



Dear Professor Ryan Alvarado:

Student Opinion of Teaching Questionnaire Results

This form contains survey results for ANALYTIC GEOMETRY & CALCULUS 1(MATH-0220)-1025.

Attached is a report in PDF format containing your Student Opinion of Teaching Survey results from last term. The report is best viewed and/or printed in color.

The evaluation results are broken down into three distinct categories. The first part of the report shows a breakdown of student responses to the quantitative questions. For each item, the number of students (n) who responded, the average or mean ($av.$) and standard deviation ($dev.$) are displayed next to a chart or histogram that shows the percentage of the class who responded to each option for that question. The percentages are above the number on the rating scale which increases from left to right, i.e. the number 1 equals the least favorable rating and the number 4 or 5 (depending on the scale) equals the most favorable rating. The sum of percentages will equal 100%. A red mark is displayed on the chart where the average or mean is located. To calculate how many students responded to each option, multiply the number of students who answered the question by the percentage for that option. For example, if 14 students answered the question and 50% responded to option 3 then 7 students marked option 3 for that item ($14 \times .50 = 7$). The standard deviation is a common measure of dispersion around the mean that may be useful in interpreting the results.

If your school had previously calculated norms, they will be on OMET's website (omet.pitt.edu).

The second part displays individual comments to each question in the open-ended section of the evaluation. All the responses to the first question will be listed together after the first question and then the responses to the next question will be listed together after the next question, and so on.

The final part gives you a profile of the student responses to the quantitative section of the evaluation. This is a chart listing all of the means for the scaled items with a dashed red line connecting the means.

If the number of respondents for any of the scaled items is fewer than seven, please be cautious in interpreting the quantitative results.

Office of Measurement and Evaluation of Teaching (OMET)

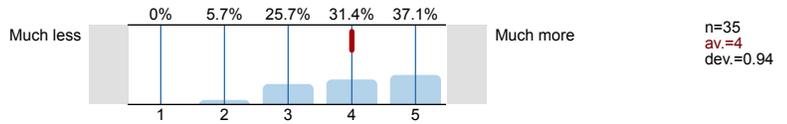
Professor Ryan Alvarado

ANALYTIC GEOMETRY & CALCULUS 1(MATH-0220)-10252161_UPITT_MATH_0220_SEC1025
 Fall 2015
 36 RESPONDENTS = 47.37% OF NUMBER REGISTERED

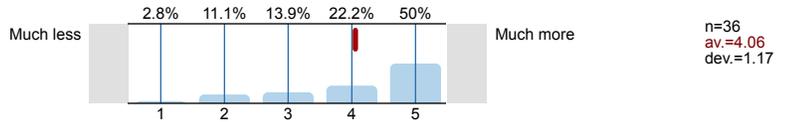


1. SELF RATINGS

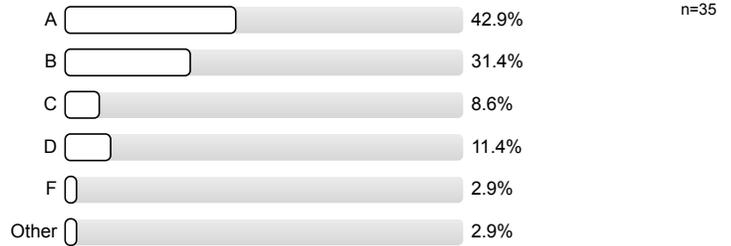
1.1) Compared to other courses at the same level, the amount of work I did was:



1.2) In this course I have learned:

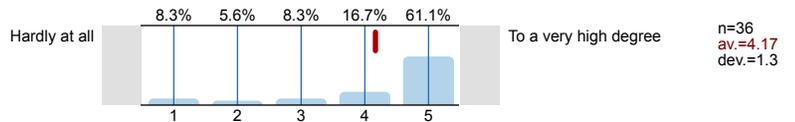


1.3) The grade I expect in this course is:

