacher	4.4	10	7	1	1	0	0	0	0.8	0.19	19	5,403	4.3	1.0
9	The course materials (e.g., readings, videos, class notes, course packs, FAQs, websites, course webpage, and blogs) were valuable aids to learning	4.2	9	8	0	1	1	0	0	1.1	0.25	19	5,303	4.3	0.9
10	The course assignments (e.g., homework, exams, quizzes, lab reports, papers, presentations, projects, portfolios, artistic impressions, critiques, blogs, and videos) were valuable aids to learning	4.6	11	5	1	0	0	2	2	0.6	0.15	17	5,301	4.2	1.0
11	This course improved my knowledge of the subject	4.4	10	6	2	0	0	0	1	0.7	0.17	18	5,348	4.4	0.9
12	Overall, this course was excellent	4.1	7	9	1	2	0	0	0	0.9	0.22	19	5,363	4.1	1.1

Note: 1. Results based on low response rates may not reflect the true class mean. Dept mean is for all undergraduate, or all graduate courses, offered by dept and is weighted by class size.

2. Results from cross-listed courses are included in the mean for the department whose course prefix appears first in the alphabet (e.g., for a course listed as HI and REL, the results are included in History's mean). To find the department mean for the other department (in this example, Philosophy and Religion), go to http://www2.acs.ncsu.edu/UPA/classeval/faculty/college_univ_means.htm.

North Carolina State University - ClassEval Report	
Emplid: 200263949	Name: Sarah Strikwerda -- Course: Calculus I
Term: 2018 Fall	MA 141 006A Courses surveyed - MA 141 006A
Question	Response
Comment on strengths and weaknesses of the instructor	good
Comment on strengths and weaknesses of the course	good
Give suggestions on how the course or how the instruction could be improved.	good
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Comment on strengths and weaknesses of the instructor	Sarah was great, sometimes a bit condescending but that was by accident
Comment on strengths and weaknesses of the course	Good recitation, bad overall class. But this TA made the class much, much better.
Give suggestions on how the course or how the instruction could be improved.	Good stuff
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Comment on strengths and weaknesses of the instructor	SHES AMAZING
Comment on strengths and weaknesses of the course	Make her the teacher every other day
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Comment on strengths and weaknesses of the instructor	Sarah is a great TA, she is super well versed in calculus and can explain stuff in multiple ways! She's super helpful! No weaknesses
Comment on strengths and weaknesses of the course	No weaknesses
Give suggestions on how the course or how the instruction could be improved.	Great TA!
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Comment on strengths and weaknesses of the instructor	She was always prepared and enthusiastic but sometimes it was hard to understand her explanations
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Comment on strengths and weaknesses of the instructor	She hasn't taught much before, which is easy to tell, but it's also easy to tell she is trying her best and wants to see everyone succeed, so I think she'll improve a lot and become a good teacher.
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Comment on strengths and weaknesses of the instructor	knew the material as well as the teacher and helped work through problems effectively.
Comment on strengths and weaknesses of the course	course was effective in its teachings
Give suggestions on how the course or how the instruction could be improved.	good year for math
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Comment on strengths and weaknesses of the instructor	She was decent and enthusiastic, but she didn't always provide the most useful of responses when students had questions.
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Comment on strengths and weaknesses of the instructor	Sometimes methods and work were inconsistent, but I loved recitation
Comment on strengths and weaknesses of the course	Sometimes caused more confusion, but everyone does math differently
Give suggestions on how the course or how the instruction could be improved.	Thanks for a great semester !
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Comment on strengths and weaknesses of the instructor	Sarah is very knowledgeable on the material and does a good job at explaining concepts to make sure we understand it
Comment on strengths and weaknesses of the course	I feel like recitation should be longer. It's supposed to be a time to time to ask questions and get help on the things you don't understand which is hard to do when you don't have time to do everything you want to get done
Give suggestions on how the course or how the instruction could be improved.	Sarah you are awesome! Keep on going strong! and thank you for grading my tests, i know its been a struggle
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Comment on strengths and weaknesses of the instructor	She was very helpful in office hours and would constantly tweak them and add more so that the majority of students could attend if they wanted to.
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Comment on strengths and weaknesses of the instructor	Felt that the TA explained the concepts better than the professor! Good job.
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Comment on strengths and weaknesses of the instructor	Good at explaining concepts, especially in a way that is different from the main class in case the primary explanation wasn't quite on it. Is slightly less good at commanding respect from the class as Tricity is, although its much harder to do in a recitation because it is less strictly guided by the professor.
Comment on strengths and weaknesses of the course	The recitations usually aligned with times right before the exam, but would sometimes be at a random and not very useful time like the very beginning of a unit.
Give suggestions on how the course or how the instruction could be improved.	I typically benefited most from the recitations that went over many problems over and over, like a problem session yknow? The sessions that had more teaching didn't do as much for me, but that's a personal thing.
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Comment on strengths and weaknesses of the instructor	Sarah was very enthusiastic about what she was teaching, and always approached every problem with a smile.
Comment on strengths and weaknesses of the course	The course was a good source of review for the class.
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Comment on strengths and weaknesses of the instructor	With only being a TA, I didn't expect as much as I would of a full-blown professor. Therefore, she exactly met my expectations as a TA and I couldn't really complain. Her best strength was her relatability and ability to explain course-work while her only weaknesses was her inexperience and the limitations set by the course itself (She has to deal with a multitude of different knowledge levels coming from students due to the fact that it is an intro course).
Comment on strengths and weaknesses of the course	The problem session was fairly useful for asking homework questions and extra practice on the subject. You can't get much more straightforward to the point of the class than that.
Give suggestions on how the course or how the instruction could be improved.	Experience will definitely be a help in the future for the instructor. Everything was exactly where it needed to be for this problem session.
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Comment on strengths and weaknesses of the instructor	Sarah is good at teaching, but there are a few minor improvements that could be made. She is always prepared for class, but occasionally makes mistakes when going through problems. This is not super important as she always sends an email out after recitation correcting any issues but it could be improved. Otherwise she is fantastic.
Comment on strengths and weaknesses of the course	The course was good, I learned a lot and the pace was good.
Give suggestions on how the course or how the instruction could be improved.	Besides being slightly more prepared as far as going through the problems, the instructor was very helpful and receptive.
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Comment on strengths and weaknesses of the instructor	Tried to cover as much new material she could within the time span to ensure everyone could practice on as much as possible.
Comment on strengths and weaknesses of the course	Very helpful to have a session dedicated to practicing new material to master it.
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Comment on strengths and weaknesses of the instructor	For a TA she was okay, I don't particularly hold TAs in high regard because I sorta end up paying the price for them to get experience which seldom benefits me. with experience she could be okay but that can be said about anyone, I mean at the end of the day if I had a hundred years I could be the best professor ever but what separates the people who should teach from those who shouldn't is how well they can learn from their mistakes and become good.
Comment on strengths and weaknesses of the course	I mean I sorta had to teach my self a lot, and considering a professor or a teacher's main and only true purpose, to me at least, is to convey their knowledge and "teach" if you fail that I would say you aren't a teacher, i mean going to tutoring or finding reasources to better grasp understanding is one thing, but literally being so undertaught you just have to build your own foundation is another
Give suggestions on how the course or how the instruction could be improved.	More experience, communication, conveying ideas, teaching methods , styles.
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Comment on strengths and weaknesses of the instructor	She was very enthusiastic, but sometimes hard to follow during longer practice problems.
Comment on strengths and weaknesses of the course	I loved that all of the notes were online, however I wish that webassign was better.

Give suggestions on how the course or how the instruction could be improved.

More homework help/homework specific practice problems

North Carolina State University - ClassEval Report	
Emplid: 200263949	Name: Sarah Strikwerda -- Course: Calculus I
Term: 2018 Fall	MA 141 006B Courses surveyed - MA 141 006B
Question	Response
Comment on strengths and weaknesses of the instructor	I thoroughly enjoyed having Sarah as one of my instructors for math. She was able to explain things in an easier and different way than my other math professor and it really did help me understand the material better. She is a very genuine teacher who made it a priority to help us any way she could. I would love to take another class with her and would definitely recommend her to other students.
Comment on strengths and weaknesses of the course	Overall, the course was a bit difficult as exams were pretty hard but I liked how the course was laid out and how the exams were styled. The only thing I could think of is making exams slightly less harder but I feel like I was able to grasp material pretty well.
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Comment on strengths and weaknesses of the instructor	Needed to work on explaining things better and making sure her work was correct.
Comment on strengths and weaknesses of the course	Spend more time explaining.
Give suggestions on how the course or how the instruction could be improved.	Better examples
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Comment on strengths and weaknesses of the instructor	Sarah knew just as much as our instructor and provided sometimes a different perspective on how to do some problems which was useful.
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Comment on strengths and weaknesses of the instructor	Extremely good math teacher. I would not have retained much of anything if it had not been for help outside of the class in office hours. Enthusiastic about math and willing to search for real life application examples, which is a plus when they aren't normally given in class.
Comment on strengths and weaknesses of the course	I actually looked forward to this class. I came out of recitation more knowledgeable and not confused. I feel like I actually learned Math in this class, and a big part of this is the teaching style of the instructor.
Give suggestions on how the course or how the instruction could be improved.	I would like to see my recitation instructor teaching a full class. I greatly benefited from her engaging explanations. Instead of just reading out of a book, she was willing to explain each step on an individual case. I think other students would benefit from this type of teaching, a type of teaching that seems otherwise nonexistent.
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Comment on strengths and weaknesses of the course	I very much enjoyed this course
Give suggestions on how the course or how the instruction could be improved.	Keep being awesome
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Comment on strengths and weaknesses of the instructor	Practice problems given in recitation were relevant to the lectures and provided quality concept reinforcement. The interactive activities were also good at encouraging a higher degree of participation.
Comment on strengths and weaknesses of the course	There were no graded assignments for recitation, which limits class participation.
Give suggestions on how the course or how the instruction could be improved.	At least 1 consistent recurring assignment that is graded on an accuracy basis would improve the quality of the class.
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Comment on strengths and weaknesses of the instructor	Sarah was a wonderful TA for the recitation segment of the MA 141 course. She explained complex subjects very well. She was also very willing to change around office hours to help students. Sarah knows the material very well, humbly admits when she doesn't know something, and makes the effort to figure out problems students are struggling with.
Comment on strengths and weaknesses of the course	Great for students who are confused about smaller topics within the course.
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Comment on strengths and weaknesses of the instructor	Sarah aided in providing and expanding my learned information of Calculus. She gave great advice and gave me help immediately when I asked for it. Readily available and flexible. Love the Kahoot sessions! ;) recommendations - Keep up the good work!
Comment on strengths and weaknesses of the course	strength - having the recitation the day before tests recommendation - sometimes on "slow" days, we could have a review session of old materials
Give suggestions on how the course or how the instruction could be improved.	sometimes on "slow" days, we could have a review session of old materials
-----	-----
Comment on strengths and weaknesses of the instructor	Super enthusiastic and loud. Taught confidently and always had an explanation to something. Took time to understand what someone was asking.
Comment on strengths and weaknesses of the course	Sometimes the major questions were too easy that they were pointless but most of the time they were great.
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Comment on strengths and weaknesses of the instructor	Very strong explanations during recitation and very enthusiastic. Could sometimes explain problems a little too slowly.
Give suggestions on how the course or how the instruction could be improved.	Review assignments as the last assignment prior to tests would be helpful supplements.
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Comment on strengths and weaknesses of the instructor	Very receptive to the students and their questions. Really gets the students to engage in the course material.
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Comment on strengths and weaknesses of the instructor	She gave the best explanations I have ever heard for problems! She understands the concepts so well that she can give us examples and explain it in a way that sticks and make the whole concept so much easier. Her explanations were not from the book, instead they were very simple and easy to apply to more complex problems. I think she is the reason I passed the course. I looked forward to her recitations so much because she cleared up all the problems I had during the week, and the notes I took during her recitation were more valuable than any other resource.
Comment on strengths and weaknesses of the course	She was also extremely helpful with Web assign, and helped up set up the more complex problems.
Give suggestions on how the course or how the instruction could be improved.	Her recitation was the most helpful 50 minutes of calc during the week.
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Give suggestions on how the course or how the instruction could be improved.	you did great
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Comment on strengths and weaknesses of the course	I think we should have focused on the web assigns more.
Give suggestions on how the course or how the instruction could be improved.	focusing on the web assigns
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Comment on strengths and weaknesses of the instructor	Explanations were simple and easy to understand.
Comment on strengths and weaknesses of the course	Having recitation is a great method to practice and further understand calc.
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Comment on strengths and weaknesses of the instructor	She was always willing to help us with any problems we had.
Comment on strengths and weaknesses of the course	We worked over problems we did not understand from class.
-----	-----
Comment on strengths and weaknesses of the instructor	We got to know Sarah in a more personal way through problem session and the practice and teaching that she provided was able to cater to multiple learning styles which I believe benefited anyone struggling in the course.
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Comment on strengths and weaknesses of the instructor	Strengths: -Good at answering questions or interpreting what questions students had mean and what they were looking for
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Comment on strengths and weaknesses of the instructor	The instructor brought always brought an enthusiastic and positive attitude to class and always found ways to make herself available for additional assistance. She offered effective feedback and was consistently patient and respectful to her students.
Comment on strengths and weaknesses of the course	Recitation greatly improved my knowledge of the subject and provided students with a more inclusive and easy-going environment to master the material.

Give suggestions on how the course or how the instruction could be improved.	Sarah did a wonderful job leading this course and I wish her good luck in her future endeavors.
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Comment on strengths and weaknesses of the instructor	I honestly think that Sarah could teach this course better than Tricity can. She moved at a much more possible pace and all of the grading made sense. When we asked a question, she either helped us arrive at the answer or gave us resources that we could use to find the answer.
Comment on strengths and weaknesses of the course	I think that a recitation is valuable and helped me learn the material much better than if it was only the lecture.

North Carolina State University - ClassEval Report	
Emplid: 200263949	Name: Sarah Strikwerda -- Course: Calculus I
Term: 2018 Fall	MA 141 006C Courses surveyed - MA 141 006C
Question	Response
Comment on strengths and weaknesses of the instructor	This instructor for the most part was a great teacher. There were multiple times where she would make mistakes and the class had to correct her or where she wasn't exactly sure how to solve a problem.
Comment on strengths and weaknesses of the course	The course is good it just depends how well the teacher teaches.
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Comment on strengths and weaknesses of the instructor	This instructor is overall very smart and fantastic at explaining calculus. There were a few times where she explained the material differently that the calc teacher and this got confusing but other than that, I found the calc recitation time very helpful.
Comment on strengths and weaknesses of the course	The course was very organized, and it was easy to see why we were learning things in the order that we did.
Give suggestions on how the course or how the instruction could be improved.	I really have no comments on how it could be improved. I love working out practice problems and being able to see where I am as far as the course work going. Thank you for being so dedicated and hard working!
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Comment on strengths and weaknesses of the instructor	Sometimes explained basic concepts too slowly but can be helpful for students with weak understanding
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Comment on strengths and weaknesses of the instructor	Sarah did an incredible job explaining material to students. If there was a difficult concept, she could move slowly enough that it could be followed, and she worded things very well.
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Comment on strengths and weaknesses of the instructor	Sarah is friendly and effective at leading the problem sessions. She always had material prepared and was prepared to answer any question. Her grading was always fair. Overall, she was perfectly competent to lead recitation.
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Comment on strengths and weaknesses of the instructor	Very helpful and friendly instructor, very receptive to students.
Comment on strengths and weaknesses of the course	Well built course, no criticism from my part.
Give suggestions on how the course or how the instruction could be improved.	None, the course is already very good
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Comment on strengths and weaknesses of the instructor	Sometimes it would take a while to go over one question, but I always knew what was going on, so that was good. I also felt comfortable asking for clarifications and such, so that was good. Also, going over things we had questions on was always helpful.

