# Student Ratings Summary

**Andrey Sarantsev**  
**Mathematics**  
**MATH 126**  
**Winter 2011**

## Section – MATH 126 CA

<table>
<thead>
<tr>
<th>IAS Form: F</th>
<th>Enrollment: 39</th>
<th>Returned forms: 23</th>
</tr>
</thead>
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## Section – MATH 126 CB

<table>
<thead>
<tr>
<th>IAS Form: F</th>
<th>Enrollment: 40</th>
<th>Returned forms: 25</th>
</tr>
</thead>
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## Quantitative Feedback

<table>
<thead>
<tr>
<th>Combined Items #1-4: 3.6</th>
<th>Adjusted Median: 3.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher (Relative Rank)</td>
<td>Higher (Relative Rank)</td>
</tr>
<tr>
<td>1) QSI’s interest in whether students learned (4.5)</td>
<td>1) QSI’s enthusiasm (4.1)</td>
</tr>
<tr>
<td>2) QSI’s enthusiasm (4.7)</td>
<td>2) Student confidence in QSI’s knowledge (4.0)</td>
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<tr>
<td>3) Student confidence in QSI’s knowledge (4.5)</td>
<td>3) QSI’s interest in whether students learned (3.8)</td>
</tr>
<tr>
<td>4) Reasonableness of assigned work for quiz section (4.3)</td>
<td>4) Availability of extra help when needed (3.8)</td>
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<table>
<thead>
<tr>
<th>Lower (Relative Rank)</th>
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<tr>
<td>18) QSI’s use of examples and illustrations (3.3)</td>
</tr>
<tr>
<td>17) Explanations by the QSI (3.4)</td>
</tr>
<tr>
<td>16) Relevance and usefulness of quiz section content (3.6)</td>
</tr>
<tr>
<td>15) Interest level of quiz sections (3.2)</td>
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## Qualitative Feedback (Yellow Sheets)

### What contributed?

- Explanations going over homework (8)  
- Examples (7)  
- Challenge problems (6)  
- TA effort enthusiasm willingness to help (5)

### What detracted? What suggestions?

- Explanations too fast not clear (4) → slow down.  
- Time spent waiting for questions (3) → do problems worksheets.  
- Ø (3)

### What contributed?

- Going over homework problems (5)  
- Examples (5)  
- Challenge problems & solutions (3)

### What detracted? What suggestions?

- Ø (8)  
- Explanations too fast (4) → slow down.  
- Proofs mini-lectures (3)
Yellow Sheet Comments

Section AA

A. Was this class intellectually stimulating? Did it stretch your thinking? Yes / No.
Why or why not?
2. Yes.
3. No.
4. Yes. Yes, any challenging problems, and ideas discussed during class.
5. Yes.
6. Yes. Concepts were challenging.
7. Yes. It was very challenging and required a lot of time and effort.
8. Yes. It was interesting, sometimes stretched my thinking, but rarely. Taylor series was hard.
10. Yes.
11. The class as a whole, yes. Quiz section, not so much. The biggest challenge was any material that
dealt with Taylor series.
12. Yes, it stretched my thinking through the complexity of the material.
13. Yes. The problems were difficult.
14. Yes.
15. The issues we covered were very basic. p.s. Say “Very Good” to mean that is correct and “very
well” means let’s get on with this.
16. Material is stimulating but class was not stimulating. I was struggling to keep up that I have “holes”
in math skills.
17. Yes. Multivariable is a very difficult kind of calculus.
18. Yes. I struggled with a lot of it but it was well taught.
19. No. I knew all the material going into the class, so this course was just a refresher at that.
20. [“Why not?” circled] We’re waiting for Godot. My thinking was adequately stretched and my
intellect was titillated by the tingling moistness of knowledge.
21. Yes. Hard material but good explanations helped me understand.

