Home Dept: Mathematics   Instructor: Ray,Arunima   Course #:   MATH 23B 1

Overall Instructor Rating (Avg. q12-q18):   4.68   Enrollment: 39   Responses: 35   Rate: 90%

Key: #-Total Responses 1-Strongly Disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly Agree

COURSE STRUCTURE AND GRADING

General Structure	#	1	2	3	4	5	NA	Avg	S.D.
1 The course syllabus was comprehensive, clear, and accurate.	35	0	0	2	4	29		4.77	0.5
2 The learning goals were clearly stated in the syllabus.	35	0	1	1	5	28		4.71	0.7
3 Classes started and ended on time.	34	0	2	0	5	27		4.68	0.8
						Average:		**4.72**	

Grading	#	1	2	3	4	5	NA	Avg	S.D.
4 Content of tests and assignments was consistent with content of lectures and/or reading.	35	1	0	3	5	26	0	4.57	0.9
5 Assignments and/or exams were returned promptly.	35	0	1	2	3	29	0	4.71	0.7
6 The grading policies were clear and consistently followed.	35	1	0	4	3	27		4.57	0.9
7 The graded assignments allowed me to demonstrate what I learned in the course.	35	1	1	2	7	24	0	4.49	1.0
						Average:		**4.59**	

Content and Workload	#	1	2	3	4	5	NA	Avg	S.D.
8 The content covered in this course was challenging.	35	1	0	3	9	22		4.46	0.9
9 This course requires a lot of work.	35	0	1	2	9	23		4.54	0.7
						Average:		**4.50**	

STUDENT RESPONSIBILITIES

	#	1	2	3	4	5	NA	Avg	S.D.
10 I completed the course readings.	35	1	0	3	13	18	0	4.34	0.9
11 I kept up with work as it was assigned.	34	1	0	1	7	25		4.62	0.8
						Average:		**4.48**	

INSTRUCTOR RESPONSIBILITIES AND SKILLS

	#	1	2	3	4	5	NA	Avg	S.D.
12 The instructor was effective as a lecturer and/or class leader.	35	0	0	4	4	27		4.66	0.7
13 The instructor's presentations were clear and organized.	35	0	0	2	6	27	0	4.71	0.6
14 The instructor stimulated interest in the subject.	34	0	2	1	5	26		4.62	0.8
						Average:		**4.66**	

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RESPONSIVENESS OF THE INSTRUCTOR	#	1	2	3	4	5	NA	Avg	S.D.
15 The instructor was available and helpful to students outside the class.	35	0	0	2	6	27		4.71	0.6
16 The instructor respected students' ideas.	35	0	1	1	6	27		4.69	0.7
17 The instructor was concerned about student learning and development.	34	0	0	2	6	26		4.71	0.6
18 I received feedback that helped me see ways in which I could improve my learning and understanding.	35	0	0	2	6	27		4.71	0.6
						Average:		**4.71**	

CONTRIBUTION TO LEARNING	#	1	2	3	4	5	NA	Avg	S.D.
19 The stated learning goals for the course were met.	35	0	0	3	8	24		4.60	0.7
20 This course improved my writing ability.	35	0	0	5	7	23	0	4.51	0.7
21 This course improved my oral communication skills.	35	0	1	4	7	17	6	4.38	0.9
22 This course improved my quantitative skills.	35	0	1	1	11	20	2	4.52	0.7
23 This course helped me develop my creative abilities.	35	0	1	1	7	19	7	4.57	0.7
24 This course helped me to analyze, interpret and synthesize information.	35	0	0	3	9	23	0	4.57	0.7
25 This course helped me to reason better and to think more critically about its subject matter.	35	0	0	3	6	25	1	4.65	0.6
26 This course helped me to consider alternative perspectives on complex issues.	35	0	1	2	8	20	4	4.52	0.8
						Average:		**4.54**	

OVERALL QUALITY OF THE COURSE	#	1	2	3	4	5	NA	Avg	S.D.
27 The overall quality of this course was excellent.	35	0	0	5	8	22		4.49	0.7
						Average:		**4.49**	

STUDENT STATUS	#	First Year	Sophmore	Junior	Senior	Master's	Doctoral
28 Your class standing?	35	5	24	6	0	0	0
	#	SCI	SocSCI	HUM	ART	Undecided	not applicable
29 What is your school of major?	35	24	6	0	2	3	0
	#	university req.	major req.	minor req.	interest	not applicable	
30 Why did you choose this course?	35	5	28	1	1	0	

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31   Please identify those aspects of the course you found most useful or valuable for learning.