Comment on strengths and weaknesses of the course	Recitation was a small group setting that helped me to solidify my knowledge, as long as I was up for it that day.
Give suggestions on how the course or how the instruction could be improved.	I think I said it all above.
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Comment on strengths and weaknesses of the instructor	ok
Comment on strengths and weaknesses of the course	oik
Give suggestions on how the course or how the instruction could be improved.	ligma
-----	-----
Comment on strengths and weaknesses of the instructor	Sarah was bubbly and energetic about teaching the course. I loved her personality and the way she taught her classes. In the beginning, I actually found that the problem sessions were my chance to catch up on the material I didn't understand. However, her tone with some students in the class and the way she sometimes snapped at students that were trying to get help on a problem or looking at homework problems showed her general disregard for the learners. As a recent graduate, I thought she would understand students having questions about WebAssign but she often refused those questions in favor of what she had planned. Just like Tricity, she explained things in a very confusing way at times because of the amount of errors she made in her teaching. Some classes would be us just watching her struggle through a problem while the students told her what she should be doing. To me, this is a waste of my time and money and is frustrating. It is also just completely unprofessional.
Comment on strengths and weaknesses of the course	This course is designed well and all of the materials helped me learn.
Give suggestions on how the course or how the instruction could be improved.	Sarah had somewhat of an attitude on days that she made countless mathematical errors. I felt awkward and frustrated when class time was taken up by her struggling through problems and one student correcting her. This course could be improved if you worked with her on how to work problems or do Calculus, or generally have a better attitude when she makes mistakes. Otherwise, I enjoyed Sarah's personality and teaching style far more than Tricity's.
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Comment on strengths and weaknesses of the instructor	This course supplemented MA141 as it was meant to do. Sarah was enthusiastic and willing to explain things thoroughly.
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Comment on strengths and weaknesses of the instructor	- sometimes you talked in circles and it was confusing - always willing to help - it was helpful that you wouldn't just tell us the answer because the process we had to think through to get there helped with the understanding
Comment on strengths and weaknesses of the course	-I do not like doing kahoot in class it was more stressful than helpful
Give suggestions on how the course or how the instruction could be improved.	I think it would be helpful if at some point before recitation you sent out a survey with topics we are struggling with and want to cover
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Comment on strengths and weaknesses of the instructor	Sarah was an effective instructor, but sometimes recitation seemed a little underprepared. Overall, recitation was productive and helpful.
Comment on strengths and weaknesses of the course	Course and material worked well to make my calculus skills better.
Give suggestions on how the course or how the instruction could be improved.	Sometimes it seemed as if the instructor was attempting practice problems for the first time during recitation and that would sometimes decrease the productivity of the class period.
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Comment on strengths and weaknesses of the instructor	I didn't feel like the instructor had a good understanding of the material she is teaching. She did try to help us but a lot of the time I just got more confused.
Comment on strengths and weaknesses of the course	Waste of time.
Give suggestions on how the course or how the instruction could be improved.	Have real assignments

North Carolina State University - ClassEval Report

Course Information		OUC													
Term: 2019 Sprg Instr: Sarah Strikwerda Emplid: 200263949 Course: MA 242 001B Courses evaluated: MA 242 001B Title: Calculus III Undergraduate Course		170301													
Responses= 20 Enrolled= 29 Resp. Rate= 69.0%															
#	Question	Mean	5	4	3	2	1	NA	BL	StDev	SEM	Nq	Dept N	Dept Mean	Dept StDev
1	The instructors teaching aligned with the courses learning objectives/outcomes	4.5	10	9	1	0	0	0	0	0.6	0.14	20	3,842	4.5	0.8
2	The instructor was receptive to students outside the classroom	4.6	12	7	1	0	0	0	0	0.6	0.14	20	3,737	4.4	0.9
3	The instructor explained material well.	4.3	8	9	3	0	0	0	0	0.7	0.16	20	3,836	4.1	1.1
4	The instructor was enthusiastic about teaching the course	4.4	10	8	2	0	0	0	0	0.7	0.15	20	3,838	4.4	0.9
5	The instructor was prepared for class	4.3	8	9	3	0	0	0	0	0.7	0.16	20	3,833	4.5	0.8
6	The instructor gave useful feedback.	4.3	10	6	3	1	0	0	0	0.9	0.20	20	3,789	4.2	1.0
7	The instructor consistently treated students with respect	4.5	10	8	1	0	0	0	1	0.6	0.14	19	3,837	4.5	0.8
8	Overall, the instructor was an effective teacher	4.5	11	7	2	0	0	0	0	0.7	0.15	20	3,831	4.3	1.1
9	The course materials (e.g., readings, videos, class notes, course packs, FAQs, websites, course webpage, and blogs) were valuable aids to learning	4.2	9	8	2	0	1	0	0	1.0	0.23	20	3,764	4.3	0.9
10	The course assignments (e.g., homework, exams, quizzes, lab reports, papers, presentations, projects, portfolios, artistic impressions, critiques, blogs, and videos) were valuable aids to learning	4.2	7	10	1	0	1	1	1	1.0	0.22	19	3,752	4.2	1.0
11	This course improved my knowledge of the subject	4.5	10	9	1	0	0	0	0	0.6	0.14	20	3,801	4.4	0.9
12	Overall, this course was excellent	4.4	10	8	2	0	0	0	0	0.7	0.15	20	3,801	4.1	1.1

Note: 1. Results based on low response rates may not reflect the true class mean. Dept mean is for all undergraduate, or all graduate courses, offered by dept and is weighted by class size.

2. Results from cross-listed courses are included in the mean for the department whose course prefix appears first in the alphabet (e.g., for a course listed as HI and REL, the results are included in History's mean). To find the department mean for the other department (in this example, Philosophy and Religion), go to http://www2.acs.ncsu.edu/UPA/classeval/faculty/college_univ_means.htm.

North Carolina State University - ClassEval Report

Course Information		OUC	
Term: 2019 Sprg Instr: Sarah Strikwerda Emplid: 200263949 Course: MA 242 001D Courses evaluated: MA 242 001D Title: Calculus III Undergraduate Course		170301	
Responses= 18 Enrolled= 22 Resp. Rate= 81.8%			
#	Question	Mean	5 4 3 2 1 NA BL StDev SEM Nq Dept N Dept Mean Dept StDev
1	The instructors teaching aligned with the courses learning objectives/outcomes	4.7	13 4 1 0 0 0 0 0 0.6 0.14 18 3,842 4.5 0.8
2	The instructor was receptive to students outside the classroom	4.5	11 3 1 1 0 1 2 0.9 0.22 16 3,737 4.4 0.9
3	The instructor explained material well.	4.4	11 4 2 1 0 0 0 0.9 0.22 18 3,836 4.1 1.1
4	The instructor was enthusiastic about teaching the course	4.7	15 1 2 0 0 0 0 0.7 0.16 18 3,838 4.4 0.9
5	The instructor was prepared for class	4.7	13 4 1 0 0 0 0 0.6 0.14 18 3,833 4.5 0.8
6	The instructor gave useful feedback.	4.5	13 2 2 1 0 0 0 0.9 0.22 18 3,789 4.2 1.0
7	The instructor consistently treated students with respect	4.8	15 2 1 0 0 0 0 0.5 0.13 18 3,837 4.5 0.8
8	Overall, the instructor was an effective teacher	4.6	13 3 1 1 0 0 0 0.9 0.20 18 3,831 4.3 1.1
9	The course materials (e.g., readings, videos, class notes, course packs, FAQs, websites, course webpage, and blogs) were valuable aids to learning	4.6	12 4 1 0 0 0 1 0.6 0.15 17 3,764 4.3 0.9
10	The course assignments (e.g., homework, exams, quizzes, lab reports, papers, presentations, projects, portfolios, artistic impressions, critiques, blogs, and videos) were valuable aids to learning	4.6	10 5 1 0 0 1 2 0.6 0.16 16 3,752 4.2 1.0
11	This course improved my knowledge of the subject	4.5	9 7 1 0 0 0 1 0.6 0.15 17 3,801 4.4 0.9
12	Overall, this course was excellent	4.3	8 7 1 1 0 0 1 0.8 0.21 17 3,801 4.1 1.1

Note: 1. Results based on low response rates may not reflect the true class mean. Dept mean is for all undergraduate, or all graduate courses, offered by dept and is weighted by class size.

2. Results from cross-listed courses are included in the mean for the department whose course prefix appears first in the alphabet (e.g., for a course listed as HI and REL, the results are included in History's mean). To find the department mean for the other department (in this example, Philosophy and Religion), go to http://www2.acs.ncsu.edu/UPA/classeval/faculty/college_univ_means.htm.

North Carolina State University - ClassEval Report	
Emplid: 200263949	Name: Sarah Strikwerda -- Course: Calculus III
Term: 2019 Sprg	MA 242 001B Courses surveyed - MA 242 001B
Question	Response
Comment on strengths and weaknesses of the instructor	Great job.
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Comment on strengths and weaknesses of the instructor	Well done. Lectures could have been less "scripted"
Comment on strengths and weaknesses of the course	Lecture every day was difficult. I wished that the problem sessions (T/Th) had been used to go over homeworks or other examples.
Give suggestions on how the course or how the instruction could be improved.	"flipped classroom" idea.
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Comment on strengths and weaknesses of the instructor	she is very enthusiastic, which made learning the material very easily.
Comment on strengths and weaknesses of the course	Webassign is the worst and the textbook is awful
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Comment on strengths and weaknesses of the instructor	She was the best TA I have had so far. She may have made mistakes, but she would send an email out correcting it or explaining something we didn't quite get to in class. She also taught what we were supposed to be learning unlike the other TA.
Comment on strengths and weaknesses of the course	Was an extension of the actual class. worked well as a second note period with examples mixed in
-----	-----
Comment on strengths and weaknesses of the instructor	Although she was a bit unprepared every now and then, Sarah Strikwerda was overall an effective teacher and was eager to help students succeed.
Comment on strengths and weaknesses of the course	This course was a great opportunity to better understand what's going on in the lecture point of this class.
Give suggestions on how the course or how the instruction could be improved.	This course is good.
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Comment on strengths and weaknesses of the instructor	Class was planned out very well made useful time out for all lesson plans. Very helpful in answering student's questions.
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Comment on strengths and weaknesses of the instructor	She did a good job explaining material and answering student questions. There were days she showed up right at the beginning of class and just didn't seem ready. Also she would sometimes lose her place going the material. She also wasn't always prepared to help students with their homework questions.
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Comment on strengths and weaknesses of the instructor	explained examples well. did a great job helping me with misunderstood homework

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Comment on strengths and weaknesses of the instructor	Sarah explained the concepts and got the notes to the students but often struggled with answering the questions that students had whether they be about the notes or homework. For being a TA she did a good job but I personally think the instruction should be left to the professor so the TA is free to answer questions and work through problems and examples with students.
Comment on strengths and weaknesses of the course	The course could sometimes be frustrating since the notes didn't always line up with what was addressed in the previous class. additionally, as I said before, mixing lecture, practice problems, and time for homework questions is not an effective way to structure a recitation section.
Give suggestions on how the course or how the instruction could be improved.	Please see above.

North Carolina State University - ClassEval Report	
Emplid: 200263949	Name: Sarah Strikwerda -- Course: Calculus III
Term: 2019 Sprg	MA 242 001D Courses surveyed - MA 242 001D
Question	Response
Comment on strengths and weaknesses of the instructor	For some reason no matter how good the teacher is the TAs are always better. Great TA who explained the material well.
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Comment on strengths and weaknesses of the instructor	Sarah has been the best and most approachable TA that I have had contact with so far during my time at NC State. She always came to recitation prepared and was very knowledgeable on the subject. Furthermore, she was very easy to talk and always gave excellent feedback on questions that students had.
Comment on strengths and weaknesses of the course	The lectures for this course were always very informative and helpful. I found myself often not needing to reference my textbook because the in-class instruction was so great.
Give suggestions on how the course or how the instruction could be improved.	The course is run very well and does not need any obvious improvements.
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Comment on strengths and weaknesses of the instructor	never went to class
Comment on strengths and weaknesses of the course	never went to class
Give suggestions on how the course or how the instruction could be improved.	I never went to class
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Comment on strengths and weaknesses of the instructor	Awesome recitation teacher! She makes everything clear as day.
Comment on strengths and weaknesses of the course	Course was good, and I learned a lot.
Give suggestions on how the course or how the instruction could be improved.	Sarah was great at teaching the recitation sections, and any questions I had about procedure from the lecture, she answered clearly!
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Comment on strengths and weaknesses of the instructor	Very good teacher but could have more confidence when answering questions
Comment on strengths and weaknesses of the course	Had a few know it or you don't units, no learning involved in those
Give suggestions on how the course or how the instruction could be improved.	Make all units equally important
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Comment on strengths and weaknesses of the instructor	Good enough i guess.
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Comment on strengths and weaknesses of the instructor	Sarah was a great instructor. She explained the material so well that it almost wasn't necessary to ask additional questions. However, if a question was asked she would explain the concepts in a different way still making it easily understandable. She created a welcoming environment and made it feel okay to ask questions. Some professors made me feel dumb for asking questions, but Sarah was always receptive to questions because she wants you to understand the material being taught
Comment on strengths and weaknesses of the course	I liked that this section of MA 242 met 3 times a week in lecture and twice a week for recitation. The recitation was helpful because it had a smaller class size which made it easier to ask questions. Also, there was designated time in the recitation to go over examples relating to the material learned in lecture which helped in learning the material.
Give suggestions on how the course or how the instruction could be improved.	I wouldn't change anything about the course or instruction. Sarah was a great instructor
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Comment on strengths and weaknesses of the instructor	Very helpful and understanding, explains things in a very clear way.
Comment on strengths and weaknesses of the course	Having this smaller course for my second time taking calculus three was very helpful. It gave more opportunity for discussion, and help on the homework problems.
Give suggestions on how the course or how the instruction could be improved.	It was a great course and I would take a class with this TA again.
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Comment on strengths and weaknesses of the instructor	Explanations could at times be difficult to follow or lack depth. Was enthusiastic about the material, which helped to stay engaged.
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Comment on strengths and weaknesses of the instructor	Knew material well, sometimes in her own way rather than Dr. Brown's way. Sarah was an excellent TA, wish she would be more confident in material because I KNOW she knows it!!!
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Comment on strengths and weaknesses of the instructor	She was very respectful of students and did an effective job explaining the material in greater detail than in class.
Comment on strengths and weaknesses of the course	I like that we went over homework questions during the problem sessions.
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Comment on strengths and weaknesses of the instructor	I went to some of Sarah's office hours since they were really convenient. I was always welcomed, and I never left without having a further understanding of calculus III concepts. It's evident that she's excited to teach people new things in recitation. She would make a great professor!

North Carolina State University - ClassEval Report	
Emplid: 200263949	Name: Sarah Strikwerda -- Course: Calculus II
Term: 2020 Fall	MA 241 002 Courses surveyed - MA 241 002
Question	Response
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	yes. There was a lot of partial credit given which was nice.
Please comment on the strengths of the course and instructor.	She was nice and a very generous grader which I appreciated a lot.
Please comment on the weaknesses of the course and instructor.	When I was having problems with sections she referred me to Khan Academy and didn't offer much other help.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Communication was outstanding.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I personally felt that the exams were fairly easy, but I had taken this course prior. Maybe a more difficult test with a curve could help students learn the material better.
Please comment on the strengths of the course and instructor.	The lecture videos were well done. The structure of the course was nice and Prof Strikwerda was solid on communication, organization, and explanation.
Please comment on the weaknesses of the course and instructor.	The recitations felt misguided. Its hard with online work, but I feel there is room for improvement.
To help other students in the future and enhance student success, what could be improved in the course?	Recitations
-----	-----
Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	There's no need to improve communication. We all knew how to contact her if needed and I never needed to.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	As per above, it would be more appropriate to make the tests much longer and therefore they could be more difficult if the length changed. This would make exams more of a reflection of all we learned.
Please comment on the strengths of the course and instructor.	We never got to know Sarah as a professor. I have never learned anything from her because of the way this semester was set up and never talked to her. It feels kind of silly to comment about her performance because she did not teach me nor grade any of my work. The standardized course was set up well I suppose.
Please comment on the weaknesses of the course and instructor.	I have no weaknesses for the instructor given the circumstances.

