

**Course Evaluation Form
Fall 2023 – Math 121-03
Professor Ryan Alvarado**

1. How often did you:

Prepare for class: **often**

Attend class: **always**

Participate in class: **often**

Complete assignments: **always**

Meet with professor(s) outside of class: **always**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

Writing down the in class notes, reviewing the online course notebook, and attending office hours.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

Very engaging and interactive and made personal connections with the class.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

Mathematical problem solving skills and understanding of calculus

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

It was very well organized and was at a pace that wasn't too fast for me to understand so I felt confident going into every exam.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Exceptional engagement with students and inclusive classroom environment and very helpful at office hours.

Additional comments.

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2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

Professor Alvarado does an incredible job of organizing course materials, so it's been relatively easy for me to improve my course knowledge. There are always more practice problems to do and notes to review.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

His constant energy through every lecture is contagious, making me excited about the concepts we are learning, too. Although I don't think math is a passion of mine, Professor Alvarado's class made me understand the appeal.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

Of course, I gained thorough Calculus 2 knowledge in this course, learning concepts I'd never seen before. It also showed me the discipline required to succeed in a college math course.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

The course was paced exceptionally well. We moved relatively fast, covering a wide range of topics, but we could also stop him and ask a question. He always actively listens, showing genuine care for each question. Lectures were very well organized, and even interconnected. He'd often reference a part of a lecture from several days, or weeks, prior, showing a clear and interesting connection.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Office hours, like everything else, are welcoming and well-structured. It is always a pleasant environment, as he provides a safe space to ask any questions about math or anything else. He also responds to emails very well, going above and beyond to help his students.

Additional comments.

Professor Alvarado is a truly exceptional professor. I've never had a teacher be so organized, consistently energetic, and caring. The class is a decent amount of work, naturally, but he provides a great support system. In class today, he spoke about the importance of reviews this year, as the college will make the decision of whether to tenure him. I could not more highly encourage the college to do so.

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2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

I'd say providing online notes from all the lectures was a huge help as someone who struggles with taking notes. I'd also say the homeworks helped a lot, being just long and difficult enough to both push you and allow you to understand the material well.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

Professor Alvarado taught every lecture with passion and joy which rubbed off on me. His joy for the subject made me enjoy calculus II as well. During office hours and in class he would always answer questions clearly and would push us enough that it was challenging but also fun. Going into calc 2 I thought I wouldn't love it, but prof Alvarado has made it a fun experience for sure

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

I would say that I've gained a strong understanding of calculus 2 (of integration, series, and polar coordinates) and a strong foundation of what it takes to make a mathematical proof.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

I thought the structure for the course has possibly been the best I've had so far at Amherst. Although 2 problem sets a week are a lot at first glance, they really prepare you for the exams and make the course work extremely clear and easy after practicing so much. The lectures went at a good tempo and the course was designed in a very fair way— if you put in the work you should do well.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Prof Alvarado has always been an engaged lecturer, bringing passion to each and every lecture while also answering every question clearly, no matter how obvious. His office hours are always useful and his comments on exams are clear and consistent from what he says he expects from us.

Additional comments.

Professor Alvarado is an amazing professor who I definitely love to take again!

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1. How often did you:

Prepare for class: **often**

Attend class: **always**

Participate in class: **often**

Complete assignments: **always**

Meet with professor(s) outside of class: **rarely**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

I made the most use of review my notes and the class notebook to work on problem sets, and the examples provided were incredibly helpful when I felt confused.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

Professor Alvarado always brought positivity and energy to keep the lectures from getting dull, and to keep students engaged. He showed examples that went beyond course content, but were interesting demonstrations of what we were learning.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

I developed new ways of thinking through math problems so that I didn't feel helpless whenever I saw questions that I hadn't seen before. Unlike past math classes, there were problems that were different from the in-class examples that didn't make me feel helpless. Instead I was able to approach such questions and see how the examples related.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