   1   The essay

   2   I learned how to write proofs in a very detailed way. This course is really interesting
       and helpful. I always loved proofs with pure math symbols, but after this course, I know
       that proofs with words are sometimes much more interesting and insightful than the ones
       with pure symbols. Also the group work part is helpful. I learned that this is the first
       time ever that math 23b has this part. I think the good's are more than the bad's of it.
       It allows me to communicate my ideas with classmates, which helps refine my understanding
       of the questions and also corrects some of my wrongness, despite the fact that finishing a
       group work takes much more time than a problem set (this was later fixed with group works
       that have fewer questions, which is good).

   3   I learn how to read math.

   4   Taking this course is almost the best decision i have ever made. Aru is a great
       instructor. All the materials are explained perfected clear during class time. She is also
       very helpful and supportive after class. She respects every student's idea and answers all
       the questions that we have. After class, she also answer the questions that we posted on
       the website immediately. This course is great.

   5   Learning how to formally write math is extremely important and this course did a great job
       at that. I also liked how we went on a grand overview of math at the end of the semester.

   6   group work is effective

   7   the essay contest is really interesting and worths attending. the rewrite policy for all
       the problem sets helps not only improve the score but also correct work by myself.

   8   This course is different from other math courses at Brandeis. It involves lots of group
       work. It is essential to be able to work in teams, and my communication skills improved.
       Also, one part of this course involves a math paper. This is the first math paper I wrote
       in my life. Aru encouraged us to explore different math topics that we are interested in.
       The paper challenged me to explain math to others, and improved my writing skills.
       However, by write this paper and read the papers by other students in our class, I see how
       math can relate to other fields such as physics, economics and computer science. Since it
       is a proof class, the way of thinking we gained is very important. I also enjoyed how Aru
       encouraged us to visit math museums, attend math talks and do other fun stuff! Not many
       other math courses do this type of things. Through this class, we can see how math relates
       to real life through these activities. Aru is one of the best professors I have ever had!
       She is always well-prepared. She explained the material really well with lots of examples.
       She helped me a lot. She answers all my questions patiently. After school, she is willing
       to stay late as long as we need her help. Sometimes, I go to her office at 5pm and leave
       after 8pm. She cares about students. I would definitely recommend her class to other
       students!!

   9   The Essay Contest

  10   I think that the professor did a good job of stimulating interest in the subject and was
       an effective lecturer. I especially appreciated how accommodating she was; she frequently
       took student feedback on the course and modified the course accordingly to benefit the
       whole class. She was constantly available for questions either online, via e-mail, or
       during office hours. She was easy to reach and was truly accessible, which I found
       admirable and extremely helpful. I appreciated being given the option of late days; it
       made my semester a lot less stressful, because I could use the late days when problem
       sets, group works, etc. collided with other assignments and I found myself being extremely
       busy and unable to a good job on the assignments otherwise. I think the essay was very
       fair and straightforward; it was not difficult. The essay contest was a nice addition, and
       it was fun to participate and read other people's essays!

  11   Aru construct the course in a creative way. We do not only do problem sets, but also have
       group works and math-related essays. She encourages us to learn and practice the knowledge
       in different ways. Through the group works, we get connected to our classmates, and we
       have deeper understanding by through communication. She also encourages us to go to math
       exhibition and talks, etc. Thus I not only have a deeper understanding about proof, but
       also loves math more.

  12   This course really motivates me to study math and get a general ideas about the sub-field
       of math.

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13 The majority of the class is to learn about different concepts and use different theorems
     and techniques to prove things. Constructing a proof itself is really valuable because you
     can get better at critical and logical thinking, speaking and writing. Another part I find
     really helpful is the group work part. We are assigned to groups and work on problems
     together. Working in a group really helps you to get a really sense how this course has
     been so far for everyone and you can see and learn the inspiration, intelligence, and
     creativity from your group mates.