To help other students in the future and enhance student success, what could be improved in the course?	The only improvement I would make is to make the test longer. By only having 5 questions to answer, I feel like it was a misrepresentation of the quantity of things we were expected to know. That being said, I feel like the tests could be graded harder if more questions because 30 points of the grade wouldn't ride on one question. Also, I wish there were practice (maybe a years past) exam released a week before each test.
-----	-----
Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Again, not to be repetitive, but each week Ms. Strikwerda would send out an online schedule as well as the syllabus was readily available. She had office hours twice a week and would always respond very quickly to emails.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	we did not have a midterm exam.
Please comment on the strengths of the course and instructor.	I am not a math person and Ms. Strikwerda made this class and herself very accessible. While I have struggled in the class, she always made herself available for office hours and would answer any question we had. In addition, I had accommodations in her class and she was incredibly great with them! The tests also were usually easier than the webAssigns and I normally felt pretty prepared!
Please comment on the weaknesses of the course and instructor.	No weaknesses from her in my opinion!
To help other students in the future and enhance student success, what could be improved in the course?	Honestly, I think the way it is currently conducted, due to COVID, could not really be improved.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I found the communication between the professor and students to be rather sufficient. Frequent emails were sent to the class to ensure we understood the schedule and what was expected of us for each week. In addition, reminders of test dates and homework due dates would also be found in the emails sent. Any changes were quickly communicated to keep students up to date with information.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	There was no midterm for this course, which was appreciated. I feel having only exams on the material as we complete it is more beneficial in this type of course. Instead of having to allot time out of our regular schedule to review for a final exam, more time could be spent to ensure a fuller understanding of the concepts being taught. Concepts from the beginning sections are still relevant in later sections as well, so in order to perform well in later sections, you would thereby prove an understanding of earlier sections.
Please comment on the strengths of the course and instructor.	The course seems rather laid back and the instructor is not at all off-putting. She seems easy going and easy to talk to if you are in need of help. It is obvious she wants us to do well and understand the concepts we are learning. I enjoyed the course, but mostly for the offhanded conversations we would occasionally have before class.

Please comment on the weaknesses of the course and instructor.	Recitation is not always very engaging. I feel the time could be better spent working to solidify concepts. I understand this is a college course, but one homework assignment paired with a quick review session during recitation does not ensure the understanding of the students. There are opportunities to ask questions; however, alternative explanations of the concepts are not provided. It seems as though there is only one correct way to do and understand math.
To help other students in the future and enhance student success, what could be improved in the course?	Break out rooms during recitation were not always effective. Often times other students would only speak when the professor asked how we were doing, lying to her in stating we have been working together. I found it to be more useful to have a full class discussion and problem-solving session rather than small group sessions. The only downfall to this is the lack of engagement shown by the students. I do not know how to go about fixing this, but I am confident the professor can find a solution to make the class more engaging and enjoyable for the entire class. Most students are probably scared of being wrong when questions are asked.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	She did a good job.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The exams were an appropriate difficulty considering our method of instruction.
Please comment on the strengths of the course and instructor.	Sarah responded quickly to emails and was very available for office hours. She did everything she could to make the best of the bad teaching environment caused by COVID.
Please comment on the weaknesses of the course and instructor.	The weaknesses of the course were only things that Sarah had nothing to do with, like the fact that we had videos instead of in-class teaching. I have no complaints of Sarah.
To help other students in the future and enhance student success, what could be improved in the course?	There should really be extra credit on the tests. I am trying to make an A+ in this class and with no extra credit, one mistake means I failed.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Make sure to send out a weekly schedule. I know it is on Moodle but sometimes just seeing an outline for the week was SUPER helpful for me.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I really enjoyed the layout of the tests because it didn't put the stress on me of cramming everything. It was much more application which I enjoyed VERY much.
Please comment on the strengths of the course and instructor.	The schedule was fairly straight forward and there was never a question about what needed to be done every week.
Please comment on the weaknesses of the course and instructor.	I feel like the last unit was kind of rushed and we've had a lot of assignments due in a short amount of time. Other than that though, it was fairly straight forward
To help other students in the future and enhance student success, what could be improved in the course?	Watch all of the lectures the day that they are meant to be watched. It's really easy to get behind so stay on top of your stuff!
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Is already perfect.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The midterms were very precise and followed paper patterns.
Please comment on the strengths of the course and instructor.	Has always helped to understand the subject and has innovative ways to allow interaction between students.
Please comment on the weaknesses of the course and instructor.	No weakness
To help other students in the future and enhance student success, what could be improved in the course?	No such improvement required.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	She was very responsive to emails and would always send out reminders for the exams early so we knew what to study. I think she had great communication!
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I would say yes. The open notes was very helpful because of the fast pace of this class and the difficulty of the material. The tests were spot on with the problems encountered in the homework so I could not ask for more.
Please comment on the strengths of the course and instructor.	She was very responsive to emails and helped when I asked questions about the exam. Also, I liked how she gave us a study guide for the exams so we knew exactly what to expect. Also, the pacing of the Webassign with relation to the lectures was really good too. Also, the open note tests were a GREAT plus :)
Please comment on the weaknesses of the course and instructor.	I don't think I have any.
To help other students in the future and enhance student success, what could be improved in the course?	Nothing I can think of. I would keep the tests open note in the future that was great.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	5/5, wonderful offerage of help. Wonderful recitation sections. Perhaps setting the recitation time a little more towards the middle of the day cant hurt.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes, midterm exams, normal exams are reflective of what we went over in class, but it is nitty picky of some of the materials, as some tests are not as comprehensive, but a blessing because it is only the most important stuff. I apologize for informal tone, the mix of second-person and third-person in some evaluations and lack of sentence structure, Grammarly does not work here. Sorry.
Please comment on the strengths of the course and instructor.	You are very helpful in one on one situations, helping out in the breakout rooms what the problem is. Great professor, good "work at your own pace" course.

Please comment on the weaknesses of the course and instructor.	I have time and time again looked at third party resources to understand the course material as the lectures are often confusing and no questions can be asked. The recitation should, in theory bolster the lecture material, but I have found the recitations be not as helpful as I would have liked. The "work at your own pace" is also a double edged sword, as many of us, myself included, love to procrastinate (personal problems I know lol, so not necessarily a weakness of the course or instructor), professor Strikwerda is very kind and a good person, I would like to see some more lectures from her, as the "half-lectures" in some of the recitation sections in the beginning of the course is much better than the ones given by the asynchronous section.
To help other students in the future and enhance student success, what could be improved in the course?	Lessons in print, important stuff in notes, as the lecture part of this course is not as clear cut. Also it would not hurt to set the homework due dates on the day before recitation and not make it due at 11 but instead 12.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I don't know if she can do a better job. She updated us with emails and would help us during live recitations.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I don't recall a large midterm, it may have been just another normal test, which is definitely appropriate for this online-style class.
Please comment on the strengths of the course and instructor.	Very kind and thoughtful instructor.
Please comment on the weaknesses of the course and instructor.	Sometimes was a little scatter-brained but we all have those days.
To help other students in the future and enhance student success, what could be improved in the course?	Fairly easy course as long as you take notes and do your work. Those will prepare you for tests.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I think my professor communicated pretty well. To improve though I would say be more clear on the test day
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	did not really have a midterm. The test we took halfway through the semester was just the next unit and it was difficult but not too difficult
Please comment on the strengths of the course and instructor.	The lectures were really good and I liked them because I could pause if I needed to. I also liked how the teacher wasn't able to randomly call on me to answer a question because that stresses me out.
Please comment on the weaknesses of the course and instructor.	The weakness of this course is that I was not really able to meet anyone in my class
To help other students in the future and enhance student success, what could be improved in the course?	To improve this course I would say move it in person but I know that can't be done right now.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	She was pretty solid on communication. I really like how she sent an email a week about due dates.

Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes, it represented what we learned
Please comment on the strengths of the course and instructor.	The test represented what we learned for the most part The lectures were good Due dates for homework was fair Review days were awesome!
Please comment on the weaknesses of the course and instructor.	Not much time or space to ask questions Was discrepancy between lectures and test Webassign is flawed. Not a good learning tool
To help other students in the future and enhance student success, what could be improved in the course?	Make it a synchronous class Have the teacher who makes the test the same one who does the lectures Have WebAssign show how to do the assignment after a student loses all attempts or the due date for th homework passes. This way, the student can still learn how to solve a problem if they're unable to make it to office hours or if there's not enough time within them
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Nothing really, she has done a great job communicating.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The midterm exams were difficult but fair. Overall the style of her exams are great and she doesn't test any concepts not taught, which is surprising in a Calculus course...
Please comment on the strengths of the course and instructor.	Professor Strikwerda is a great math instructor. She teaches the content very well and answers any related questions. She also seems like a nice person that puts her students first.
Please comment on the weaknesses of the course and instructor.	Besides writing down a small typo in math lectures, nothing really.
To help other students in the future and enhance student success, what could be improved in the course?	Giving each student a formula sheet at the end of each unit to help them study would be great.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Not sure improvement is needed. Plenty of office hour times were available, recitation over zoom worked pretty well, and emails were responded to fairly quickly.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	No midterms for this course, but the exams were at a good difficulty where the test was a little hard, but if you study it's not a problem.
Please comment on the strengths of the course and instructor.	Great at explaining the problems to the students. Understanding the students' lives. Ex. gave plenty of time to complete homework, waited patiently for questions from students, created a way to actively participate through surveys on zoom. Also plenty of office hour times available.
Please comment on the weaknesses of the course and instructor.	No weaknesses from my standpoint.
To help other students in the future and enhance student success, what could be improved in the course?	I'm not sure what could be improved about this course. The material is tough and lengthy, but is still manageable with proper time management.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Not much, she was very clear on communication, and she would send out the schedule for the week, including the office hours. She greatly encouraged us to come to them and ask questions. She would have Google Forms to complete before each review date before tests. This allowed us to submit our opinions and ideas for what we wanted to review.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes, it assessed what had been learned thus far.
Please comment on the strengths of the course and instructor.	Very clear on instructions and reviews.
Please comment on the weaknesses of the course and instructor.	Some of the lectures wouldn't provide how to do certain types of problems, making it difficult to teach oneself the content.
To help other students in the future and enhance student success, what could be improved in the course?	More examples of differing problems.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	None, have a high-five.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Often, I found tests easier than homework, so I appreciate that. I honestly have no memory of any midterm, however.
Please comment on the strengths of the course and instructor.	I enjoyed the in-person classes, and the instructor was great.
Please comment on the weaknesses of the course and instructor.	If my memory serves correctly, there were a couple topics that got covered in class but when looking for any info on moodle for that topic, I could not find it.
To help other students in the future and enhance student success, what could be improved in the course?	The unit on limits on webassign is much less useful for learning, since all questions were multiple choice, so my practice of theorems is little to none within it. Whether this can be fixed, or is just a feature of online homework, I am unsure.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Nothing really, she was responsive to emails and understanding and sent Google forms with mid-term updates with how we were feeling which was nice.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes, our midterm was just a normal test so it was expected.
Please comment on the strengths of the course and instructor.	Course pace went smoothly, lectures were informative, additional resources besides the lectures themselves weren't really needed, other than using the textbook for more practice problems.
Please comment on the weaknesses of the course and instructor.	Instructor herself didn't really do much, since the lectures were prerecorded by another teacher.
To help other students in the future and enhance student success, what could be improved in the course?	Not much, just pay attention to lecture and take notes, since she goes through problems with a range of difficulty that show up on the test.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I think she did a really good job and doesn't need to improve. Keep doing weekly emails and the forum. It was great.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes, they covered the range of content we had studied over the 8wk period. I thought it was of a regular difficulty, but given they we have been studying from some and not been having the in-person experience it was a little more difficult than I had expected.
Please comment on the strengths of the course and instructor.	She's incredibly kind and patient. She always asks if we have questions and takes the time to answer them.
Please comment on the weaknesses of the course and instructor.	I see no weaknesses other than the fact that she's having to teach over the internet and that's not her fault at all.
To help other students in the future and enhance student success, what could be improved in the course?	To be honest I don't know because I've never done online class before. I would say that having the answers to WebAssign problems might be nice because there were times when I struggled and would have liked to see those answers.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I thought the communication was pretty good. Maybe find a better way for students to ask questions on webassign questions.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I thought the midterm was alright. wasn't too difficult and was the appropriate style.
Please comment on the strengths of the course and instructor.	I thought the course was generally pretty easy to navigate and stay informed about. I thought the teacher communicated well on important events and stuff. The homework was easy to keep track of and I like the recorded videos.
Please comment on the weaknesses of the course and instructor.	The only weakness that I feel like their could have been was it seemed a little difficult to ask questions about webassign questions in a quick manner. Eventually they would get answered but we would have to wait for an email or something.
To help other students in the future and enhance student success, what could be improved in the course?	Maybe have like a Question and Answer forum type thing where anyone can go on their and ask general questions for everyone to see.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I think she did a good job communicating, maybe more notifications on assignments
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	the midterm exams were pretty balanced, everything is just a little harder with COVID-19
Please comment on the strengths of the course and instructor.	you can re-watch the lectures if you do not understand something
Please comment on the weaknesses of the course and instructor.	COVID
To help other students in the future and enhance student success, what could be improved in the course?	The homeworks do not accurately reflect the difficulty of what we do on the tests (which are already hard enough). Maybe make the homeworks a little more user friendly

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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I think understanding more of what is happening in lecture and recitation would be helpful. It's hard to communicate the material when it is being taught by someone else.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	For the most part, yes. I felt the length of the test was appropriate. The difficult level was ok, considering I studied for the test with mostly outside resources. The time limit was the hardest part. Every test I have taken has felt rushed to me.
Please comment on the strengths of the course and instructor.	The video lectures were, for the most part, easy to follow. The instructor was fast to respond and sent out surveys to see how the class was doing.
Please comment on the weaknesses of the course and instructor.	It was hard to ask questions in the online setting. I was often directed to help outside of NCSU instead of direct feedback. When I was struggling with a concept, it was hard to reach out for clarity.
To help other students in the future and enhance student success, what could be improved in the course?	More practice problems could be included. In lecture, the simplest form of the concept is shown. It is hard to apply the simple examples to homework questions and exams. For me, I would have benefited from harder examples being taught.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	She sent out weekly emails with schedules, and I felt that that was sufficient. If anything, I would ask that she sent out an email when she responds to a homework question.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	We did not have a midterm, and because of this, I feel like it would have been disruptive, and mess up the flow of the class.
Please comment on the strengths of the course and instructor.	Although Sarah was unable to control the majority of the course, I think she did a great job doing what she could for her students. The weekly emails were very helpful!
Please comment on the weaknesses of the course and instructor.	Because she was not my recitation leader, I barely had contact with her. She seems nice, so I wish she was more approachable to the other recitation sections.
To help other students in the future and enhance student success, what could be improved in the course?	This course was very manageable in my opinion. To be fair, I took AP calculus BC previously, so I could be saying that because of prior knowledge.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	N/A. this was done well
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	yes! especially for at home, open note exams are a must
Please comment on the strengths of the course and instructor.	Set up a system to allow students to succeed within specific guidelines
Please comment on the weaknesses of the course and instructor.	Not all office hours are always convenient or accessible to student (ex. a 8:30 course conflict). Office hours with the TA were less useful, so I tried to attend these whenever possible.
To help other students in the future and enhance student success, what could be improved in the course?	more/varied office hour availability

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Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Appropriate, touched on every concept covered throughout the course.
Please comment on the strengths of the course and instructor.	Very adaptable and adjusted the course schedule so we were not rushed but still finished on time.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	The weekly emails were very helpful. I think that the instructor did a nice job with communication.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The midterm was pretty fair. As stated above I didn't always feel that the difficulty of the test questions matched what was covered on review or offered as review.
Please comment on the strengths of the course and instructor.	The course was good for the online platform. The lectures were easy to follow. The tests were graded relatively quickly and ample time was set for review for the tests.
Please comment on the weaknesses of the course and instructor.	I didn't feel that all of the test questions were fair. The review provided didn't always match the difficulty of what was on the test.
To help other students in the future and enhance student success, what could be improved in the course?	More time for problem solving in groups would be helpful. Recitations felt like more of a lecture than a time to practice the skills learned. It would be helpful to notify students when there are homework problems that the instructor does not expect to test on or does not feel are fair and then to provide a hint or help when this happens.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	It was hard to have an online class so early in the morning -- this is just a personal preference. I only have myself to blame really for signing up but it would still be nicer to have them later in the day though.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I think that they were perfect. I didn't much like the new software -- the gradescope -- but it has since grown on me.
Please comment on the strengths of the course and instructor.	Ms. Strikwerda was very good at explaining the problems and how to solve them. The lectures were also very well done.
Please comment on the weaknesses of the course and instructor.	I don't like how there is a test a week before exams -- I would have preferred that test incorporated into the exam.
To help other students in the future and enhance student success, what could be improved in the course?	Having this class in person is the only thing that comes to mind.
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Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The midterm exams seemed a little too easy for certain parts. For instance, a part of a question wanted me to figure out what a value was within a formula instead of working out the formula in order to develop my understanding of how to use it.
Please comment on the strengths of the course and instructor.	The course was easy to understand and I was able to improve on my calculus understanding.
Please comment on the weaknesses of the course and instructor.	There were questions that required more context than others that weren't explained well during the lectures.