B. What aspects of this class contributed most to your learning?
1. • Good explanations
2. • Lot of practice problems.
3. • Fun instructor, always willing to help.
4. • Immediate response to homework difficulties.
5. The explanations on solving problems. During sections and reviews on previous materials.
7. Andrey did a good job of making sure we had our questions answered. He was enthusiastic and put
real effort into trying to improve himself and the class.
8. • Example problems.
9. • Instructor had great knowledge of math, he just needed to find a way to clearly explain it to us.
10. • TA was very hardworking & available outside of class.
11. • TA was very hardworking & available outside of class.
12. Section explanations, in class examples & challenge problems.
13. Weekly challenge problems were helpful and mini lectures. The TA’s enthusiasm and knowledge
were encouraging. It seemed like he put a lot of time and effort into preparing our quiz sections
which was good!
14. • Homework/practice!
15. • Examples.
16. • Going over examples.
17. Solutions to homework.
18. The homework was probably the most helpful. There was a good amount and many helped to
practice the basics for the tests.
19. The mini-lectures and homework help.
20. Challenge problems are good.
14. Challenge problems and solutions were good. Going over homework. Doing extra examples. I always knew when office hours were & lots of availability for help.
15. The challenge problems & solutions were very helpful study materials.
16. Examples—I have had time with abstract but when I make connection through example—I get the abstract I’m backward.
17. Explanation to homework problems.
18. Good explanations, very thorough, quiz review was helpful.
20. The instructor’s contributions were integral to my learning. NAY, I declare that his contributions were double integral to my arithmetic edification.
21. Going through the problems that were difficult.

C. What aspects of this class detracted from your learning?
1. –
2. –
3. Most of time was boring.
4. • Sometimes questions weren’t fully answered.
   • Language barrier at times.
5. • The going into extremely deep detail on theorems.
   • The professor was horrible, no TA could have made up for the damage the professor did. Andrey did his best & worked hard.
6. None…only that you stand in front of the board while writing & I can’t see what you write.
7. It was frustrating. There was no answer key for the Taylor series homework so I didn’t know if I was doing it right. Sometimes math computations on the board were too fast to follow.
8. Lack of concrete examples for Taylor series. We got some but I had to spend a bit of time on the homework figuring at the things I hadn’t seen before.
9. Just sitting there when he asks “any questions?”
10. –
11. Sometimes his explanations were too rushed.
12. Sometimes the explanations given were not very clear.
13. Asking questions—Time spent w/no questions being asked.
15. • Basic, basic lessons.
   • Lessons overlapped with lecture.
16. Similar example—repeated example. Need E.
17. Slight differences between lecture and quiz section lectures such as writing formulas in different ways sometimes made it difficult to the things together.
   Lecture:  \[ a = b \cdot c \]
   Section:  \[ d = e \]
   > Equivalent formulas
18. No one ever answered your questions…not your fault
19. Some of the TA’s methods for solving problems were much longer than necessary and were not as efficient as methods I already knew that are not taught in this course.
20. Mid-week Everton matches. It’d be worth it if they at least won a few…
21. The fast pace of the quiz section.

D. What suggestions do you have for improving the class?
1. –
2. –
3. Be more professional in the future.
4. I believe with time, Andrey will be a great TA. He cares about his teaching and is very friendly. Those are two things in being a successful teacher.
5. • Explain concepts or problems slower.
   • Carry out more example problems in class.
6. Step sideways more often so we can see. Write slightly more clear. Font size is good, but clarity is not so good. Other than that, thank you & have a good rest of the year!
7. More worksheets of practice problems w/solutions like the challenge problems.
8. A mathematics or mathlab project.
9. More examples!
10. More office hours.
11. Slow down. Overall he’s very helpful.
12. –
13. Work through the challenge problem together.
14. If it is towards the end of class & no one is asking questions people will want to leave. Keep momentum at the end.
15. Incorporate challenge problems into quiz section instead of lecturing. Students learn by DOING. Helps with exams/ homeworks, quizzes. Teach solution methods, not ideas.
16. Stretch the concept beyond the “Book”, Ex: Tests did that very well but homework did not.
   Homework is where one should expand the concept of MATH. Test is too high pressure & short in time to force one to expand beyond the homework.
17. Coordinate between lecture and QS more.
18. More quizzes, otherwise the day isn’t helpful.
19. None regarding quiz section.
20. Very well.
21. Slow down the explanations of problems, go step by step.