The way the course was structured was helpful to my learning, I really relied on the key concepts sheets when reviewing for exams, and I was able to quickly go over what I needed to know. I liked seeing the in class examples, though at times I felt I didn't need to sit through the whole process when I understood the concept at first. However, there were also times when I benefited from seeing multiple examples when a concept wasn't intuitive, and I know other students did too. Professor Alvarado cared about making sure each student understood, and that no one should feel shy about asking questions in class.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Prof. Alvarado was always kind and helpful, and he fostered a positive environment in the class. He made me feel comfortable to be in that class, and he was always very accommodating. Although my schedule prevented me from getting help during office hours, I know that I could have if my schedule was different. He was incredibly accommodating when trying to reschedule an exam due to a conflict, which helped a lot when I was stressed about it. Feedback on exams was always incredibly prompt in a way that I haven't had in any other class, and I really appreciated it.

Additional comments.

I enjoyed the class and would take another math class with Prof. Alvarado

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1. How often did you:

Prepare for class: **always**

Attend class: **always**

Participate in class: **sometimes**

Complete assignments: **always**

Meet with professor(s) outside of class: **often**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

I went to office hours to complete homework assignments because Professor Alvarado always answered my questions clearly and helped clarify what I was confused about in class. I also rewrote all important notes before exams to study.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

Professor Alvarado's enthusiasm made the topics a lot more interesting for me. His tips during office hours also helped me imagine concepts in different ways, making them easier to understand.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

How to prepare for exams and the importance of learning from homework as we go.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

Professor Alvarado moves at a very fast pace, but it becomes more manageable as the semester goes on. He is always very well prepared for class. His presentation is extremely clear and connects all topics to make the class flow.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Professor Alvarado cultivates an inclusive learning environment, is always available for students outside of class, and always gives constructive feedback on coursework.

Additional comments.

Professor Alvarado is an excellent professor and I attribute the majority of my success this semester to him.

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1. How often did you:

Prepare for class: **always**

Attend class: **always**

Participate in class: **rarely**

Complete assignments: **always**

Meet with professor(s) outside of class: **rarely**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

When I took clear notes and used the uploaded online notebook from class, my ability to easily finish homework increased.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

He is very passionate about his teaching, which makes the class enjoyable. I liked how he was always enthusiastic and made class time engaging. He made sure to clarify if there were any questions, and he would show us examples of problems that went beyond so that we could see the real-life applications of our work.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

I've gotten better at combining topics to solve more complex problems.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

It was helpful how we did lectures in class, provided more than enough office hours for our questions if needed, and then gave us access to his notes from the lecture afterward. This combination made homework and test prep very manageable.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

He is very approachable and made it easy to seek help with him outside of class. He made room for questions in class and answered them all in full and with patience.

Additional comments.

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2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

Throughout the progression of this course, I learned that the most valuable way I could improve my learning was by looking at the comments left on all my assignments and bringing any concerns I had to Professor Alvarado during Office Hours. This strategy helped me identify any lapses in my understanding, as well as reoccurring errors in the presentation of my answers.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

Professor Alvarado greatly contributed to my newly-found interests in mathematics. Before going to college, I was very hesitant on taking any upper-level math classes; my calculus teacher's lectures in high school were boring and uninspired. However, as I walked into my first Calculus class with Professor Alvarado, I was met with enthusiasm and alacrity. While the subjects he taught were complex, the detailed explanations and examples he offered made them easy to understand. Moreover, his mathematical brilliance manifests in the clear and concise answers he provides when a student is struggling to grasp a concept. Specifically, I admire the rigorous pace of his lessons as it forces me to stay engaged during class. The combination of these techniques have stimulated my intellectual interests in mathematics, as I am planning on taking Multi variable Calculus next year.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

Perhaps the most significant skill that I gained during this course is how to effectively present my answers. While coming to the right answer is important, it is equally important to know how to present your answer to your reader. Professor Alvarado emphasized the importance of clean and concise work by scrutinizing my calculations and correcting any errors that I committed. This