To help other students in the future and enhance student success, what could be improved in the course?	Give slightly harder questions that will be used often. The use of real-life examples should be used often for every chapter.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	It would help if you were notified of test dates on the homework pages.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	We did not have a midterm, but a test. I cannot comment on the difficulty unfortunately.
Please comment on the strengths of the course and instructor.	The course was not determined by the instructor, but rather the course coordinator. The instructor was very willing to work with you when you had struggles with materials or grades.
Please comment on the weaknesses of the course and instructor.	The online facet was poor, and the video lectures did not explain every step in the problems.
To help other students in the future and enhance student success, what could be improved in the course?	Avoid online, but if it must be so, then explain each step in the problems more carefully
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	The weekly emails were very helpful. They detailed what lectures to watch, what homework was due, if there was a test, and when office hours were. Those should continue. It would be helpful if such emails were sent out more often, showing different timelines. Overall though, I thought communication was very good.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes, we did not have a midterm, just four exams. This was good for us because if we had a midterm we were able to focus on mastering new content instead of having to go back and review the old content while learning things that were very different. (i.e. we would have needed to look at applications of integrals and we were working in a totally different section. I think the intersection of the two would be very confusing.)
Please comment on the strengths of the course and instructor.	Sarah was always willing to help and answer questions. She was kind and patient in explaining questions. Homework had very reasonable due dates and lengths. Tests were not overly difficult and we were provided an abundance of resources. Overall, a very good course.
Please comment on the weaknesses of the course and instructor.	As a course, the online learning was difficult in that we would watch videos for our lectures, but there would be some content that was to be covered in recitation and often there would be disconnect in the timing of that or in the way the content was taught which led to more confusion. A weakness of the course was the way that there was no way to ask questions while learning because it was separate.
To help other students in the future and enhance student success, what could be improved in the course?	The course could have been improved by adding in a mechanism for asking questions as we are learning and watching lectures. It would also be helpful to have seamless teaching so that we aren't learning new content in a recitation that's being taught by a different teacher.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	There were a great deal of emails with weekly updates and there were relatively quick replies to the questions asked.

Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The exams were appropriate, we had enough time and everything was almost if not completely example in recitation or class.
Please comment on the strengths of the course and instructor.	With everything that is happening she did as well as anyone could planning and setting up the way the course would run.
Please comment on the weaknesses of the course and instructor.	There wasn't any weaknesses.
To help other students in the future and enhance student success, what could be improved in the course?	Keep the recitation sessions problem sessions it really helped me learn.
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Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The difficulty level of the exams really helped to reduce stress. I never felt like the tests were too long to do during the length of a recitation period.
Please comment on the strengths of the course and instructor.	I like when the homework is harder than the tests to challenge us and help us learn and practice the material, but also to help ensure our success. The tests were constructed to be helpful, which I was thankful for. They weren't excessively challenging. I also appreciated the weekly updates.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I thought the communication was adequate, maybe a bit more specific on test day procedures.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I think the exams were fair and the questions hit the majority of the topics in each unit as time permitted.
Please comment on the strengths of the course and instructor.	I liked the asynchronous format, as it allowed me to do most of the work on my own time. I think the instructor did well overall.
Please comment on the weaknesses of the course and instructor.	I believe there was a sub topic or two missing from the notes.
To help other students in the future and enhance student success, what could be improved in the course?	Make sure all topics are covered in their entirety in the notes/lectures.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	i don't think i talked to my professor once
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	yeah the tests were nicely made and done.
Please comment on the strengths of the course and instructor.	videos are good and easy to understand
Please comment on the weaknesses of the course and instructor.	i lost motivation towards the end of the course to sit down and watch an hour long lecture.
To help other students in the future and enhance student success, what could be improved in the course?	maybe have the lectures broken up into two 25 min videos so that it feels like less

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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I wouldn't change anything.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	There wasn't a midterm that I'm aware of.
Please comment on the strengths of the course and instructor.	No comment, I had little communication with my instructor.
Please comment on the weaknesses of the course and instructor.	No comment, I had little communication with my instructor.
To help other students in the future and enhance student success, what could be improved in the course?	I wouldn't change anything.
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Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes. Being provided enough time to upload resources takes off a serious burden from students.
Please comment on the strengths of the course and instructor.	Incredibly patient Very positive Supportive even when students make mistakes Course page on moodle allowed for students to ask and respond to one another's questions.
Please comment on the weaknesses of the course and instructor.	Course itself lacked the ability for instructor to provide live lectures.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	The communication was decent, but I think if we had live lectures it would have been better.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The exams were difficult for me to complete in the time frame allowed. I only finished two of the four tests.
Please comment on the strengths of the course and instructor.	The course had pre recorded videos of past classes as lectures. They provided information on each unit and the course material.
Please comment on the weaknesses of the course and instructor.	The lectures were not live which was hard. I am an in person learner and the online learning was tough for me.
To help other students in the future and enhance student success, what could be improved in the course?	I think that having the lectures live and interactive could be better to learn from than a pre recorded video.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	As I mentioned, she did a fantastic job communicating with us and making sure that we could communicate with her. No complaints here.

Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I believe that the difficulty and style of exams were extremely appropriate given how the course was taught for this semester. It was straightforward technologically for an online exam, didn't try to enforce overkill restrictions, and tested knowledge of the material to a realistic level without expecting memorization. Other courses in math and science could learn from the format of these tests.
Please comment on the strengths of the course and instructor.	Even though I never even had a zoom class with her, I really appreciated all of the emails and surveys. I felt like I always knew what was going on and that I could communicate any confusions or concerns if I needed to. If any class is going to be primarily asynchronous as this one was, this is how it should be done.
Please comment on the weaknesses of the course and instructor.	Perhaps this is the way of the class regardless, but I wish the test were more in synch with the course material that we learned. If I had to study hard for a test, I was suddenly behind on lectures that came before it but weren't tested until later.
To help other students in the future and enhance student success, what could be improved in the course?	Specifically for Test 4 material, I think the WebAssigns could have been more comprehensive. Though the lectures reviewed it, I don't think we were properly prepared on how to write out the work that was required on the test.
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Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Midterms were composed of around 5-7 questions and I feel like it would be better if there were more questions. Partial credit was given for the work shown. Overall, the difficulty was average and appropriate for the course.
Please comment on the strengths of the course and instructor.	The instructor is easy to talk to and willing to answer any and all questions related to the course. The course was set up in a way that made it easy to follow. All homework assignments were posted on Webassign with due dates and the expectations were clear and concise.
Please comment on the weaknesses of the course and instructor.	The lectures were prerecorded and because of this it was sometimes difficult to follow along with the material.
To help other students in the future and enhance student success, what could be improved in the course?	The tests could have more of a variety of questions for each topic rather than one question per topic.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	The communication was already amazing, way better than any of my other professors.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes, I felt that all the types of questions on tests were covered in lectures, so the tests were very fair.
Please comment on the strengths of the course and instructor.	She definitely seemed to care about the success as well as stress that her students were having.
Please comment on the weaknesses of the course and instructor.	I did not get to interact with her enough to define any weaknesses that she may have had.
To help other students in the future and enhance student success, what could be improved in the course?	I thought that it was organized as best as it could be for an online course.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Make sure students are keeping up with asynchronous notes, as there is a vast amount of material to cover.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The difficulty and style were near perfect for this course.
Please comment on the strengths of the course and instructor.	The style and pacing of the course were great. Also, the material was not extremely difficult to understand.
Please comment on the weaknesses of the course and instructor.	Possibly less break out rooms.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	She was very easy to get a hold of through email. There was also a class forum for questions.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I felt the midterm exams were appropriate.
Please comment on the strengths of the course and instructor.	I liked the recitations were we worked on problems. I liked working on the problems in the breakout groups.
Please comment on the weaknesses of the course and instructor.	The homework assignments didn't really help to know what was expected in terms of knowing how I was supposed to show my work on tests.
To help other students in the future and enhance student success, what could be improved in the course?	I would like to be able to see the correct answers to the homework after I have completed the assignment in order to understand why I got a question wrong.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	She was very available so there is not much that I would improve.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes. They were appropriate and orderly.
Please comment on the strengths of the course and instructor.	The notes are organized.
Please comment on the weaknesses of the course and instructor.	No weaknesses.
To help other students in the future and enhance student success, what could be improved in the course?	I would like for there to be a lowest test replacement policy.
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Online courses require excellent communication between	I think she was very good at emailing us and setting up a discussion board so that we could ask questions if we needed help. I think her communication with the class was extremely good. She set up many resources for us and would readily respond to emails. I emailed her about a homework question and a personal one and she set up a zoom call for just us the next day. Having someone take time out of their day to help you, is something so selfless I cannot even

<p>student and professor. How can your professor improve online communication for this course?</p>	<p>begin to describe. She has a lot of students and if she would do that for me, I know she would do that for each and every one of them. That experience was just very wholesome and it made me understand just how much she cares. She wants her students to be successful and truly is there if you need her. She set up a discussion board, tried to help kids for study groups, and really encouraged people to talk with other people in the class so we did not feel alone. All in all she is doing a great job and I am very honored to be one of her students.</p>
<p>Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.</p>	<p>I think the course was definitely difficult. I did not feel like I truly new what to expect on the exams. I knew what the style of the exam would be like, but we covered a whole chapter of topics and I felt like some of the problems I spent time really looking over were not apparent on the test. With that being said, I think that the review sessions could have been run a little more efficiently and more stress that problems that we would actually see on the exam. Yes, this course is difficult and a lot of work. You definitely need to put time into this course to see the results, but this is Calculus II. This is an upper level math course and is not supposed to be easy. Therefore, I do think the tests were appropriate for this course. The only negative thing I feel about the style of the test is that I felt that i could get all the questions right except for one and then my grade would plummet. I do not think that therefore the tests always showed the best representation of my understanding. I also think that with the time limit I felt rushed and think an extra 10 minutes at least would have eased my nerves and just allowed me to perform better.</p>
<p>Please comment on the strengths of the course and instructor.</p>	<p>Ms. Strikwerda is a very nice, young instructor. I think she id doing the best she can considering the circumstances. This year is hard for everyone. I think it it very hard to teach this way and definitely hard to learn this way. I think Ms. Strikwerda did a great job trying to keep the class light and funny when we were on zoom calls with her. She is also super personable. She understands what it is like to be going through this and that is something that a lot of other instructors cannot really grasp. She set up so many resources for us to be able to reach out and get the help we needed. She set up a discussion board, tried to set up study groups for those that requested one, and had office hours twice a week. She also set up additional office hours when she felt necessary, such as the Saturday before our final. Ms. Strikwerda has a real leg up on other instructors because she is a grad student and not only is someone who is young and just got out of school, but can actually understand what it is like to have to try and learn through this global pandemic. There is a lot of stress on people today without the worries of schoolwork, she understands this and tries to help us the best she can. She wants us to participate in her zoom calls and tries to come up with better ways that we can work together to problem solve in those breakout rooms (ex. using a whiteboard to put the problem on). Therefore, Ms. Strikwerda had a slot of strengths and overall was a very nice and good instructor. She really did care about us, which is something a student definitely appreciates. She also taught things in a way that people understood. If you did not understand how she explained something she would go about it a different way until you did understand it. She would also go back over anything you were confused about. She really wanted her students to understand what she was teaching and really asked if we did or if we did not. I really enjoyed being a student of hers.</p>

Please comment on the weaknesses of the course and instructor.	I almost feel as though with online classes it is very hard to grasp if the students are understanding the material or not. I think in this class we did not slow down ever to really check and see if we understood the material that was gone over in the lecture videos, rather we were kind of just given more problems and if we needed help we needed to ask. This makes sense, but given this year's circumstances I think it would have been more beneficial to really go out of their way to make sure we were understanding what we were learning. I am not really sure I truly felt as if there was an adjustment to this course because of Covid. I think this is more because of the lecture videos and then the zoom classes. I think the lecture videos made it a little harder to be able to ask for that help, but we were given that opportunity in recitation. I do not really feel as though Ms. Strikwerda has many weaknesses. She really tried her best due to the circumstances, and just asked that we tried ours. I think she just was a very good professor.
To help other students in the future and enhance student success, what could be improved in the course?	I think it is hard to pinpoint exactly what could go better for this course. I think that really just the time limit on tests, an extra 10 minutes or so would really just help students. I think because of the global pandemic happening right now there should not be additional stress added to students and there should be some ease. I do not think there was much ease in this course and definitely felt like there could have been more and I think that would just come from an extra 10 minutes to perform the test. With that being said, I do feel as though this course was run very smoothly. I enjoyed being able to see everything I needed to get done. I knew exactly what I was going to do everyday and that was super helpful while planning my day to day or week to do list during this semester. That definitely lowered my stress level. T
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	It was fine the way it is now.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Didn't need one because there aren't that many topics. Just few ones that are very in depth.
Please comment on the strengths of the course and instructor.	Even though it was online, lectures were very detailed and helped me learn a lot. Office hours were very helpful.
To help other students in the future and enhance student success, what could be improved in the course?	I didn't find anything that needed to be improved.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	She made check-ins but other than that there's nothing much she can do.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	It was appropriate for what it was . WE were given the test and did it over zoom it was alright.
Please comment on the strengths of the course and instructor.	The course taught what was needed for me to learn online I guess for Math.

Please comment on the weaknesses of the course and instructor.	For me personally learning Math online just kind of is really isn't that productive and helping of remembering everything.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	She could provide more opportunities or outlets for direct communication between the students and professor.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The midterm exam was fine for this class. The style and format was clear and easy to use and understand.
Please comment on the strengths of the course and instructor.	The instructor is very nice and is very communicative with her students. She responds to emails in a very reasonable amount of time. The same can be said about the course's TA.
Please comment on the weaknesses of the course and instructor.	Due to the class being online this semester, we didn't have much direct communication with the main professor other than through emails or office hours. Most of the communication was done through the TA. Some of the homework problems were either harder than or not covered at all during the lectures and not even on the tests. This made some of the homework very frustrating to complete.
To help other students in the future and enhance student success, what could be improved in the course?	Have all of the homework questions be inline with what is covered in the lecture and is possible to be on the test.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Better communication between recitation lectures.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Fairly decent. I feel that the homework should be better represented in the tests.
Please comment on the strengths of the course and instructor.	The videos are helpful and explain the concepts well
Please comment on the weaknesses of the course and instructor.	I feel Like the homework doesn't correlate to the tests and lecture videos sometimes.
To help other students in the future and enhance student success, what could be improved in the course?	Make the homework similar to the lecture videos.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I think they did the best they could; the Recitation teacher was a great person to ask questions to
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	There wasn't a midterm, but the tests were largely fair
Please comment on the strengths of the course and instructor.	Videos were nice; teacher was willing to work with students
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Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes. Midterms covered relevant material and questions were always straight forward and clearly designed to be an accurate test of our knowledge.