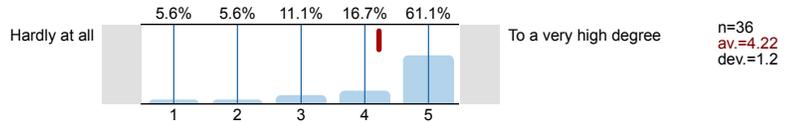


2. TEACHING EVALUATION

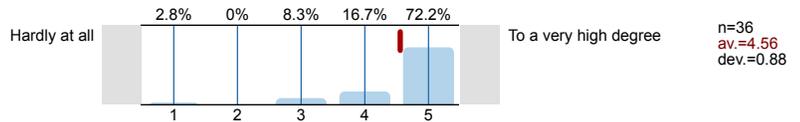
2.1) The instructor presented the course in an organized manner.



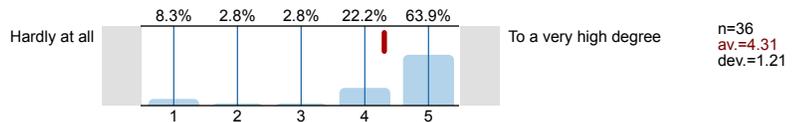
2.2) The instructor stimulated my thinking.



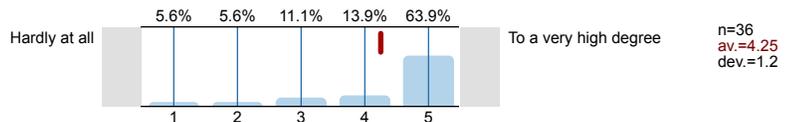
2.3) The instructor evaluated my work fairly.



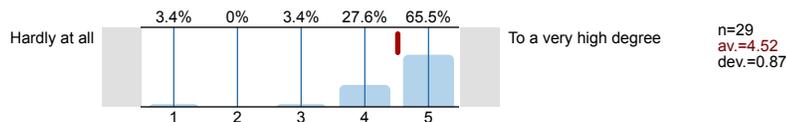
2.4) The instructor made good use of examples to clarify concepts.



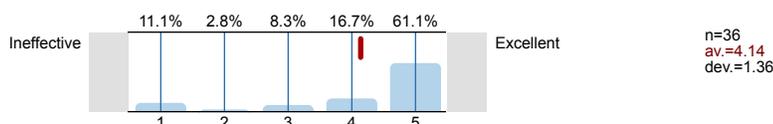
2.5) The instructor maintained a good learning environment.



2.6) The instructor was accessible to students. (Do not answer if no basis to judge)



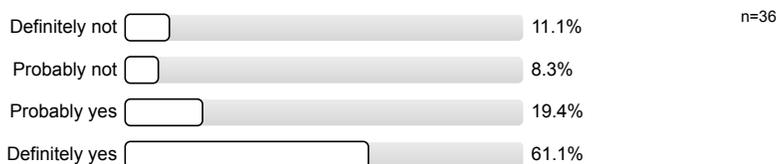
2.7) Express your judgment of the instructor's **overall teaching effectiveness**:



2.8) Would you recommend this course to other students?



2.9) Would you recommend this instructor to other students?



3. TEACHING COMMENTS

3.1) What were the instructor's major strengths?

- - Very solid understanding of the material
- - Encouraged asking questions
- - Good examples showing a wide variety of cases that may come up