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

Upon reflection, I can confidently say that Professor Alvarado and his style of teaching has sparked my interest in mathematics. The pace of his class, while rigorous, helped me stay engaged in class. The clarity of his expectations and future assignments helped set me up for success. It is worth noting that he is just as helpful outside the classroom as he is in the classroom. His office hours proved to be crucial to my success in Calculus.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

In my opinion, the best types of teachers are those who are passionate about the subject in which they teach. Professor Alvarado's passion for mathematics shines through his upbeat/energetic tone as well as through the depth and complexity of his lesson plans. As a result, he cultivates an environment in which students feel comfortable sharing any concerns/confusions as they know

that he will address their questions with joy. And if he doesn't have time to answer your question in class, you can rest assured as he will personally help you work through a problem during his office hours. For these reasons, I strongly recommend him for any promotion process he may be a part of.

Additional comments.

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Participate in class: **sometimes**

Complete assignments: **always**

Meet with professor(s) outside of class: **sometimes**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

Going to office hours really improved my learning in this course, not only because I was able to ask questions about the material but also because it was an environment where I was able to be very productive and finish my homework far faster than I could had I not gone to office hours. I also went through my notes and did the exercises Professor Alvarado left for us that we were encouraged to do before the next class, and doing these exercises improved my learning a lot as I was able to work through additional problems to understand why the formulas we were given worked.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

This course had a big impact on my intellectual interests. Before taking this course, I was very apprehensive about calculus because I took AP Calc BC in high school, and it was the hardest class I've ever taken. This course reminded me that I actually found math fascinating, and I was able to both relearn the material I had previously covered in high school from a new perspective and also better understand the purpose behind everything we learned.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

Although I previously learned a lot of the content covered in this course in high school, this course gave me a much deeper understanding of that content. In particular, this course taught me so much more about power series; previously, while I had learned how to do some problems with power series, I didn't properly understand what a power series was or what the point of learning about them was. Professor Alvarado taught power series in a very in-depth way that allowed me to easily understand what they were and the greater purpose behind our learning.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

The overall design of the course was very beneficial to my learning. I found the pace of the class to be very manageable so that I was never lost but also never bored. Professor Alvarado was very clear about his expectations from the start of the class. I found that the homework assignments were well spaced out so that I was never overwhelmed but I still had plenty of examples to work through. The homework assignments were also paced out well so that they each stayed up to date with what we had most recently learned in class but it was still possible to start the homework early to avoid stress.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

My interactions with Professor Alvarado were overwhelmingly positive. He was very approachable, and I never felt apprehensive about coming up to him with a question. In class, he

always put in effort to answer each student's questions thoroughly, and I never felt that he would make anyone feel bad for asking a simple question. He also made efforts to ensure that his office hours worked with everyone's schedule and was open to offering additional office hours if he ever needed to adjust his office hours for a time conflict. He also encouraged students to contribute to the class themselves, where he welcomed students to demonstrate memorization "tricks" they had previously learned or create new names for methods we were learning. He also put in a great deal of effort to get to know the students outside of class; he asked students about their personal lives and made the effort to show up to orchestra concerts, sports games, and other events students were involved with outside of class.

Additional comments.

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Attend class: **always**

Participate in class: **sometimes**

Complete assignments: **always**

Meet with professor(s) outside of class: **rarely**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

The most effective things that I did for this course included putting as much effort as possible into completing homework, always attending class and remaining engaged during lectures, and taking the time to take practice exams and study before exams.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

I came into 121 very excited to take another math course, as I enjoyed my calculus classes in high school. Professor Alvarado exceeded expectations. Intermediate calculus was not taught to me well in high school, and Professor Alvarado was able to teach the concepts in an engaging and enthusiastic manner that made the material easy to understand and comprehend. Although I do not intend to major in math, his teaching has made me passionate about the material again and I would like to take a few more math classes in my time at Amherst. I also think that my study skills have been greatly developed in this class. The class required avid attention during class to succeed, and I thoroughly enjoyed the way in which it was presented. I found passion in learning that a couple of my classes this semester zapped away.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