Please comment on the strengths of the course and instructor.	She was always clear in her teaching and allowed for us to ask as many questions as we needed to and would help us until we understood the answer. The schedule was easy to follow.
Please comment on the weaknesses of the course and instructor.	The Time for tests was slightly different than for recitation but on the same days so I would have liked it if the time of each test had been more clear.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I do not know.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I think that the exams were difficult enough to make sure that I knew the information.
Please comment on the strengths of the course and instructor.	Good lectures you can watch.
Please comment on the weaknesses of the course and instructor.	I do not know how well the WebAssigns prepare me for the actual tests.
To help other students in the future and enhance student success, what could be improved in the course?	Make sure that students understand how to write out their work.
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Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	We did not have a midterm in this course, and I felt that was appropriate because with the little time we were given this semester to finish classes, there would have been no way we would have the time to have a midterm and be expected to learn and retain all the information in our lectures, as well as complete all the WebAssigns.
Please comment on the strengths of the course and instructor.	I enjoyed the recorded lectures, and I thought they were really effective in teaching the material.
Please comment on the weaknesses of the course and instructor.	I felt like there was often a disconnect between the lectures and the WebAssign problems we did, and I also felt like our instructor could have done more to help alleviate the stress of WebAssign. I heard of other instructors providing hints for the harder WebAssigns, but our instructor didn't do that. I realize we had somewhere on moodle where we could ask questions, but I just feel like that was not helpful enough. Also, I did not find recitation helpful for answering the questions I had for WebAssigns either, so I often felt like I had a lot of content that just could not be understood by me and no one could explain it to me.
To help other students in the future and enhance student success, what could be improved in the course?	Make sure the WebAssign reflects what is taught, or make sure to provide notes to make up for what wasn't shown in lecture. Having all the WebAssigns worked out for us after the due date may be helpful as well, especially because the format of this semester makes it difficult to understand everything that is thrown our way.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Maybe hold more office hours.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The exams were a good difficulty

Please comment on the strengths of the course and instructor.	Provided consistent updates as to the direction of the class.
Please comment on the weaknesses of the course and instructor.	Didn't really lecture so I can't exactly say I learned a lot directly from her.
To help other students in the future and enhance student success, what could be improved in the course?	Grading for tests had issues sometimes and those took awhile to resolve which was an issue for some people.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	The communication was great. You emailed us when you had updates or important information for us. I always knew when homework was due and when test were.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Midterm exam was easy and did not affect my grade.
Please comment on the strengths of the course and instructor.	Emailing students at the beginning of the week to inform them what lectures to watch and when homework was due.
Please comment on the weaknesses of the course and instructor.	Some of the webassign questions were complicated and almost impossible to get right.
To help other students in the future and enhance student success, what could be improved in the course?	Being in person because that would allow me to ask questions during lectures.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I think that the professor could respond to Moodle questions faster.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I believe that they were appropriate for this course. All of the content on the tests were accurately explained in the lectures. Most of the time our homework was more difficult than the tests, so I felt prepared on test day.
Please comment on the strengths of the course and instructor.	The lectures are all very well done, full of content and examples that are well explained and fairly easy to understand.
Please comment on the weaknesses of the course and instructor.	Sometimes the questions asked on the moodle page never got answered by the Instructor, or the took a long time to respond.
To help other students in the future and enhance student success, what could be improved in the course?	To improve, I think that there could be more smaller quizzes throughout the units to test understanding.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	I honestly felt that communications were fine -- weekly emails that included homework and test dates sent out really helped a lot; absolutely no complaints in terms of communication.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	I personally felt that midterm exams reflected the difficulty of the course relatively well. They weren't too hard to the point where studying felt pointless yet they weren't too easy to the point where you didn't have to study at all. When I slacked on studying, it reflected on my test results and when I actually put effort into studying, I was satisfied with my test results.

Please comment on the strengths of the course and instructor.	I like how extra help is always offered outside of recitation periods; there's no reason to be afraid to ask for help on a topic you're unfamiliar with. Recitations were extremely useful in helping to understand concepts and is really good at explaining unfamiliar subjects.
Please comment on the weaknesses of the course and instructor.	In some recitations, an example problem would be put up without any previous examples being walked through and explained. As such, when we were put into breakout rooms, it would just be completely quiet with no one knowing how to solve the problem at hand. Since everyone would be silent, it was difficult to ask for help without feeling awkward/embarrassed, even if Prof. Strikwerda joined the room.
To help other students in the future and enhance student success, what could be improved in the course?	I think with calculus, it's all about practice. I'd personally like to see maybe a few extra ungraded practice problems uploaded onto Moodle every week or before every midterm, separate from the Webassign homework. I could then use these practice problems to brush up on anything I didn't know in preparations for midterms. Personally, I felt that I was going into the tests a bit blind using only the webassign problems, as they format in which questions are asked on the midterm deviate slightly from the way they're asked on webassign.
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Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	The tests were appropriately difficult.
Please comment on the strengths of the course and instructor.	Due to the asynchronous nature of the course, this class was very easy to complete at your own pace. The instructor provided helpful, weekly updates via email. The instructor was also readily available if help was ever needed.
Please comment on the weaknesses of the course and instructor.	The Webassign questions were not always the most comprehensive practice for the test.
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Online courses require excellent communication between student and professor. How can your professor improve online communication for this course?	Weekly emails were appreciated.
Were midterm exams (style, difficulty level, etc.) appropriate for this course? Explain.	Yes, exams effectively evaluated understanding at different points. Helped instructor and students understand areas for improvement(series proofs)
Please comment on the strengths of the course and instructor.	Lecture videos were excellent. Curriculum was organized and well delivered.
Please comment on the weaknesses of the course and instructor.	Recitations were helpful; breakout room utilization was only effective sometimes
To help other students in the future and enhance student success, what could be improved in the course?	Perhaps consider more homework assignments with less questions per submission, further division of material.

North Carolina State University - ClassEval Report

Course Information		OUC														
Term: 2019 Fall Instr: Sarah Strikwerda Emplid: 200263949 Course: MA 242 005 Courses evaluated: MA 242 005 Title: Calculus III Undergraduate Course		170301														
Responses= 103 Enrolled= 120 Resp. Rate= 85.8%																
#	Question	Mean	5	4	3	2	1	NA	BL	StDev	SEM	Nq	Dept N	Dept Mean	Dept StDev	
1	The instructors teaching aligned with the courses learning objectives/outcomes	4.5	55	43	4	0	1	0	0	0.7	0.07	103	4,999	4.4	0.9	
2	The instructor was receptive to students outside the classroom	4.3	48	34	14	2	1	3	4	0.9	0.09	99	4,851	4.3	0.9	
3	The instructor explained material well.	3.9	37	36	17	9	4	0	0	1.1	0.11	103	4,988	4.0	1.2	
4	The instructor was enthusiastic about teaching the course	4.5	62	32	6	1	0	1	2	0.7	0.07	101	4,988	4.3	1.0	
5	The instructor was prepared for class	4.3	50	41	7	3	2	0	0	0.9	0.09	103	4,983	4.4	0.9	
6	The instructor gave useful feedback.	3.9	39	31	16	12	3	1	2	1.1	0.11	101	4,935	4.1	1.1	
7	The instructor consistently treated students with respect	4.5	62	32	6	2	1	0	0	0.8	0.08	103	4,974	4.5	0.8	
8	Overall, the instructor was an effective teacher	4.1	44	40	7	9	2	0	1	1.0	0.10	102	4,988	4.1	1.2	
9	The course materials (e.g., readings, videos, class notes, course packs, FAQs, websites, course webpage, and blogs) were valuable aids to learning	4.2	45	43	7	5	1	1	2	0.9	0.09	101	4,882	4.2	1.0	
10	The course assignments (e.g., homework, exams, quizzes, lab reports, papers, presentations, projects, portfolios, artistic impressions, critiques, blogs, and videos) were valuable aids to learning	4.0	40	39	11	10	2	0	1	1.0	0.10	102	4,861	4.2	1.0	
11	This course improved my knowledge of the subject	4.4	54	41	4	2	1	0	1	0.8	0.07	102	4,955	4.3	1.0	
12	Overall, this course was excellent	4.0	36	39	14	10	2	0	2	1.0	0.10	101	4,949	4.0	1.1	
13	Lab sessions contributed to mastery of course concepts	4.4	42	14	7	3	0	34	37	0.9	0.11	66	1,193	3.9	1.1	
14	Lab facilities, equipment, supplies, etc. were adequate	4.2	30	18	13	1	0	37	41	0.8	0.11	62	1,063	4.1	0.9	
15	The degree of lab difficulty was appropriate	4.2	29	23	12	0	1	34	38	0.9	0.11	65	1,148	4.1	0.9	
16	Overall, the labs were effective learning experiences	4.3	31	23	11	1	0	33	37	0.8	0.10	66	1,171	3.9	1.1	
17	The topics were arranged logically and contributed to student learning.	4.3	45	43	5	4	1	0	5	0.8	0.08	98	98	4.3	0.8	
18	The in-class exercises were helpful to me in learning this material.	4.2	42	38	12	6	1	0	4	0.9	0.09	99	99	4.2	0.9	
19	The instructor was well prepared for each class.	4.3	48	38	9	2	2	0	4	0.9	0.09	99	99	4.3	0.9	
20	The instructor gave clear explanations to clarify concepts.	4.0	34	39	17	7	2	0	4	1.0	0.10	99	99	4.0	1.0	

21	The instructor's teaching style (auditory vs. visual vs. kinesthetic) was a good match for my learning style.	3.7	35	27	14	14	8	1	5	1.3	0.13	98	98	3.7	1.3
22	The instructor was concerned with whether or not the students learned the material.	4.1	40	34	15	7	2	0	5	1.0	0.10	98	98	4.1	1.0
23	The instructor's methods of evaluating me were fair.	4.2	39	44	10	4	2	0	4	0.9	0.09	99	99	4.2	0.9

Note: 1. Results based on low response rates may not reflect the true class mean. Dept mean is for all undergraduate, or all graduate courses, offered by dept and is weighted by class size.

2. Results from cross-listed courses are included in the mean for the department whose course prefix appears first in the alphabet (e.g., for a course listed as HI and REL, the results are included in History's mean). To find the department mean for the other department (in this example, Philosophy and Religion), go to http://www2.acs.ncsu.edu/UPA/classeval/faculty/college_univ_means.htm.

North Carolina State University - ClassEval Report	
Emplid: 200263949	Name: Sarah Strikwerda -- Course: Calculus III
Term: 2019 Fall	MA 242 005 Courses surveyed - MA 242 005
Question	Response
Comment on strengths and weaknesses of the instructor	Strikwerda talks very fast and covers material very quickly, often leaving me without time to think about what I'm writing, and completely focusing on just copying her notes from the board.
Comment on strengths and weaknesses of the course	Some of the webassigns were helpful. Not having a textbook is pretty annoying. I wish the test questions were more like the homeworks.
Comment on strengths and weaknesses of the lab (if applicable)	The lab is just another version of lecture, where the class is taught by two teachers. Two different teaching styles, with miscommunication between both.
How could the instructor improve his/her teaching style?	Making test questions that aren't weighted so differently. Making a test that isn't 4 questions, with one question being 60% of the grade.
What did you like most about this course? Why?	Nothing.
What did you like least about this course? Why?	Lecture, small desks, a teacher who goes too quickly, pointless material, two lecture environments.
Give suggestions on how the course or how the instruction could be improved.	ma242 is a pointlessly difficult class.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Providing the notes online so students aren't focused 100% on copying down from the board.
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Comment on strengths and weaknesses of the instructor	She wrote down things wrong at least twice every class and we had to correct her. i understand people make mistakes but after a few times lecture started becoming very confusing. Maybe she could prepare her notes right the first time instead of fixing them during class.
How could the instructor improve his/her teaching style?	She could be more prepared and not read off of her notes sense they were incorrect most of the time anyways.
What did you like most about this course? Why?	I liked how the exams we not too difficult and there was bonuses. The homework helped alot.
What did you like least about this course? Why?	The exams were only 3 questions
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Comment on strengths and weaknesses of the instructor	Great job!
What did you like most about this course? Why?	The math because it was really interesting!
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Comment on strengths and weaknesses of the instructor	I neither agree nor disagree
Comment on strengths and weaknesses of the course	So stronk
Comment on strengths and weaknesses of the lab (if applicable)	Yes

How could the instructor improve his/her teaching style?	Above
What did you like most about this course? Why?	Epic
What did you like least about this course? Why?	The bad stuff
Give suggestions on how the course or how the instruction could be improved.	More visuals and examples
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Shout equations over and over until drilled in brain
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Comment on strengths and weaknesses of the instructor	She explained the information in great detail, but made a few mistakes in later units. However, she did correct these rare mistakes.
Comment on strengths and weaknesses of the course	Much better than Calc II, as it built on information that we previously learned in Calc I and some of Calc II, rather than containing nearly all new material.
Comment on strengths and weaknesses of the lab (if applicable)	No lab, only recitation.
How could the instructor improve his/her teaching style?	I wish she would write slower from time to time. In her defense, there is a lot of info to cover.
What did you like most about this course? Why?	I liked how in depth the notes were because it helped me better understand the subject matter.
What did you like least about this course? Why?	Sometimes a random question would be on the board for participation, but it generally wasted about 5 minutes of class time.
Give suggestions on how the course or how the instruction could be improved.	None, the class is fine the way it is.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	This course works better at the students' pace, but it was still engaging.
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Comment on strengths and weaknesses of the instructor	I don't feel like writing 2000 characters about why I now hate calculus because of this class
Comment on strengths and weaknesses of the course	I hated it
Comment on strengths and weaknesses of the lab (if applicable)	Learned more in recitation
How could the instructor improve his/her teaching style?	Don't just look at notes you printed off and write them on the board. You actually need to teach the material instead of writing on the board for 50 minutes
What did you like most about this course? Why?	Nothing
What did you like least about this course? Why?	When you would stand in front of what you just wrote on the board since that's all we did all class
Give suggestions on how the course or how the instruction could be improved.	Don't teach things that we won't be tested on

How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Actually teach instead of writing notes on the board exactly as you have it on your printed sheet
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Comment on strengths and weaknesses of the instructor	Explained the material in a way that was very easy to understand, great instructor
Comment on strengths and weaknesses of the course	Very informative course, learned a lot of new information about calculus, great example problems, homework was very helpful
Comment on strengths and weaknesses of the lab (if applicable)	Good supplement to lecture, allowed us to move through the course at a faster rate
How could the instructor improve his/her teaching style?	Giving more practice problems in class so that lecture was a little more engaging
What did you like most about this course? Why?	Learning and being able to easily understand new calculus concepts, it made me feel like I was learning lots of new material and I was retaining most of it pretty well
What did you like least about this course? Why?	I wish we would have had a lot more practice problems to do on our own that were similar to the ones on the test
Give suggestions on how the course or how the instruction could be improved.	Maybe being a little more engaging with notes. Sometimes felt like we were just copying notes off the board for most of the class
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Practice problems helped a lot, maybe asking students to go up and do problems on the board would engage students more as well.
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Comment on strengths and weaknesses of the instructor	Sarah Strikwerda was a great teacher, she has a way to make difficult things easy to understand. And her notes are easy to understand.
Comment on strengths and weaknesses of the course	non
Comment on strengths and weaknesses of the lab (if applicable)	non
What did you like most about this course? Why?	The in-class exercises, because they allowed me to understand the subject much easier.
What did you like least about this course? Why?	non
Give suggestions on how the course or how the instruction could be improved.	non
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	adding a bit of "comedy" to the class
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Comment on strengths and weaknesses of the instructor	Good teacher
Comment on strengths and weaknesses of the course	Lots of useless stuff
How could the instructor improve his/her teaching style?	Write slower or with less lengthy notation
What did you like most about this course? Why?	Mathematics