- Ability to connect with the students and teach very complex concepts.
- Dr. Alvarado was very thorough in his teaching and made sure he didn't leave anything out. He was very good at explaining concepts that were hard to understand and has a good personality for teaching. Overall, a great professor. The best one i had this semester.
- Explaining everything thoroughly and giving many examples. Pushed us to do well for future math courses.
- Finding all kinds of problems that we may encounter and focusing on parts of the course that would be important for those continuing on to Calc 2
- He followed the book which made it super easy to learn and all of his material was very clear. He is one of two of my professors that I wish I could take next semester I learned so much. A lot of other calc teachers make calc like reading hieroglyphics, Dr. A does not do that.
- He is a very understanding professor that I think genuinely wants his students to understand that material and do well in the class.
- He is able to get teach.
- He knew calc very well and did make some parts interesting.
- He was really good at explaining high level concepts to me in an understandable manner.
- He would spend as much time as necessary after class to make sure everything was clear if someone had a question. He really wanted everyone to do well and tried to give people as many points as reasonably possible. He knows what he's teaching really well.
- His seems very passionate about the course. The upbeat nature of the class made it not boring, but his speed did make it very hard to actually process the information given.
- Incredible mathematician.
- Inspired me to do math. Makes students learn why we can use mathematical rules, rather than just taking them for granted. Interested in the progress of students. Quick pacing so that I don't drift off during class. Students have to actually put forth effort to do well in class.

- Large range of examples
- Logical thinking
Clearly knew the material very well
- Material covered in class was made understood extremely clearly.
- Motivating students to think
- My professor's major strengths are his tolerance for in class questions and his ability to clearly and efficiently answer questions through examples, explanation, analogy, and whatever other mediums he sees fit.
- None
- Organized in lecture and always came with a clear outline. Explained examples well. Always explained not just how equations, proofs etc. worked but why. I really liked how he gave us an outline of what we needed to know before every exam. Very approachable if you had questions, and very fair grader.
- Overall I thought Dr. Alvarado really connected with us as students and understood what we were and weren't understanding.
- Presented everything clearly in class and participation and attendance in class translated to better grades
- Professor Alvarado presents the material in an organized manner and keeps the classes interesting.
- Professor Alvarado was always on time for class. He always used a very good tone of voice in lectures. He was kind, respectful, sociable, communicated effectively the material and explained step by step how to resolve problems related to the material. He cared when students asked him questions and he made sure that students resolved their doubts. He was always approachable and helped me solve my questions at all times. Professor Alvarado knew very well the material to be covered in class and wanted students to learn not only how to solve problems but also to know proofs, theorems, definitions and to learn how to analyze and understand problems. All of his lectures were interesting and I enjoyed learning math with Professor Alvarado.
- Very approachable, interested in how his students learned and excelled, kept a welcoming classroom environment, very willing to answer questions in and out of class.
- Very clear in his lectures. Always available to help. The proofs are hard but I have benefitted a great amount from it. He is an excellent educator, and extremely organized. I feel as if I have learned a great deal of information in this class.
- Very intelligent and diligent, tells us what to expect on exam
- Very knowledgeable
- Very knowledgeable about Calculus
Had a passion for learning/teaching the subject - his enthusiasm was entertaining
Easy to get along with
- Very stimulating in lectures
Good at explaining ideas
Clear about what you need to know

3.2) What were the instructor's major weaknesses?

- - Sometimes moved too fast, never unreasonably fast though
- 1st midterm grade took awhile to get back, understandably
- All over the place.
- At times it seems as though the teaching pace was a little too fast paced and since there was no lecture recaps online if one was to miss a lecture, they would have to rely on either the book or another student's notes for lecture material.
- Can't really think of any, overall an excellent professor.
- During one of the exams it was noticeable that people were talking during it, somehow the professor did not notice. Not only is it not fair that friends are looking at each other's papers but it is distracting hearing the whispers.
- Have separate office hours for calc 1 and 2.
- He is too fast and does not help the students understand enough. I felt rushed and had too much anxiety. I did not like this teacher and it was too hard.
- He moved through the material way too fast. I would not have enough time to finish the point we were just learning before he moved on to another. There was no time for information to be absorbed and I feel like he spent a lot of time reminding me I should remember things from high school when I graduated high school almost 10 years ago.