As previously stated, the course developed my intellectual and study skills quite significantly. I was passionate about the class and the material, so I absorbed quite a bit. Technically, I was able to solve trig integrals, something that was very difficult in high school. Series and sequences were another concept that I was introduced to in high school but was not taught well, but Taylor series were my favorite part of this class.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

Professor Alvarado's class structure is very conducive to learning as long as you are willing to show up and put the effort in, and he makes it very easy to do that. His lectures are fast paced but understandable, and I appreciate that he takes notes in real time, as that does put a good pace to the class. If you missed any class, which I made sure not to do this semester, I imagine it would be a little but difficult to make up for the gap, but he is very easily accessible outside of the classroom in office hours and via email. There have been days where my focus waned, but as long as I was able to zone in enough to take notes and engage enough to absorb the material, the homework assignments filled the gaps. There were a few nights where I was up rather late finishing problem sets (some did, unfortunately, lead to dad-teaching-you-math-at-the-kitchen-table-esque tears), but those were due to my own lack of time management. The course load is not overly demanding, but the department always asks for your best foot forward. There were times when it felt like the class was always asking for 110% when I maybe only had 80 or 90% to give at the time, which did lead to burnout, but the class also taught me to manage those stressors. Everything in the class was done with intention, which is very valuable to me as a student.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Professor Alvarado is readily available in and out of the classroom and is always receptive to questions. He is pretty good at reading the room and does make the occasional cold-call choice, but I think he typically makes good choices and encourages people to answer questions, even if they're unsure of the answer. He also always come to the classroom with a smile on his face and greets students individually, which means a lot to me. I have had a few conversations with him outside of the classroom about just daily life, and he is always engaged in what I have to say. He always grades work quickly and gives good feedback. he can be a stickler for exactly what he's looking for on exams- there is an adjustment to be made about not just finding the right answer, but also giving very detailed and correct steps along the way. I viewed this in both a positive and negative light, and I think that perhaps the transition between those two things could be done a little more smoothly and with a little more graciousness. Overall, Professor Alvarado is an amazing professor- probably my favorite one this semester and has made MATH 121 a highly enjoyable experience for me. I am excited to continue coursework in the department, hopefully with him.

Additional comments.

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Meet with professor(s) outside of class: **often**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

In class, I asked questions when I needed clarification about a problem or the material he was teaching. Professor Alvarado holds an office hours multiple times a week, where I can ask more in-depth questions about what I am learning or about the homework.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

I love attending Professor Alvarado's class because he encourages us to think deeply about the structure and idea of mathematical concepts. He often tells us about how the calculus he is teaching was researched and how it applies to research he and others are currently doing.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

In Professor Alvarado's class I have learned to think critically and carefully about problem solving. Before we start any question we analyze each question and talk about what approach we should take, why we shouldn't take others, and the details we should see in each problem.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

I had taken a calculus class in high school, but my understanding of calculus has grown exponentially. His presentations are clear but go into depth to set us up with a strong foundation. Our homework often has challenging problems that encourage me to think deeply about what I learned in class.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Professor Alvarado is one of the friendliest and most approachable Professors I have ever had. The questions I ask him in class are met with enthusiasm. He works through any confusion I have with patients, and I appreciate his ability to talk me through key concepts and find new ways to understand problems.

Additional comments.

Professor Alvarado is a gifted teacher. The way he talks to us in class is engaging. His energy makes me want to learn about math, and made me a more analytical thinker. He truly cares about his students and is a great figure to have in the Amherst Math Department.