14 our group works are really helpful.

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32 What suggestions would you make to the instructor for improving the course?

    1 Aru is the best instructor I've met!

    2 I really like the essay part, which allows me to present some of my ideas in a mathematical way.

    3 Give more lectures and practice in the textbook.

    4 Down with Piazza and Notabene. I found those websites to be hard to navigate and stopped using Notabene near the end of the semester. I only went on Piazza for the resources tab which could easily be placed on a Latte page. I thought the group work was hit or miss, while I liked my group during the first half of the semester, I kinda wish I could have picked my group since I had multiple people in the class I talked to on a constant basis. This would have made it easier to meet outside of class.

    5 too much hw

    6 Everything is great! For the paper assignment, it will be nice if we can have peer reviews to get some suggestions from our classmates. Also, for group works, it is hard but important to motivate every student to share equal amount of work.

    7 groups changed on a weekly basis, different groups for each problem set

    8 My one gripe regarding the group work is that it was difficult to obtain copies of graded group works. Typically, one person would hold on to them, and it was sometimes difficult to see the reviewed comments. If group work is to continue to be a part of the course, it would be nice for the grader to scan and upload them to LATTE or Piazza so that all members can easily access the graded version. I realize this is probably time consuming, but it is something that I took some issue with.   I think that the success of groups depends highly on the group members, so I am not sure how great of a measure of actual success it is. I do not really have a suggestion for this; some groups are bound to be stronger than others. I think that reducing the number of problems in the group work was beneficial, because each individual could take the time to fully understand each problem. Before, there was so much to do, that the work was split up, and I would end up never reviewing the other problems in the group work. I feel that I would rather have a more in-depth understanding of a few problems than a cursory (or empty) understanding of a lot of problems.

    9 I think Aru taught this course excellently. I cannot come up with any better way.

  10 Maybe the pace of the course can be better adjusted as i feel the harder materials are in the latter chapters but there are not enough time to really go through them.

  11 I think the course has been great so far.

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33 If you feel that this instructor should be considered for a teaching award, please explain why. Please understand that completing this section does not constitute a nomination for a teaching award. To nominate a

1 Aru is the greatest instructor that I had in Brandeis. She is open to every student and she respects every thoughts. She really spent a lot of time answering questions since there are multiple ways to prove something and there is no answer that is strictly correct. I really appreciate her dedication. Moreover, she is so kind and she is always considering everyone's opinion and feeling. We all enjoy her class and enjoy every day with her.

2 Aru is a fantastic teacher who is super nice and understanding. I love how she brought her field of study, topology, into class and used it as an example of what proofs can be used for. She's always available in some form or another and always ready to answer a question you might have.

3 none

4 I believe that Aru should definitely be considered for a teaching award. She is THE best professor I have ever had. She explains everything in detail in class and gives us clear instructions of what we should do after class. When we have any question or concern, she is always there to help. She always replies our emails, responds to our posts on piazza in time when she is not at her office. She does not only answer the question we asked, but also makes sure that we understand all knowledge related to the problem. During the semester, she keeps giving us detailed feedback so that we know what we could have done better. Moreover, she construct the course in a creative way. We do not only do problem sets, but also have group works and math-related essays. She encourages us to learn and practice the knowledge in different ways. She also encourages us to go to math exhibition and talks, etc. Thus I not only have a deeper understanding about proof, but also loves math more. Although this course is a writing intensive course, I don't feel tiresome or boring because everything we wrote is meaningful and useful and it was a lot of fun.

5 The instructor is really good at motivating people to enjoy math. She is really enthusiastic in terms of answering students' question. Moreover, she takes the reflection from student seriously and tries her best to communicate with students.

6 I think Aru should be considered for a teaching award because she is really really responsive to her students. She is always available outside of class, respect every student's idea, give extensive and to-the-point feedback in a prompt way for every student, and really care about students' development and academic progression in the future, especially the science field.