Section AB

A. Was this class intellectually stimulating? Did it stretch your thinking? Yes / No. Why or why not?
   1. Yes. Difficult course material at beginning and end.
   2. No. Standard math class. Theories are kind of boring.
   3. Yes.
   4. Yes. The math was interesting.
   5. Yes. Yes, there were some pretty challenging problems.
   6. Yes, It definitely made me think about the math more abstractly.
   7. Yes.
   8. Yes. Never taken multivariable calculus before.
   9. Yes.
11. Yes.
12. [between “yes” & “no”] Yes it was stimulating because I love math. But it did not “stretch” my thinking. It’s math.
13. Yes. It made me think outside the box to manipulate variables, equations, and graphs.
15. No. Information wasn’t very interesting.
17. Yes. Very much so.
18. No. It was grossly ineffective.
19. Yes. This class presented some of the most complex ideas of the calc series.
20. Yes & No. It was horrible sometimes, but it was challenging.
21. Yes. Yes. It encompasses many concepts regarding mathematics in 3 directions. It is an eye-opener.

B. What aspects of this class contributed most to your learning?
   1. Non-proof explanations that were well thought out.
   2. Examples.
   4. Examples of problems.
5. Having problems done on the board, and going through them step by step.
6. The example problems helped me the most.
7. Discussing homework.
8. The answers to the challenge problems helped me in studying because it gave examples.
9. –
12. Going over homework problems.
13. The challenge and example problems to illustrate the process very clearly.
15. –
16. Example problems.
17. Quiz and lecture.
18. None.
19. Going over homework and mini-lectures.
20. • Going through HW.
   • Challenge problems.
21. Large amount of new materials taught.

C. What aspects of this class detracted from your learning?
1. –
2. Instructor spoke too quickly and rushed through explanations.
3. –
4. N/A
5. No need to wait too long for people to ask questions.
6. Doing any sort of proof just confused me.
7. Waste too much time in something really simple.
8. Going through proofs we don’t need to know.
9. –
10. Speed of examples (too fast).
11. –
12. Mini lectures. I stopped listening to them because they didn’t help me at all.
13. N/A
15. –
16. • Too fast explanations.
   • Too many homework problems.
   • Inconvenient scheduled office hours.
17. –
18. Andrey does not lack enthusiasm, only preparation, teaching skills, and English proficiency.
19. Too many examples, I got bored. Accent was sometimes hard to understand.
21. The mass lecture classroom is just horrible. People from both sides of classroom cannot see the projector screen most of the time.

D. What suggestions do you have for improving the class?
1. Be more open to students’ opinions and different learning needs, etc. It’s much better to give a broken-down explanation so all can learn, and how you go about it will make you a better teacher.
   This course material was quite difficult in some places so be mindful that not everyone in the class is math savvy.
2. –
3. Give the answer to the HW after grading.
4. Less focus on proofs.
5. Maybe more time spent on Taylor inequalities.
6. I guess I would talk about general algorithms for types of problems a lot more. That would really help me. Also, if this could be done in conjuncture with example problems, that would be fantastic.
7. –
8. –
9. Slow down on explanations.
10. Group worksheets.
11. –
12. More examples. Understand that some people can’t go as fast as you can.
13. N/A. I thought the class was very organized and planned.
14. Make it easier.
15. –
16. • Fewer homework problems.
   • More (slower) example problems.
17. –
18. This TA has a long ways to go to become a competent educator.
19. Great job, you have great enthusiasm and knowledge of math. I would bring it down just a bit though, you sometimes were too fast.
20. Explain things in an easier way.
21. Change the classroom, please.