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Attend class: **always**

Participate in class: **sometimes**

Complete assignments: **always**

Meet with professor(s) outside of class: **often**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

Going to office hours was super helpful. My professor made sure to check with each person to answer their questions, no matter how busy office hours was.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

My professor was always so positive and engaged in teaching during class and during office hours. Every time I would ask my professor a question, he would explain it in multiple different ways to make sure I fully understood. For example, I could not understand this one problem on the homework regarding trig substitution. I asked him in office hours, and he went through possible different ways to think about the problem, and he walked me through how to solve similar problems.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

The most significant skill I learned during this course is to continue ask why. Why do these theorems work, why can we solve a problem a certain way, etc. My professor really emphasized understanding why things happen in math, and it really grew my love for math.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

The pace during class was pretty fast, but my professor made sure to answer any and all questions during class. And he would always emphasize how much he enjoys people coming to his office hours. He would say to stop by office hours if anything in class went too fast or was confusing. My professor was SUPER clear about expectations of assignments and exams. At the beginning of EVERY class, he goes over upcoming assignments and/or exams to make sure everyone is aware.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

My professor was always super interested in my life outside academics, such as sports and my mental health. He always asked me about my upcoming games. He is always so passionate when I speak to him which is so amazing to be in a learning environment with. Regarding feedback, he is very informative on exams what I did wrong and why it would be wrong.

Additional comments.

Professor Alvarado is by far my favorite professor I have. He makes it so fun to come to class just through his energy and passion about what he is teaching.

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2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

Doing the homework assignments on my own first before going to office hours helped a lot, instead of just immediately going to office hours. I also really enjoyed the material and made an effort to pay attention in class.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

I was terrified of math before this course and told myself I would never take another math course at Amherst College again after I took calc 1 here. I was required to take this course for my major and ended up really loving the course and its content. Professor Alvarado was such an amazing professor and I'm glad that I took this course with him. He knows how to teach math in a way that is straight forward and clicked with me a lot. Now I like math!

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

Being able to understand some of the uses of computing integrals/derivatives that is not very apparent in calc 1. Also the use of algebra in calculus was really important in this course, so I really brushed up on those skills. Other than the content of the course, which is fairly straightforward, I learned to become more scheduled and consistently keep up my skills in learning subjects, since the content in this course consistently builds on itself.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

The pace of the course was good in my opinion. There were three weekly assignments, which seems like a lot at first, but they are perfectly curated to not seem overwhelming. Well, there was a L'Hopital's Rule assignment in the middle of the semester that had around 20 questions which took way too much time and the Math Fellows couldn't even figure out some of the problems, but that is just one assignment. The rest felt really good and I'm surprised that I was able to turn them in all on time (I'm proud of myself).

The exams were spaced apart well too and I always felt pretty prepared for them. Professor Alvarado's grading for the exams are 20% for your best exam, 15% for your second best, and 10% for your worst I'm fairly sure. I think that this is a really good grading scheme to make students not feel overwhelmed with all the content they are being taught because some times are just busy. Also the expectations for the exams were always super clear, I have never had a math professor or professor in general be really good with exam preparation the way Professor Alvarado is. It really made studying far more productive, rather than stressing about curveballs. He wants to teach us math and it was enjoyable to learn it when we knew what we were meant to learn.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Professor Alvarado was awesome with connecting with students. I'm a fairly quiet student, but he would remember the things I said in class and made an effort to try and connect with me. I really appreciated how he would go above and beyond for each student and made sure we were on track or reassure us that we were doing well. He was good with answering questions in class and making sure there was no ambiguity in our comprehension of the subject. He would give good feedback on the exams and I would try to apply it on my future exams afterwards. He has a passion for math, knows how to teach it, and knows how to make students improve even if they do understand what they are doing for the most part.

Additional comments.

Thanks for an awesome semester! I'm excited to take more math!