- He sometimes explains his thought process a little too quickly.
- He would make occasional simple algebraic mistakes that would distract the class from the main point sometimes. Also, the class is pretty fast paced as he does go through the material quite quickly which could make students confused.
- I do not think he understands that not all of the people taking calculus one are going on to calculus two and that he will get some people in this class that really do not understand the subject well. He goes very quickly in class does not always write clearly on the board. I think he made the class unnecessarily difficult and though I understand that it is important for people to get as much out of the class as possible I also think that this class did not have to feel so geared toward people that had either already taken calculus once or already had an affinity for the subject.
- I thought the lon capa homework was pretty ridiculous. The problems were barely reminiscent of the material we covered in class or on the exams.
- It seemed like he thought everyone in class was in that course for the sake of learning calculus to its fullest application. Being a science major (where math to this level isn't necessary aside from filling a credit), I found this class a bit much. My other courses are intensive as well so I didn't have much time to memorize and learn to apply all of the proofs. Talking with other students I found that this was one of the few courses where this was necessary, as many of the other math teachers "understood everyone wasn't at school for math". Great teacher but definitely not one I would recommend to someone not at school for math.
- Lack of ability to simplify concepts so as to make it more understandable for students who do not understand the complex nature of calculus.
- No weaknesses found in his teaching or class.
- None
- None.
- Quickly going through topics. Teaching concepts more than implementation. Class difficulty was too high. Tests were so much harder than information learned
- Sometimes does not finish problems and leaves students really confused
- Sometimes goes through problems too fast
- Somewhat imposing - I find the environment to be repressive of questions when the instructors is so passionately knowledgeable and finds it ludicrous to perform a problem in an incorrect manner.
- Speed. The lectures go by so fast that you already have to have a good basis in calculus to follow along. I felt myself just scrambling to write everything down, rather than actually listen and follow along. Also the "conceptual" parts of the exams distracted from the actual math. I found myself trying, and failing, to memorize definitions before the exams and didn't have enough time to study the real point of the course, the actual math. Even if students do move on to calculus two, they won't remember the definitions, theorems, and proofs anyway because they only remembered them to vomit out on the exam. I guarantee that no one remembers a single definition or theorem off by heart by the end of the course, let alone the next semester.
- That he's not teaching Calc 2 next semester
- Went through the material very quickly and was sometimes hard to follow. He knows what he's teaching really well and sometimes goes very quickly through difficult concepts. He expects everyone to be moving on to Calc 2 and treats the class that way.
- nothing really, the class material was presented in a logical way, and we knew what our responsibilities were
- too knowledgeable? ;)

4. COURSE COMMENTS

4.1) What aspects of this course were most beneficial to you?

- - In depth analysis of material instead of cookie-cutter high school calculus
 - Much more challenging applications of concepts
- ?
- Attending lectures
- Calculus as a subject may be annoying for many students to deal with. I myself enjoy math very much but this course could be a burden on others students shoulders.
- Class and recitation.

- Even though I already took calc 1 in high school, this course opened my eyes more and showed me things I didn't see before or just went more in depth, which will help immensely in future courses.
- Everything! Even though I took AP Calc in highschool I felt as though I genuinely learnt the material in a much more through manner.
- Homework(The book problems, not LON-CAPA), and the example problems in lecture.
- I am a math major so it was a big help to my understanding of basic calculus.
- I feel this course has provided me with an exceptional foundation for my future math courses. The basics of calculus 1 are extremely essential to a math major's career, and this course has given me the confidence to proceed in my math career with confidence.
- I have learned many things outside of the realm of course material that has inspired me to go further with math than what is required in my major. Copies of proofs for tests were also useful.
- I now am better at quick mental math.
- I really got a good grasp on the main concepts of calculus
- In class examples
- In just a term I learned a lot about calculus that I didn't learn back in high school. I enjoyed taking this class, and I know that it will help me a lot for calculus 2. I think that I will apply everything that I learned in my future classes. This course made me become a more responsible student, it make me realize that in order to succeed in my career I need to work hard and if I need help, my professors will always be there to help me. For me, this course was challenging but I learned to study effectively and to organize better my time. Thanks to this class, I know that I can do well in my future math classes if I applied what I learned.
- It was good that it was offered at night.
- Learning how to learn something that doesn't come easy to me normally.
- Material was presented in a logical manner, and all the concepts seemed to build of each other. The extra credit opportunities on exams were really nice.
- Perfect pace of learning to stretch mind but still grasp concepts
- Recitation. I always left recitation feeling like I could actually follow along and take the time to pay attention.
- The base ideas
- The conceptual ideas of calculus were taught rather than just the calculations.
- The lecture material and the office hours.
- Theoretical parts made calc much more interesting than it already was
Gave good reasoning behind every step, helps to know why
- This class helped me learn how to study effectively and improved my critical thinking skills.
- none
- the practice problems, the lecture notes
- the way some problems used techniques from previous chapters because it kept me alert and built on the critical thinking aspect of math