What did you like least about this course? Why?	Taking notes and webassign problems that were ridiculously hard
Give suggestions on how the course or how the instruction could be improved.	Idk
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Idk
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Comment on strengths and weaknesses of the instructor	easy to understand
Comment on strengths and weaknesses of the course	the course will be helpful for future courses
Comment on strengths and weaknesses of the lab (if applicable)	labs are kinda pointless, I can spend my time doing other things
How could the instructor improve his/her teaching style?	more examples
Give suggestions on how the course or how the instruction could be improved.	recitation needs to be taken out
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	easy to understand
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Comment on strengths and weaknesses of the instructor	Awesome professor very nice and eager to help students learn
Comment on strengths and weaknesses of the course	A formula sheet should be given with every test. I felt like whenever I studied it was so much harder to do well and grasp the concepts because half of it was spend memorizing complex formulas. There was also a lot of homework assigned back to back which was very difficult to complete sometimes. I think 10 questions per subchapter should be the maximum. One week there was 17-20 of them for a single subchapter and it took hours.
How could the instructor improve his/her teaching style?	some of the paragraphs for the theories were really long and if possible would be better if stated then broken down into simple terms
What did you like most about this course? Why?	the teachers were all very kind and helpful. the notes on the board were laid out very well. the study guides given that analyzed each concept you needed to know were very helpful. I liked how the tests lengths were made so you were able to complete them on time and had the time to think through every problem versus testing for maximum points.
What did you like least about this course? Why?	I wish they had some more office hours because I had a lot of conflicts with my schedule and their hours, but I understand they are grad students and that isn't always possible
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	class participation: i.e being told to solve a problem with a partner
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Comment on strengths and weaknesses of the instructor	Sarah is an incredible instructor, but she does have a tendency to go through the material too quickly (but I don't know if this is due to the nature of the course or her own teaching style). However, when she does go slowly enough, she is an amazing teacher, capable of making even some of the hardest concepts easy to understand. She is enthusiastic and it is clear that she is passionate about the material. Sarah is definitely one of the best math instructors I have ever had.
Comment on strengths and weaknesses of the course	The course itself was nice. I felt that I understood most of the concept throughout, and it was easy to see the practical applications of these topics. The course was sometime a little too fast paced for my liking. In general, the homework questions could be a little unreasonable in their difficulty, but I felt that the amount was fair. The tests were also very fair.
How could the instructor improve his/her teaching style?	Sarah is exceptional at the actual explanations of the concepts, and she can always answer any questions clearly. However, she sometimes has a tendency to go too quickly with the material. The last unit, for instance, was finished 1.5-2 weeks ahead of schedule, and also 1.5-2 weeks before the actual test on it. While this unit was an exceptional case, she can sometimes speed through sections. Luckily, this is not usually the case.
What did you like most about this course? Why?	I liked the material in the course. I also liked seeing the applications of our topics (in physics or other real life scenarios). I also really valued how there was a reasonable amount of homework.
What did you like least about this course? Why?	I thought some sections could be incredibly definition heavy. While I recognize the value of understanding these definitions, they could be pretty hard to understand. The pace could also be incredibly quick at some points.
Give suggestions on how the course or how the instruction could be improved.	In general, I think that the course is very well designed. I would prefer a less definition heavy style of teaching, but I am not sure if this is possible.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	In general, this course is very well structured. The only things that would make me engage more in class is if recitations had less of a lecture focus and more of a problem-solving approach, but luckily recitation was not always like lecture. I also would prefer a slower pace.
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Comment on strengths and weaknesses of the instructor	Received feedback well and adjusted how we prepare for tests based on it. More examples would have been helpful in class but the ones in recitation were helpful. I really liked the form to ask questions for test review. Video s showed to help visually were helpful and would have liked to see more.
Comment on strengths and weaknesses of the course	Homework assignments were sometimes excessively hard and sometimes paced a bit to close together. The textbook was very helpful to supplement the lecture.
Comment on strengths and weaknesses of the lab (if applicable)	Great for practice problems, the days we did practice problems were more helpful then when we went over concept/continued lecture.
How could the instructor improve his/her teaching style?	Showing more videos to help visualize instead of demonstrating with objects. Continuing to take input for test review sessions.
What did you like most about this course? Why?	It shows how Calc is actually applied so I understand how I might end up using it.
What did you like least about this course? Why?	Some of the homework being excessively hard/long.

How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Encourage trying examples with your neighbor now.
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Comment on strengths and weaknesses of the course	Not many resources outside of the classroom
Give suggestions on how the course or how the instruction could be improved.	More resources outside of class, practice exam
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Comment on strengths and weaknesses of the instructor	Sometimes unprepared but overall a great teacher
Comment on strengths and weaknesses of the course	WebAssign was overall not helpful
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How could the instructor improve his/her teaching style?	A few times at the end of the semester people around me would talk over Sarah. I would appreciate if she would shut them up, respectfully of course.
What did you like most about this course? Why?	The webassign policy of notifying the student if they got the answer correct is much more helpful to my learning than the physics policy.
What did you like least about this course? Why?	I wish the class didn't meet every day.
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Comment on strengths and weaknesses of the instructor	The instructor often miscopied her notes down, and was correcting herself over 20 times per class. Therefore my notes were unreliable, I was never able to trust that what the instructor was saying was entirely true. When a student would ask a clarifying question about the material, she would give an answer, however the answer would never answer the question the student asked. I don't believe the instructor had a true grasp on the learning objectives they were teaching. The teacher often questioned what she wrote on the board and regarding physics related material to the learning objectives, she had little to no prior knowledge. The instructor could not draw 3D shapes or vectors clearly enough for them to be understood, which I believe is necessary for the learning objectives. She was overall very kind and respectful to her students. However she was late to her office hours once in awhile. When students alerted her that they couldn't see certain colored white board markers, she questioned them. She then angrily threw them on the floor, and then next class continued to use them. Which I view as a sign of disrespect.
Comment on strengths and weaknesses of the lab (if applicable)	Our TA- Sarah Talley who taught the lab was incredible- I preferred her methods and everything she did overall much more than the instructor.
How could the instructor improve his/her teaching style?	Review her notes before lecture, making sure that each step of the problems she writes on the board is correct.
What did you like most about this course? Why?	The community built between students during lectures, we were always able to help one another out and bond over the mistakes of our instructor.
What did you like least about this course? Why?	I did not like how the instructor could not clarify concepts.

How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Give more indepedent time to complete examples during lecture.
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Comment on strengths and weaknesses of the instructor	I could tell the instructor was invested in the class and was very knowledgeable in it. No weaknesses, other than a couple human mistakes.
Comment on strengths and weaknesses of the course	Very interesting course.
Comment on strengths and weaknesses of the lab (if applicable)	Really helpful in applying the concepts
How could the instructor improve his/her teaching style?	By doing exactly what they are doing. Maybe being a bit more interactive or natural/ their normal selves.
What did you like most about this course? Why?	The concepts taught because they were all very interesting.
What did you like least about this course? Why?	Nothing really.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Having random people called on to encourage others to work the problem rather than waiting until the instructor does it.
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Comment on strengths and weaknesses of the instructor	she is very intelligent and knows what she is talking about. she explained everything very well and help to get the information across. please use the funds for buying these professors markers instead of wasting the money on something useless. the amount of times ive seen professors have to try out 10 markers before they can get one that writes is truly sad how our funding is budgeted. you know that it is a good class and that you enjoyed it when saying goodbye and thank you to the professor is hard. :)
How could the instructor improve his/her teaching style?	when explaining 3d surfaces, maybe do it on the projector and then drawing and explaining on top of the drawing. the umbrella problem was kind of difficult to visualize for some people since it was perceived two ways. also, maybe showing an interactive with sherical coordinates can help too. https://mathinsight.org/spherical_coordinates
What did you like most about this course? Why?	i like the conecepts in calc iii.
What did you like least about this course? Why?	drawing. it is difficult but is necessary
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Comment on strengths and weaknesses of the instructor	Very effective, answers questions thoroughly and teaches at a good pace. Occasional algebra or writing mistake here and there, but overall a very good teacher.
Comment on strengths and weaknesses of the course	Each chapter was fairly thorough and easy to comprehend, final chapters 6 and 7 had a few flaws and were a tad confusing but overall course was effective.
Comment on strengths and weaknesses of the lab (if applicable)	Practically another lecture, effective in helping learn.
What did you like most about this course? Why?	Each chapter was taught and the tests were made not too hard but not too easy. Gave you a good challenge to your knowledge without giving you too absurd to solve problems.

What did you like least about this course? Why?	Homework was definitely much more challenging than the rest of the course, many problems took a rather hefty amount of time.
Give suggestions on how the course or how the instruction could be improved.	Overall not much I'd change on course, chapter 6 could use some tweaks but all in all I am happy I took this teacher.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Course overall was very effective in teaching, students asked a lot of questions and professor and TAs answered them well. Not much I would change.
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Comment on strengths and weaknesses of the instructor	Enthusiastic and very well prepared.
Comment on strengths and weaknesses of the course	Course taught me calculus in three dimensions efficiently.
Comment on strengths and weaknesses of the lab (if applicable)	Andrea was personable, kind, receptive and intelligent. Labs were an excellent resource to both refine knowledge and learn new material.
What did you like most about this course? Why?	Sarah's teaching methods provided an excellent medium to learn the theory as well as how it applied in example.
What did you like least about this course? Why?	Lots of note taking, which isn't necessarily bad.
Give suggestions on how the course or how the instruction could be improved.	More examples, but you fixed that after the first unit. I thought the course was excellent. You did a great job Prof. Strikwerda!!!
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Encompass more example into labs, try to cover more material in lectures.
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Comment on strengths and weaknesses of the instructor	Really got me excited about math and did a very good job explaining integrals in 3d space.
How could the instructor improve his/her teaching style?	I honestly loved the way this class was taught, it was a very good pace for a math class and made sure I always was paying attention .
What did you like most about this course? Why?	Teacher
Give suggestions on how the course or how the instruction could be improved.	This is just my preference, but I prefer the HWs to all be due the day of the test that way I can work on different HW problems the day before for practice rather than not having the option for webassign to check my answers for the older problems.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Sometimes the proofs would take a ton of nopte writing and we never really used them again, so just mention that we dont necessarily need to write everything down.
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What did you like most about this course? Why?	Simply learning about concepts in math which I didn't know existed before this point
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Comment on strengths and weaknesses of the course	No helpful review material, constant mindless notetaking that is difficult to comprehend
How could the instructor improve his/her teaching style?	Slow down
What did you like least about this course? Why?	The weighting of the questions on each test was unfair

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Comment on strengths and weaknesses of the instructor	She seemed prepared for each class and was excited to teach course material. She gave extensive notes and course materials to help with webassigns Sometimes questions threw her off, she seemed to strictly follow proofs and textbook definitions
Comment on strengths and weaknesses of the course	It would have been helpful to have online access to notes for classes we might not have understood rather than having all material on whiteboards I would have liked more examples and less wordy/definition proofs
Comment on strengths and weaknesses of the lab (if applicable)	Lab helped to keep the course on track, but it would have been more helpful to maintain its intended purpose as more of a problem session. Continuing lecture in lab made it difficult to ask questions on material before completely moving forward
How could the instructor improve his/her teaching style?	being more receptive to student questions during class, having example problems or worksheets for extra practice if limited on time
What did you like most about this course? Why?	I liked that the material built off of previous course concepts, making it easier to master
What did you like least about this course? Why?	I didn't like that lectures were continued in recitations and that we sometimes skipped around in notes
Give suggestions on how the course or how the instruction could be improved.	More feedback on exam answers/why answers were incorrect, fewer proofs and more example problems, online access to notes or doc scanner instead of whiteboard notes
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	group work during class using examples, less time copying proofs
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Comment on strengths and weaknesses of the course	On certain assignments, it seemed that WebAssigns were not helpful because they did not always reflect what we did in class
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Comment on strengths and weaknesses of the instructor	Goes through material very quickly. I think she lacked to give us examples.
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Comment on strengths and weaknesses of the course	The homework needs to align more with the material covered in class as well as the material that is tested for the class. The homework was excessively challenging and didn't accurately represent how questions would be presented in testing situations.
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Comment on strengths and weaknesses of the instructor	Overall an excellent teacher.
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Comment on strengths and weaknesses of the instructor	With more experience, she will become an amazing instructor! She knew her material, and if there was a question she could not answer right away, she would always find an answer. She just needs to slow down a little in the presentation of material, but otherwise, she was pretty good!
Comment on strengths and weaknesses of the course	The course had a lot of material to be covered in a semester, and that was a little overwhelming at times. Otherwise, it was a good course.

How could the instructor improve his/her teaching style?	Slow down a little bit. But otherwise, it was really good.
What did you like most about this course? Why?	That the material was often given a real-world application, so that I know where I might see the math again in future classes or jobs.
What did you like least about this course? Why?	How much material there is to cover in such a short amount of time. I also didn't like how we were never sure about what would be covered on the tests. It was stressful for me, even if I knew all the material.
Give suggestions on how the course or how the instruction could be improved.	I do wish that better calculators could be used, or formula sheets could be given before/during tests. My brain can't hold that much information.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Have more in-class examples I reckon.
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Comment on strengths and weaknesses of the instructor	Overall, the instructor was a good teacher, but often made mistakes when writing notes on the board. These mistakes were only corrected when students noticed, but as we have not learned the material before, there is no way to know if students caught all her mistakes which was very frustrating when trying to learn formulas for tests and they were incorrect.
Comment on strengths and weaknesses of the course	Webassign problems differed greatly from material covered in class and it was very difficult to complete them without additional help.
Comment on strengths and weaknesses of the lab (if applicable)	I liked learning in recitation better than learning in class.
How could the instructor improve his/her teaching style?	It would be helpful if there were fewer mistakes in the notes copied onto the board.
What did you like most about this course? Why?	I liked that the tests reflected the examples covered in class rather than difficult webassign problems.
What did you like least about this course? Why?	I did not enjoy the difference between webassign problems and material covered in class.
Give suggestions on how the course or how the instruction could be improved.	It would be helpful if the homework reflected material covered in class.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	I felt like I was engaged during class due to the participation required during examples.
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Comment on strengths and weaknesses of the instructor	Sarah was very knowledgeable and kind, but would often write too fast in class.
Comment on strengths and weaknesses of the course	Course material was reasonable and consistent with syllabus
How could the instructor improve his/her teaching style?	Write slower
What did you like most about this course? Why?	Sarah was kind and the tests covered material she reviewed extensively in class and recitation.
What did you like least about this course? Why?	Having to go to recitation on Tuesday before Thanksgiving break.
Give suggestions on how the course or how the instruction could be improved.	I believe if the lectures in class were less rushed and had more participation, then the class would be better.
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Comment on strengths and weaknesses of the instructor	Best calc professor I've had period.
Comment on strengths and weaknesses of the course	Webassign...
Comment on strengths and weaknesses of the lab (if applicable)	Need more examples
How could the instructor improve his/her teaching style?	Yes, use more visuals near end of course.
What did you like most about this course? Why?	The concepts because they are interesting to me.
What did you like least about this course? Why?	The webassigns because they are very picky about what they want and could be better if it walked you through some on your on.
Give suggestions on how the course or how the instruction could be improved.	More examples
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Us real life examples
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Comment on strengths and weaknesses of the instructor	Sarah sometimes was not able to explain material in the best way, which is understandable because some material is tricky in that way. She would often come back to the next class with answers she couldn't give right that second. Tests were very fair, but the WebAssign homework often had material that was more difficult than what was taught in class. It would have been nice to do a few examples and talk about how the material related to each other as the course progressed. The study guides for the test were helpful.
Comment on strengths and weaknesses of the course	The material was taught in a timely manner and gave plenty of time for exam review, but I think some extra time (especially in recitation) could have been used for examples. The extra credit built into WebAssign was extremely helpful.
Comment on strengths and weaknesses of the lab (if applicable)	Was often used as lecture, but it was nice when we got to do some homework problems.
How could the instructor improve his/her teaching style?	Stating things in more of a casual tone than writing definitions straight from the book would be helpful. It has hard to digest all the information when the whole class is spent writing and trying to keep up with the instructor. Some time to review what we went over that class would be useful so students don't leave not really knowing what we learned.
What did you like most about this course? Why?	The tests were fair and much like examples in class.
What did you like least about this course? Why?	The homework was much harder than examples done in class and the tests.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	More time for examples, charts relating how all the concepts worked together, broad overviews at the end of the unit
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Comment on strengths and weaknesses of the instructor	Sarah was a good teacher and even better person. She explained most all of the concepts well and was enthusiastic in teaching the material. She could use some time to look over physics material but overall a great instructor.