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Fall 2023 – Math 121-03
Professor Ryan Alvarado**

1. How often did you:

Prepare for class: **always**

Attend class: **always**

Participate in class: **often**

Complete assignments: **always**

Meet with professor(s) outside of class: **often**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

I attended office hours as much as I could, which was great for completing homework assignments and reviewing class material.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

Professor Alvarado outlines his class notes in a way that is engaging and not difficult to follow along. Professor Alvarado often outlines the steps that should be taken when solving a particular calculus problem, makes charts and tables to illustrate the relationships of mathematical concepts, and walks through many types of questions that we will see on homework assignments and exams.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

While taking Math 121 with Professor Alvarado, I learned new methods of integration, including integration by parts and trigonometric substitution. I also learned about sequences and series, comparison tests, along with polar coordinates and how to draw polar curves.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

The design of the course is structured quite well, as the integration techniques learned in the beginning are the backbone for everything else that is taught for the rest of the semester. The pace of the class is not slow, but NOT too fast where the work and material becomes too difficult to manage. The routine homework assignments due every Tuesday and Friday were a great review of the week's material and a wonderful application of learning from the information taught in lectures.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Professor Alvarado is a very fun and enthusiastic professor which translates into an engaging classroom environment. He is always looking out for the best interest of his students and is happy to answer questions during class and office hours. Professor Alvarado takes feedback from his students about the students about the course and always checks to see how well we doing with the new material. Professor Alvarado makes a strong effort to get to know each of his students and in fact, he knew every student's name by the second day of class! Professor Alvarado gives his best effort every day for his students with the expectation that the same will be given back to him.

Additional comments.

Professor Alvarado has been one of my favorite professors during my first semester and made me excited to come to class each day!

**Course Evaluation Form
Fall 2023 – Math 121-03
Professor Ryan Alvarado**

1. How often did you:

Prepare for class: **always**

Attend class: **always**

Participate in class: **often**

Complete assignments: **always**

Meet with professor(s) outside of class: **sometimes**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

Going to office hours and utilizing the materials given out by the professor benefitted my learning the most in this class. I done practice exams and review packets posted on Moodle as revision and saw my exam scores go up throughout the semester.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

Professor Alvarado taught this course with the mindset that we will continue doing math at Amherst and I found that to be the most effective way he shaped my interest around math. I specifically remember a speech he gave about power series and Math-121 as a whole, where it can take you further down the line and why what we are learning right now is so important. It was a very captivating display of his passion for teaching and I would definitely say it solidified my choice for math as a major even more.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

Developing my intuition in math has been the most pronounced skill that I have developed. Having done a lot of studying for the course, as well as attending office hours, I learnt how to better deduct what a question needed me to do and it has increased my confidence when doing math. Furthermore, having to learn multiple new topics weekly was a step up in pace, so I had to learn how to effectively review my notes so I wouldn't forget them over time.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

The pace of the classes was definitely faster than what I was used to, but I would say it was quite beneficial for me. It required a lot of attention and focus, so I always had to remain attentive in class. Weekly homework assignments were manageable, and Professor Alvarado always made it clear what he expected from us on the work. The course structure was very digestible and made logical sense when moving between topics.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

I would usually go to office hours at least once a week and, in that time, Professor Alvarado was always extremely helpful. Towards the start of the semester, we had a one-on-one meeting and I discussed a lot of my worries about college math and high school math, and I found myself using a lot of his advice from that interaction further down the line. In class, he would answer any question that students had and was encouraging when we made mistakes. He always promoted putting your hand up and getting the wrong answer, rather than not trying at all, which I though was a very good teaching tactic.

Additional comments.