4.2) What suggestions do you have to improve the course?

- Can't think of a thing. If you do the work in this class, you'll pass. It's as simple as that.
- Change Lon Cappa. Or get rid of it. It's bad.
- Either teach Honors calculus so that you can teach the more intricate parts of calculus to students who will appreciate and understand the additional knowledge, or don't focus too much on the intricate parts.
- Everything. He needs to slow down. Talk to the students. Do more examples and make the test do able for the students.
- Get rid of Lon Capa it is probably the worst system known to man. Nothing ever works correctly. You spend more time punching in the answers than you are doing the problem. Everyone hates it. I hope that the school can recognize how ungodly horrible that system is and get rid of it. Especially the problems have terrible numbers that cause problems for the input of the answer. Seriously guys, all you have to do is make a system that reviews how to do problems. Then it is up to the students to do well on the exams.

- I think the biggest help would be to A) remove the conceptual part of the course and B) videotape the lectures and put them on courseweb. That way when you're struggling to follow along in class, you can watch the video over again and pick up what you might have missed. Yes, there will likely be a drop in attendance, but does it matter? The primary point of this class is to learn, so it shouldn't matter if it's in person, or through online help.
- I would have really liked more time to complete the quizzes, even 15 instead of 10 mins would have made a big difference.
- It would be great if the classes were smaller because students could participate in class, by doing problems in front of the class.
- Make Lon-Capa extra credit or just not necessary. It's a terrible system.
- More application is needed to really cement concepts/formulas.
It'd also benefit students if there was any mnemonics, songs, etc that would help in memorization.
More study guides or practice exams would help ease test anxiety for students.
- More opportunities to bump your grade
- None (2 Counts)
- None.
- Not much. I liked it as it is now.
- Organize better.
- Perhaps make this class less available for students who don't study math as a major.
- Re-write lon capa questions to suit each teacher's style vs. having ones for everyone, which may be in a foreign form.
- Slow down the pace just a tad. Give us more time to let the information soak in by, say, adding 15 minutes onto class and slowing down the rate at which the material is taught while still keeping the amount of material taught in a lecture the same.
- Slow down. More examples. Teach the whole class and not just the students who already know all of the material.
- Switch to a different online homework website. Lon Capa is terrible and sometimes doesn't understand the formula even if your answer is correct.
- The only suggestions I have to improve this course are to coordinate between TA's and Professors so the TAs' quizzes are not so much easier than the actual classwork. Also to ensure the english is adequate for TAs.
- There defiantly needs to be a practice exam, the questions that were given for homework and lab were not at all representative of the most questions that were on the exam. I felt that there was a large gap in between what was taught in the class that what was presented on the exam and with no practice exam or review session I do not feel like there much was a fair chance to bridge this gap. I never missed a lecture or recitation and I still feel like it did not give me the tools needed to succeed in this class.
- none
- remove some of the material so that there is more sufficient time to teach the important parts of the course