Comment on strengths and weaknesses of the course	Homework was a great help in learning the material and our tests accurately showed how well we knew the material.
Comment on strengths and weaknesses of the lab (if applicable)	Lab was good for learning new material and explaining webassign problems but, personally, I thought it was too slow and more material could have been given to lab so that lecture days could slow down.
How could the instructor improve his/her teaching style?	I don't think there is any other way to teach the course. The only thing that may have been helpful would be an online 3D graph so that students could better understand the graphs.
What did you like most about this course? Why?	The thing I enjoyed most about class is that both my instructor and TA were very kind and willing to help.
What did you like least about this course? Why?	The thing I liked least about this course was the slow pace. This is because I feel the course could have been taught much faster and more examples could be shown to help students understand material.
Give suggestions on how the course or how the instruction could be improved.	It was a fairly straightforward course where the material was taught well. Only thing I can think is to make to make tests harder can go through examples faster.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Don't give students time on their own to work on problems. For students, this just means it is time to get on your phone and wait for the instructor to go over the problem.
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Comment on strengths and weaknesses of the instructor	Too many notes made it very difficult to find the applicable material for the exams. The TA wrote extremely fast which made it difficult to keep up. Spend all of class time focusing on copying notes and not understanding what I was writing due to the pace of the class. Instead condense the notes and eliminate unnecessary notes.
Comment on strengths and weaknesses of the course	There is too much discrepancy between each class. Some students had different TA's that made their exams a lot easier where more students received higher grades, this isn't fair to the students who chose the TA's who turned out to be more difficult. Standardize the material that is taught, the exams, and how the exams are administered (i.e., some students have "cheat sheets" and some are allowed to use laptops on exams while some aren't even allowed to use calculators).
How could the instructor improve his/her teaching style?	The TA wrote extremely fast which made it difficult to keep up. Spend all of class time focusing on copying notes and not understanding what I was writing due to the pace of the class. Instead condense the notes and eliminate unnecessary notes.
What did you like least about this course? Why?	The way the material was taught, it was not useful for my learning style. The concepts were not explained broadly enough, some of the material was learned from homeworks and not even mentioned in the notes.
Give suggestions on how the course or how the instruction could be improved.	Standardize the material taught, the exams, and how the exams are administered (i.e., some students have "cheat sheets" and some are allowed to use laptops on exams while some aren't even allowed to use calculators).

How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Write slower. Standardized exams/ procedures for exams.
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Comment on strengths and weaknesses of the instructor	My only complaint is that Sarah sometimes would talk a little too fast and I would rush to finish writing what she was teaching. However, because it was a fast paced course we finished the material very early and will have lots of time to prepare to the exam. Sarah was very good at explaining concepts in a couple different ways and answering question. Can tell she is passionate and very receptive.
How could the instructor improve his/her teaching style?	My only comment is slow down like 10 percent
What did you like most about this course? Why?	The concepts are very cool and interesting
What did you like least about this course? Why?	The homework. I feel like WebAssign homework never aligns with the tests in calc because they're all super advanced and hard. But it is nice theres a homework for each topic.
Give suggestions on how the course or how the instruction could be improved.	Slow down maybe a tiny bit
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	I was fine in class
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Comment on strengths and weaknesses of the instructor	Every once in a while Sarah would make basic math mistakes. Now, I understand that no one is perfect and everyone makes mistakes, but the constant corrections from the class makes it difficult to truly absorb the information if I constantly have to fix my notes.
Comment on strengths and weaknesses of the course	I think that the use of so many proofs in lecture distracted me from the actual concepts. Spending the majority of the lecture proving a concept did not help when it came time to do homework and apply the concept to real problems.
Comment on strengths and weaknesses of the lab (if applicable)	If by lab you mean recitation then yeah the recitations were helpful.
What did you like least about this course? Why?	The thing I liked least was that too much of lecture time was spent on proofs that we where never tested on afterwards. There was no incentive to learn the proofs, therefore it became a waste of time.
Give suggestions on how the course or how the instruction could be improved.	My suggestion is to focus lectures on practice problems and not proofs. Especially if we are never tested on proofs.
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Comment on strengths and weaknesses of the instructor	friendly but sometimes was not great at explaining difficult concepts
Comment on strengths and weaknesses of the course	some of the homework's were a lot harder than the class but most of them were helpful for preparing you for the test
How could the instructor improve his/her teaching style?	do more examples like the cylinder of paper for arc length

What did you like most about this course? Why?	the one example where you demonstrated arc length by drawing on the cylinder of paper and then unrolling it
What did you like least about this course? Why?	felt very rushed
Give suggestions on how the course or how the instruction could be improved.	more explaining instead of just writing
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	have it be a little more interactive
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Comment on strengths and weaknesses of the instructor	Sarah was really enthusiastic about the material; however, she moved through material pretty quickly.
Comment on strengths and weaknesses of the course	Webassign does not align well with the material, as the level of difficulty is usually more advanced than what we do in class.
How could the instructor improve his/her teaching style?	Sarah could go through more examples in class, as the classes seemed extremely note heavy, which made it difficult to learn at times; however, I know calc 3 is a lot of material.
What did you like most about this course? Why?	I liked the way Sarah arranged each class, and wrote down the notes with us instead of just projecting them on a screen. This was better for my learning style, and helped me pay attention more.
What did you like least about this course? Why?	The thing I liked least about this course was the pace, and also webassign. The course seemed to move extremely fast, which was overwhelming, but once again I understand calc 3 is a lot of content, so Sarah really couldn't do much to change the pace.
Give suggestions on how the course or how the instruction could be improved.	I think a different homework type needs to be given, not webassign. Doing webassign rarely helped me through this course, as I found reviewing and reworking problems from our notes helped way more. The problems on webassign are often way too long to even be considered for a test question, so it just doesn't seem like a great study source.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Adding more examples would help engage me more, as it seemed really hard to pay attention when the lectures were really definition and note heavy.
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Comment on strengths and weaknesses of the instructor	She sped through lectures wayyy to fast such that no one could understand. Her example problems were not helpful because instead of walking us through them she just assumed we would know after a breif introduction to the subject.
Comment on strengths and weaknesses of the course	There was just way too much busy work and we are expected to memorize dozens of formulas that in real life, if I needed them, I could easily google the defintion. We shouldn't be expected to memorize the equations but tested on how we implement and use them.
Comment on strengths and weaknesses of the lab (if applicable)	My TA was great
How could the instructor improve his/her teaching style?	Slowing down and walking through examples better

What did you like most about this course? Why?	nothing
What did you like least about this course? Why?	the pace of it and the fact that a lot of other sections had more time on units and could use a formula sheet. I also didn't enjoy that we started learning topic for the next test before we took the previous one. How am I supposed to remember all that?
Give suggestions on how the course or how the instruction could be improved.	SLOW DOWN and give formula sheets or allow us to make a note card with them
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	better in class examples and keeping pace with students
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Comment on strengths and weaknesses of the instructor	Lovely teacher, really knows her stuff.
Comment on strengths and weaknesses of the course	The reason #10 is only 'agree' is because The homework was way too hard to prepare us for the tests and help with the knowledge. The time taken to calculate a lot of the HW problems took the same time it took to take a test. Also, there is way too much material in this course. Our teacher was rushing to stay on schedule with the course.
Comment on strengths and weaknesses of the lab (if applicable)	The labs were annoying because they basically functioned as another class, as opposed to outside work that would help us understand the material. why call it lab if it was just another class?
How could the instructor improve his/her teaching style?	slow down, but that is a problem with the course, not her teaching. Maybe have models ready to help visualize. Like 3D print some.
What did you like most about this course? Why?	How fair the tests were. really felt like I wasn't being cheated in any way
What did you like least about this course? Why?	the speed, too much info to learn in not enough time.
Give suggestions on how the course or how the instruction could be improved.	Stop asking so much, I've heard in other courses that they skip some information, which is not good because that info is important for some engineering degrees and people need to understand the concepts.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	more 3D models, and for god sake someone fix how its taught. Split the class up or something,
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Comment on strengths and weaknesses of the instructor	Great teacher but sometime go too fast and very heavy lecture based
Comment on strengths and weaknesses of the course	Great courses
How could the instructor improve his/her teaching style?	Slow down a little bit and doing more example
What did you like most about this course? Why?	the webassign was very helpful
Give suggestions on how the course or how the instruction could be improved.	Doing more example of the section would be helpful
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Maybe lower the materials in the courses

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Comment on strengths and weaknesses of the instructor	No extra material, spent way to long explaining extremely complex examples that weren't realistic to course. Definitely understood the material.
Comment on strengths and weaknesses of the course	Not much extra material instead focused on in class learning which is not my favorite environment.
How could the instructor improve his/her teaching style?	Slower teaching for complex examples and using simpler examples more often.
What did you like most about this course? Why?	The homework was helpful.
What did you like least about this course? Why?	Lack of resources, poor in class examples.
Give suggestions on how the course or how the instruction could be improved.	Provide more materials and teach slower in class.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Group work. Better problems.
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Comment on strengths and weaknesses of the instructor	A little fast on the white boards, its harder to see and I sit near the front.
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What did you like most about this course? Why?	I like how the instructor made the topic easy to understand and make sure we learn the material before putting it on the test.
What did you like least about this course? Why?	The pace of the lessons were quick and sometimes I have a hard time taking down notes due to how quick the pace was.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	I like most part of the class, but slowing the pace of the class would be extremely helpful.
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Comment on strengths and weaknesses of the instructor	Sarah was such an amazing instructor! She was my TA for calc I and she thoroughly understands the material of the class and elaborate immensely on the topics discussed in this class.
Comment on strengths and weaknesses of the course	No weaknesses. I wish there were a few more examples but this class has a lot of information so that's difficult.
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Comment on strengths and weaknesses of the instructor	She went a little fast, but she always provided useful explanations if you didn't understand.
Comment on strengths and weaknesses of the course	Webassign is not the most useful resource.
How could the instructor improve his/her teaching style?	Providing more practice outside of class besides webassign.
What did you like least about this course? Why?	The speed, it was a little hard to keep up.
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Give suggestions on how the course or how the instruction could be improved.	Slow down, or at least give us access to the notes after class so we can pay attention more to what you are saying during class rather than just frantically writing all the time.

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Comment on strengths and weaknesses of the instructor	She explained the material well, but at times went way too fast. We never had adequate time to do the example problems that she provided.
Comment on strengths and weaknesses of the course	The course overall was good. It improved my knowledge of the subject. Homework load was fine.
How could the instructor improve his/her teaching style?	Slow down
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Comment on strengths and weaknesses of the instructor	She was always kind and enthusiastic, but copying down notes (not always accurately) on the board every day wasn't the best way for me to learn.
Comment on strengths and weaknesses of the course	webassigns didn't correlate well with the tests. tests were fair and reasonable and helped reinforce the most important topics
Comment on strengths and weaknesses of the lab (if applicable)	Andrea was a great TA and always made an effort to help our section understand every topic. Recitation was a really helpful addition to this class.
How could the instructor improve his/her teaching style?	don't just read the notes, be better prepared for questions
What did you like most about this course? Why?	fair tests and nice instructors, i knew what to expect
What did you like least about this course? Why?	having mistakes in my notes and not knowing about it, web assigns being unnecessarily hard (no way to solve without going in to office hours bc there weren't any examples in our notes)
Give suggestions on how the course or how the instruction could be improved.	change webassign assignments to be more accurate. don't teach physics topics without offering explanations of why it's important
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	small group work in recitation
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Comment on strengths and weaknesses of the instructor	She did amazing for her first semester.
Comment on strengths and weaknesses of the course	The course has taught me a lot.
Comment on strengths and weaknesses of the lab (if applicable)	Labs helped me understand stuff.
How could the instructor improve his/her teaching style?	Slow down a little.
What did you like most about this course? Why?	The tests because they weren't too hard.
What did you like least about this course? Why?	The notes got annoying because I hate writing, but I understand why we had to take them.
Give suggestions on how the course or how the instruction could be improved.	Slow down the pace just a little.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Maybe don't do notes every single day.
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Comment on strengths and weaknesses of the instructor	She did a great job answering our questions. She made the material easy to digest. I really liked the way she explained the topics too. She got straight to the point and helped us visualize a lot of concepts that we had a hard time envisioning. Good job Sarah! You did an awesome job this semester.
Comment on strengths and weaknesses of the course	I liked the course. I've always liked my calculus courses. I expected it to be fast pace. At times it was difficult to keep up but that's life.
Give suggestions on how the course or how the instruction could be improved.	Good course. Good professor. A+
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Comment on strengths and weaknesses of the instructor	I wish she would have posted notes online instead of just using the whiteboard in class. I could not read the board well from my seat
How could the instructor improve his/her teaching style?	Move away from definitions and more towards practice
What did you like most about this course? Why?	Homework was easy to keep up with. Tests were not overly challenging
What did you like least about this course? Why?	Classroom was not conducive to learning. Too big and writing on whiteboard did not help
Give suggestions on how the course or how the instruction could be improved.	Post notes online + practice tests before tests also don't move onto new material right before test
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Previously stated
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Comment on strengths and weaknesses of the instructor	The instructor somewhat knew what she was talking about but she often messed up in explaining and that made whatever she was teaching much more difficult to understand.
Comment on strengths and weaknesses of the course	I personally did not think that the homework was helpful because the homework would go into more detail than what we learned and was not useful for me during tests. The notes were the most useful to me.
How could the instructor improve his/her teaching style?	It would have been helpful if the instructor posted her notes from class online somewhere because she wrote all of her notes on the whiteboard in a room that did not have elevated seating so it was difficult to see the board.
What did you like most about this course? Why?	I liked that it is my last calculus class that I have to take.
What did you like least about this course? Why?	The problem of not always being able to see what was written on the board and then not having access to the notes anywhere else in case I missed something.
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Comment on strengths and weaknesses of the instructor	went a little too fast on the more complex topics.
Comment on strengths and weaknesses of the course	not enough time for more complex topics.
How could the instructor improve his/her teaching style?	Go over examples that are similar to that of the homework.
What did you like least about this course? Why?	I would have rather had it 2 times a week for 1 hr 50 min each
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Comment on strengths and weaknesses of the instructor	The strengths included positive teaching attitude. The weaknesses include going too fast during instruction and not being in touch or flexible with student conditions.
Comment on strengths and weaknesses of the course	Well structured course. Helpful Webassign.
How could the instructor improve his/her teaching style?	Respectfully, slow down as much as logical and make sure the majority of the students are with you before moving on.
What did you like most about this course? Why?	I liked the way tests were representative of the main parts of the course, it helped reassure me that I was learning.
What did you like least about this course? Why?	I disliked that the final was not representative of the tests. It did not feel fair that the final focused on things that were not tested on before. If tests are a gauge of where the students are atm why would one gauge the students during the main tests and then lose that in the final exam. Then, the final is not correctly indicative of the material learned.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	I was engaged in class. Remain how it is.
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How could the instructor improve his/her teaching style?	Slow down in class and stop trying to just get through the notes you have for that day.
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Comment on strengths and weaknesses of the instructor	very enthusiastic and obviously ready for every lecture. my only complaint is that she went way too fast for a lot of us to keep up as well as focused more on definitions rather than examples. it was almost as if the textbook was being written down on the board. it would have been nicer if it was slightly less note-based and instead focused on examples and practice.
Comment on strengths and weaknesses of the course	very note heavy, should focus more on examples. or at least have recitations reserved for practice instead of constantly bombarding us with new material
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How could the instructor improve his/her teaching style?	Slow down.
What did you like most about this course? Why?	The subject
What did you like least about this course? Why?	The subject
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Comment on strengths and weaknesses of the instructor	She seemed very knowledgeable
Comment on strengths and weaknesses of the course	I am very glad that I took it
How could the instructor improve his/her teaching style?	Take more questions
What did you like most about this course? Why?	I was mostly applicable to real life
What did you like least about this course? Why?	Chapter 6
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Ask questions of students if you want us to engage or better yet, allow us to answer question by raising our hands
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Comment on strengths and weaknesses of the instructor	I believe that there is a large pacing problem in class. Often I feel that you move to fast between subjects, and it's hard to ensure an understanding of the material.
Comment on strengths and weaknesses of the course	I believe that the the difference in difficulty between the Webassign homework and the testing questions hurt my ability to practice my understanding of new topics.
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Comment on strengths and weaknesses of the instructor	The Instructor rushed very quickly through the material and it seemed as if she focused more on the derivation of the formulae given rather than examples of them being used which is what we were ultimately tested on.
Comment on strengths and weaknesses of the course	The course is very lengthy and the way the Instructor taught this course caused for her to rush the material along.
Comment on strengths and weaknesses of the lab (if applicable)	The lab allowed for the TAs to go into more detail in their material and actually give us examples rather than a derivation class.
How could the instructor improve his/her teaching style?	SLOW DOWN.
What did you like most about this course? Why?	The recitation sessions since they made the most sense.
What did you like least about this course? Why?	The in class constant writing. since not even the notes were uploaded
Give suggestions on how the course or how the instruction could be improved.	A more example-based classed.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	upload the notes rather than making us write them down and do more examples.
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Comment on strengths and weaknesses of the instructor	She used recitation periods to teach new information when they are supposed to be reserved for problem sessions to review from the previous class. She made the final have completely different concepts than our previous test and spent under a week helping us prepare for it. She moved the class at a completely unnecessary breakneck pace.
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Comment on strengths and weaknesses of the instructor	I feel like a lot of notes were lengthy but also rushed through. The notes could have been posted as students already have a punishment for not showing up to class.
Comment on strengths and weaknesses of the course	Some of the homework questions are overly hard and not like what we need to know or understand.
Comment on strengths and weaknesses of the lab (if applicable)	The recitations were better because it was easier to ask questions and also move at a slower pace.
How could the instructor improve his/her teaching style?	Slowing down, allowing for people to ask questions and posting the notes so if people can't keep up, they're available.
What did you like most about this course? Why?	I liked how every piece built off of each other.
What did you like least about this course? Why?	I didn't like the amount of material that needed to be covered. There were pieces that seemed unrelated to the rest of the course.