**Course Evaluation Form
Fall 2023 – Math 121-03
Professor Ryan Alvarado**

1. How often did you:

Prepare for class: **rarely**

Attend class: **often**

Participate in class: **sometimes**

Complete assignments: **often**

Meet with professor(s) outside of class: **rarely**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

One day after class, for example, Professor Alvarado showed us an interesting theorem due to Riemann. It was related to the course, having to do with absolutely convergent and conditionally convergent series, however it did not seem to be in the syllabus. This was excellent; I asked Professor Alvarado about it after class and he was kind enough to take some time to explain the theorem in more detail, including as I remember a rough idea of the proof. This made me more interested in analysis and math in general, and I spent time outside of class thinking about this theorem. Professor Alvarado's enthusiasm for math extended beyond the curriculum somewhat, which made the material more engaging.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

I felt that the assignments were paced well, and the discussions in class were helpful.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

Professor Alvarado was very happy to answer questions in class, and was not at all discouraging and in fact encouraging when a response to one of his questions was incorrect or off in any way. It felt like an atmosphere where one could ask just about any math question, no matter how trivial, and get a helpful response.

Additional comments.

Office hours, though I did not attend them regularly, were very busy when I did go, and it was difficult to have time to ask questions. This seemed like more a function of how many students were in the classes taught at the time.

Course Evaluation Form
Fall 2023 – Math 121-03
Professor Ryan Alvarado

1. How often did you:

Prepare for class: **always**

Attend class: **always**

Participate in class: **always**

Complete assignments: **always**

Meet with professor(s) outside of class: **sometimes**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

At first, I found it hard to catch up with the class. However, I actively attended TA hours and came to office hours to ask for help. The contagious enthusiasm of Professor made me feel comfortable asking. He was really amazing as he always expressed his willingness to answer all questions from his students. Also, when I came to ask for tips, he gave me really useful tricks and plans of attack, which helped simplify difficult concepts a lot.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

The Professor managed to simplify difficult concepts and stimulate my interest in diving deeper into each lecture. His clear instructions combined with a lot of examples helped me visualize effectively how to apply seemingly cumbersome equations into real exercises. Also, step-by-step plans of attack helped me know where to start and arrange my thinking before getting at it.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

It's logical thinking. By learning to divide problems into smaller cases and develop strategies for each case, I find it much easier to solve problems step-by-step.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

Homework is really helpful in helping me revise old lessons. The online course notebook of Professor is an amazing source. Whenever I feel unsure about something, I would turn to it. He arranges it in a perfectly convenient way (like notes for midterm 1, notes for midterm 2 with dates on it). Therefore, even when I was on sick leave, I was not worried about missing notes because I know exactly where I could find them on Moodle.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

He's really amazing. He always exudes positivity and makes me excited to attend to his lectures. He always compliments students whenever they ask questions, even when their questions sound naive. He creates a comfortable learning environment!

Additional comments.

**Course Evaluation Form
Fall 2023 – Math 121-03
Professor Ryan Alvarado**

1. How often did you:

Prepare for class: **often**

Attend class: **always**

Participate in class: **sometimes**

Complete assignments: **often**

Meet with professor(s) outside of class: **always**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

Frequent, consistent participation in office/math fellow hours.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

Professor Alvarado was a dynamic and engaging professor, his methods underpinned by a commitment to support his students even as he challenges them to grow.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

Critical thinking, improved reasoning and analysis.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

Presentation of information was incredibly well thought-out, an online notebook was used as a whiteboard which doubled as a resource outside of class and visual aids were employed in various ways to suit the specific topics we would cover.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

He was friendly, warm, inviting conversation and thought-provoking. Correspondence has always been quick, and always willing to work with students outside of class, or introduce them to alternatives when he cannot.

Additional comments.

Course Evaluation Form
Fall 2023 – Math 121-03
Professor Ryan Alvarado

1. How often did you:

Prepare for class: **always**

Attend class: **often**

Participate in class: **never**

Complete assignments: **often**

Meet with professor(s) outside of class: **sometimes**

2. Using specific examples, please briefly describe what you did that you feel was particularly effective for improving your learning in this course?

For this course, I found that it was especially helpful that I prepared thoroughly before each and every class, and revise my notes afterwards to retain the information as best as I could. I found that as this course continued on through the semester, that it was also effective to practice certain concept that were not as familiar or stuck less by using the materials provided by the instructor on Moodle such as the extra practice worksheets or practice examples given in class to solve every now and then.

3. In what ways did this course and instructor stimulate or shape your intellectual interests, thinking, and/or imagination?

My instructor on their own is incredibly enthusiastic about this course and the material which I believe fosters genuine curiosity and an interest in the topics of the course for every student in the room. Every day, he came in with a smile on his face, and was immediately ready to bring about an engaging lesson. With each class, this professor went above and beyond to explain not only the surface level, necessary components of the material, but made a true effort to expand on it's importance and relevance in the world of mathematics and on a broader scale more "real-life" oriented scale. I know for a fact that this sense of understanding I gained over the course of this class led me to discover an entirely new way of looking at math and allowed me to further develop my intellectual curiosity as I am sure it did for all the other students.

4. Please describe the most significant skills and/or knowledge that you gained or further developed during this course.

I would say the most significant skill I developed during this course was my ability to be proactive and strategically focus my attention on all the mechanics of the material that allowed the topics to come together. I discovered that this course is incredibly interwoven, and so to truly understand what I am learning down to the most minimal component is something that I have been able to hone in on a lot better relative to beforehand.

5. Considering the overall design of the course, how did the pace, presentation of information, clarity of expectations, assignments, activities, and/or discussions in the course impact your learning?

I appreciated the overall structure of this course and all the design factors that came with it. Personally, It can sometimes take longer for me to follow along with material quickly and so at times the pace did feel a bit fast, however, I know for a fact that most other students had no issues with the speed at which lessons were taught. Additionally, I am aware that the pace of this course is more or less similar to the pace of many other courses within the math department and so I think it meets the generally established expectations. I think the presentation of information was wonderful, especially because we were given so many resources to help support the retention of information and I think it allowed for each student to be successful overall. The instructor is always clear, and is always sure to provide all necessary information. Similarly, the instructor was crystal clear when it came to expectations as they were established early on in the semester within the first couple days of class. He also made sure to answer any questions that arose with ease and effectiveness. The assignments were extremely helpful as well because they

provided a clear picture of the types of problems we should expect to see, which allowed for even more clarity in regard to the material. I think by completing the assignments given, you are able to gain confidence with what you are learning and have a solid sense of how the same concepts will be outlined as the class goes on/when they appear on future assessments.

6. Please describe the nature of your interactions with the instructor in this course, including the instructor's engagement with student questions and ideas in class, their cultivation of an inclusive learning environment, their availability outside class, and the feedback you received on your course work.

The instructor is always more than willing to engage with students in class, and is genuine in his passion to improve understanding or foster curiosity & growth. When students share ideas, he enthusiastically acknowledges their question or comment, and creates a collaborative environment in which students feel comfortable and motivated to bring forth their own thoughts as well. This instructor is always sure to promote a positive and inclusive learning environment as he appreciates every student's effort to participate actively or passively if they so choose as long as they are doing so, and encourages students to voice their thoughts related to the material being taught. Additionally, this professor always made sure to provide availability outside of the classroom and would announce if there would be any changes at all at the beginning of lessons. Lastly, the feedback I received on coursework from them was always useful as they could always give me effective advice and guidance that greatly helped me to better understand where and how I needed to work on something.

Additional comments.

This instructor is by far one of the most incredible, qualified, and authentic professors I have ever had. I am so grateful that I had the pleasure of being a student of theirs, and I am privileged to have learned so much from not only their lectures, but from them as a person. I felt that I witnessed their work ethic in every facet of the class, and it was undoubtedly evident that they put in vast amounts of effort into teaching and helping their students. Even while distressed about my personal progress in the class or if I was struggling at certain points, they were always reassuring and made sure to help me strategize in a way that set me up for improvement moving forward. To say that being a student in professor Alvarado's class was a remarkably delightful experience is an understatement, and I can only hope that other students are able to gain as much knowledge, competence, and all around positivity as I did from having him as a professor.