Give suggestions on how the course or how the instruction could be improved.	The notes could be made public and the homework should be at the expected level of mastery.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Less notes or derivations that take up a page that I will never look at again.
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Comment on strengths and weaknesses of the instructor	Sarah was wonderful to have as an instructor, and was enthusiastic about the material. Her enthusiasm worked to keep me focused during class, and I appreciated how in depth she went into the material. However, she is very fast paced, which led to some problems for me keeping up with the concepts. Feedback on the tests was also lackluster; there was no explanation as to what went wrong, or where in the problem points were lost.
Comment on strengths and weaknesses of the course	The course was good, I do feel that some of this material could have been taught in MA 141 though.
How could the instructor improve his/her teaching style?	Slowing down some would be good, and uploading notes to moodle could also help. That way, I could have taken notes before/after class, and paid more attention to your verbal explanations in class.
What did you like most about this course? Why?	I really enjoyed the chapters that went over finding potential functions, as it reminded me some of differential equations, which is one of my favorite subjects.
What did you like least about this course? Why?	I very much disliked how dense the course was; with all the other classes that engineering sophomores are taking that have a similarly heavy workload, it was a little hard to manage.
Give suggestions on how the course or how the instruction could be improved.	The course could be distributed some to calculus 1, which would leave more time for the more advanced material. Things like vector math and other basic operations being moved to an earlier course would be good.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	More application would be nice.
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Comment on strengths and weaknesses of the instructor	Professor Strikwerda clearly has a fantastic understanding of Calculus III, but sometimes her lectures felt rushed and not worth the time spent being there. I'm not sure if this was because there is so much material to cover in Calc III or if her teaching style was not very efficient with time. Either way, my experience with Professor Strikwerda and Calc III was not great.
Comment on strengths and weaknesses of the course	Way too much material is covered in this course. In my opinion, there is no way someone can both fully understand and remember all the material in this curriculum in one semester. Also, the webassign problems were also outrageously time consuming and did not correspond the level of mastery needed to succeed in Professor Strikwerda's class. In conclusion, this course made me sad and stressed.
How could the instructor improve his/her teaching style?	Needs to be more in-depth with the concepts. I felt that more time needed to be spent on the big concepts. Often during lecture, I felt that Professor Strikwerda flew through the material, leaving no time for students to get a grasp on what she was trying to explain.

What did you like least about this course? Why?	The lectures and WebAssigns. During lectures, I felt like I was not really learning anything. I felt the same about WebAssigns.
Give suggestions on how the course or how the instruction could be improved.	WebAssign problems need to be made by the professor, not directly pulled from the textbook. There also either needs to be more time to learn the material or less material to learn.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Less material and more in-depth lectures on the material that matters most.
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Comment on strengths and weaknesses of the instructor	She was good at making sure she got all the material done and made herself available for questions. Sometimes she would mess up which was fine, but she would allow herself to get flustered which would make me lose my train of thought. Overall though she was great at delivering the material
Comment on strengths and weaknesses of the course	It sometimes went along a little too fast for my taste, and I felt a bit like was having a bunch of information crammed down my throat and I couldn't retain it all.
How could the instructor improve his/her teaching style?	Her teaching style worked well, keep it up.
What did you like most about this course? Why?	I liked picturing things in 3d towards the beginning
What did you like least about this course? Why?	I thought the last few units were pretty confusing and I didn't know what I was doing
Give suggestions on how the course or how the instruction could be improved.	I think the course would be better if the pacing was more relaxed. I know all of the information is important, but sometimes I felt like we gunned in in lectures and I retained nothing afterwards. If there were a way to slim it down that would be helpful
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Comment on strengths and weaknesses of the instructor	The explanations of how to work through problems were very helpful, although sometimes we moved a little too fast for me to fully grasp a concept before we moved to another. The notes written were also a little wordy at times, making it a little difficult to extract the useful information before we did an example.
Comment on strengths and weaknesses of the course	The abundant examples done in class definitely helped me understand the topics. I do wish the course had moved a little slower.
How could the instructor improve his/her teaching style?	Slow down a little during the lectures.
What did you like most about this course? Why?	I liked that we did plenty of examples because I learn math best through practice. This let me see how to apply what we learned.
What did you like least about this course? Why?	I did not like that we would start a new unit the day before the test, as this would have been a better place for review. After the test, when we were continuing the new unit, I did not remember any of what had been taught before the test.
Give suggestions on how the course or how the instruction could be improved.	It would help to slow down a little and make the notes a little clearer.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Possibly a few more examples

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Comment on strengths and weaknesses of the instructor	She is one of the worst teachers I have ever had. In every lecture she will constantly mess up a crucial part of her notes and be like "oops" and just leave it with a mistake. She cannot answer any question asked during lecture correctly. She is just not good.
Comment on strengths and weaknesses of the course	The coursework supplied by the professor was not at all applicable to any tests we took and the notes had no correlation to the homework assigned.
Comment on strengths and weaknesses of the lab (if applicable)	The lab was sadly only supplemental because she was not able to cover all the material that lecture attempted to go over. My notes from my rescitaion were far better than lecture.
How could the instructor improve his/her teaching style?	Give better test review and have a better idea of the notes before you write them. Listen to the questions and make sure you understand the question asked.
What did you like most about this course? Why?	Nothing
What did you like least about this course? Why?	Everything. Test had no correlation to the hw or notes
Give suggestions on how the course or how the instruction could be improved.	Change the instructor
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Have a teacher that is a bit better at explaining her notes
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Comment on strengths and weaknesses of the instructor	A very approachable instructor. She came very prepared with her lesson plan made, and she was fairly amusing. She helped made Calc 3 fun and interesting despite its difficulty.
Comment on strengths and weaknesses of the course	A difficult course, but one that was also rewarding.
How could the instructor improve his/her teaching style?	I thought that the instructor's teaching style was good and helped me to learn a lot.
What did you like most about this course? Why?	I think the course itself is very interesting. It felt like a puzzle, learning how to apply everything I had learned to the math.
What did you like least about this course? Why?	The homework was insanely difficult, and mostly tedious, compared to everything else. The concepts and theorems were also hard to follow and understand due to their nature and the amount of information we had to fit into a short time.
Give suggestions on how the course or how the instruction could be improved.	Allowing for more practice problems as well as possibly going into more detail on explaining concepts. While all of this was done to a degree, I still found myself fairly confused at times.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Nothing necessarily did not work. More practice problems, allowing us to interact with each other, would increase the class engagement.
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Comment on strengths and weaknesses of the instructor	It was a good semester and she is very friendly, I just personally did not learn well from her teaching methods
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Comment on strengths and weaknesses of the instructor	Could have done a better job with the way that the notes were presented, and how they were organized. Also could have been more upfront with the decision to use calculators on the test. I liked that her tests were fair and focused more on understanding the concepts, instead of just having us work super hard problems.
Comment on strengths and weaknesses of the course	The homework was way to hard, when it didn't need to be, but it balanced out becasue the tests were fair in terms of understanding the concept.
How could the instructor improve his/her teaching style?	Be more organized in presenting the notes.
What did you like most about this course? Why?	What I liked about this course is that it really helped inprove my abilty in think about math concepts in 3D and geometically.
What did you like least about this course? Why?	Some problems were just ridiculus in how they were set up and what they were asking.
Give suggestions on how the course or how the instruction could be improved.	Not have the homework be as hard as it was, and instead focus more on understanding the actual concepts of the course material.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Make the homework focus more of the concepts rather than have it just be a super hard problem to solve.
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Comment on strengths and weaknesses of the instructor	Instructor was knowledgeable of the material in the class and communicated it effectively, but time constraints and the speed of the class made it difficult to keep up.
Comment on strengths and weaknesses of the course	The class notes taken and recommendations by the instructor were very helpful, however the webassign hw was not reflective of the tests.
How could the instructor improve his/her teaching style?	Possibly by asking more questions to engage the class and cement material in students.
What did you like most about this course? Why?	Teachers wee invested in the material and were able to communicated it effectively to us, this way I will remember this material in future classes
What did you like least about this course? Why?	The speed and pacing of the class, and the homework not being very reflective.
Give suggestions on how the course or how the instruction could be improved.	Perhaps spending less time on chapters 1 and 4-5, as these were easier concepts to understand than 6 and 7, which we had less time to cover.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Probably by engaging the class by asking more questions and examples to engage the material.
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Comment on strengths and weaknesses of the instructor	The teacher was really great at explaining concepts. Sometimes she would move very quickly and it would be hard to keep up but she was always willing to set up times to meet outside of class and explain questions.
Comment on strengths and weaknesses of the course	The test would not some of the material that we learn with other questions weighted heavily. If the questions on the test were worth less points, it would be easier to do well.
What did you like most about this course? Why?	Improving in test scoring.

What did you like least about this course? Why?	Sometimes I felt that my TA was not super willing to help since she did not respond to my emails asking questions but she eventually did and I found that having a tutor worked best for me.
Give suggestions on how the course or how the instruction could be improved.	The course can be improved if the teacher possibly slowed down a little while teaching the material. It would also be helpful if the notes were published online.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Incentives
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Comment on strengths and weaknesses of the instructor	Sarah was a really great instructor! This is my second time taking Calculus 3 and I now have a much more solid understanding of the material.
Comment on strengths and weaknesses of the course	I hate Webassign as always but I know that this can not be changed. But overall the notes were very useful and the 3D explanations of certain portions of the course were very useful for comprehension on how to view 3D figures graphically.
Comment on strengths and weaknesses of the lab (if applicable)	The recitation portion of the course was very useful seeing as new material was taught in the recitation sessions.
What did you like most about this course? Why?	I liked that she included the notecard submissions in an effort to get to know us more. Not all professors ask to know more about us personally, especially in a huge lecture hall class.
What did you like least about this course? Why?	I wish they included course notes online. Sometimes it can be difficult to keep up with the definitions in class. Or at least include the examples from review sessions online to use for practice.
Give suggestions on how the course or how the instruction could be improved.	Maybe include more examples for different sections of the material. Examples were very useful for solving homework problems.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	I don't honestly know how Calculus 3 could be more engaging. The material is not that interesting so I don't think there is much you can do about that.
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Comment on strengths and weaknesses of the instructor	Sometimes it was difficult to follow along with the lesson because keeping up with writing everything down was challenging. Other than that I thought the material was laid out well and the in class examples were very helpful.
How could the instructor improve his/her teaching style?	More examples are always helpful, and sometimes a long, slow example where each step is explained can provide a lot of clarity on a confusing subject.
What did you like most about this course? Why?	The tests were fair and the notes and in class examples were good preparation for each exam.
What did you like least about this course? Why?	The notes were sometimes back and forth between sections which was confusing. Sometimes different concepts were taught a bit differently in recitation and lecture which could be confusing if you didn't know exactly what was going on.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	Asking questions in class was intimidating because of the large lecture setting.

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How could the instructor improve his/her teaching style?	I just always like to have as many examples as possible but each student learns differently!
What did you like most about this course? Why?	The instructor was very understanding and responsive. If you reached out asking for help she always made a way to help, was very clear on instructions and just an overall good professor!
What did you like least about this course? Why?	Nothing, everything was super fair, all the teachers were understanding and I would recommend it to anyone taking the class after me.
Give suggestions on how the course or how the instruction could be improved.	Mix in more examples with the heavy theorems so theirs more ideas of how to apply it.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	I feel like getting the class engaged more will be class specific but maybe like a weekly quiz that just checks where you're at in understanding the material. It could be something used as attendance so students would not stress about it but still try so they can see where they are at in understanding the current material, I think that would cause a chain effect of students being more focused in class.
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Comment on strengths and weaknesses of the instructor	She wrote fast; otherwise, she was pretty good at pacing the class.
Comment on strengths and weaknesses of the course	Last section rough
Comment on strengths and weaknesses of the lab (if applicable)	Andrea did really well; wish it was dedicated to only practice problems, but I understand content density
Give suggestions on how the course or how the instruction could be improved.	Pace better
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Comment on strengths and weaknesses of the instructor	Runs through material too fast to gain a full understanding in class.
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Comment on strengths and weaknesses of the instructor	She seems to know a lot about the subject but does not communicate her knowledge very well. She often got confused in front of the class or had a mistake in her notes and was never really able to rectify the mistake which made some concepts confusing.
Comment on strengths and weaknesses of the course	The WebAssign homework would sometimes looked nothing like what we were doing in class and thus were very hard to figure out. If the homework looked more like the class examples that would be helpful practice for students.
How could the instructor improve his/her teaching style?	It always seemed very rushed and I think she was trying to get absolutely everything in her notes written on the board, but I think it would have been okay to say some of it out loud and not write it word-for-word on the board. It would make both the teachers and the students feel less rushed and stressed.
What did you like most about this course? Why?	I enjoyed learning the concepts and putting them into practice because I genuinely enjoy calculus
What did you like least about this course? Why?	It felt like we were always racing to get ahead of something so it felt very rushed.

Give suggestions on how the course or how the instruction could be improved.	WebAssigns should match up more with what we do in class. Either more time needs to be spent on chapter 7 or it needs to be explained better because it did not make much sense even though the rest of the course was easy to understand.
How can we change this course to encourage you to engage more fully during class? (Think about what worked and what didn't work.)	The recitations were better as far as getting students to engage. I think the lecture was just so large that people felt weird engaging.