JHU - Krieger School of Arts & Sciences / Whiting School of Engineering
ASEN.2024.Fall Project 2

Course: EN.553.171.01.FA24: Discrete Mathematics

Instructor: Apurva Nakade *

Response Rate: 13/13 (100.00 %)

1 - The overall quality of this course is:

Response Option	Weight	Frequency	Percent
Poor	(1)	0	0.00%
Weak	(2)	1	8.33%
Satisfactory	(3)	2	16.67%
Good	(4)	3	25.00%
Excellent	(5)	6	50.00%
N/A	(0)	0	0.00%

Means: Question 4.17, School Level 4.18, Department Level 4.16

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
12/13 (92.31%)	4.17	1.03	4.50	11876	4.18	0.95	4.00	2000	4.16	0.96	4.00

2 - The instructor's teaching effectiveness is:

Apurva Nakade

Response Option	Weight	Frequency	Percent
Poor	(1)	0	0.00%
Weak	(2)	0	0.00%
Satisfactory	(3)	2	16.67%
Good	(4)	3	25.00%
Excellent	(5)	7	58.33%
N/A	(0)	0	0.00%

Means: Question 4.42, School Level 4.24, Department Level 4.18

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
12/13 (92.31%)	4.42	0.79	5.00	13514	4.24	0.98	5.00	2089	4.18	1.04	5.00

3 - The intellectual challenge of this course is:

Response Option	Weight	Frequency	Percent
Poor	(1)	0	0.00%
Weak	(2)	1	8.33%
Satisfactory	(3)	1	8.33%
Good	(4)	4	33.33%
Excellent	(5)	6	50.00%
N/A	(0)	0	0.00%

Means: Question 4.25, School Level 4.26, Department Level 4.33

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
12/13 (92.31%)	4.25	0.97	4.50	11697	4.26	0.85	4.00	1979	4.33	0.82	5.00

4 - The teaching assistant for this course is:

Response Option	Weight	Frequency	Percent
Poor	(1)	1	8.33%
Weak	(2)	1	8.33%
Satisfactory	(3)	0	0.00%
Good	(4)	3	25.00%
Excellent	(5)	6	50.00%
N/A	(0)	1	8.33%

Means: Question 4.09, School Level 4.24, Department Level 4.17

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
12/13 (92.31%)	4.09	1.38	5.00	11595	4.24	0.97	5.00	1967	4.17	1.00	4.00

Course:	EN.553.171.01.FA24: Discrete Mathematics
Instructor:	Apurva Nakade *
Response Rate:	13/13 (100.00 %)

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5 - Please enter the name of the TA you evaluated in question 4:

Response Rate	10/13 (76.92%)

- All of them
- Spencer Huang
- Spencer Huang
- Spencer
- Spencer
- Spencer
- Spencer Huang
- Spencer Huang
- Spencer Huang
- Spencer

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6 - Feedback on my work for this course is useful:

Response Option	Weight	Frequency	Percent
Disagree strongly	(1)	1	8.33%
Disagree somewhat	(2)	0	0.00%
Neither agree nor disagree	(3)	1	8.33%
Agree somewhat	(4)	7	58.33%
Agree strongly	(5)	3	25.00%
N/A	(0)	0	0.00%

Means: Question 3.92, School Level 4.09, Department Level 4.01

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
12/13 (92.31%)	3.92	1.08	4.00	11485	4.09	1.02	4.00	1924	4.01	1.00	4.00

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7 - Compared to other Hopkins courses at this level, the workload for this course is:

Response Option	Weight	Frequency	Percent
Much lighter	(1)	0	0.00%
Somewhat lighter	(2)	1	8.33%
Typical	(3)	6	50.00%
Somewhat heavier	(4)	4	33.33%
Much heavier	(5)	1	8.33%
N/A	(0)	0	0.00%

Means: Question 3.42, School Level 3.41, Department Level 3.54

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
12/13 (92.31%)	3.42	0.79	3.00	11511	3.41	0.96	3.00	1937	3.54	0.88	3.00

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8 - What are the best aspects of this course?

Response Rate	8/13 (61.54%)

- The professor's teaching style is excellent. He really tries to get everyone involved.
- Opens your eyes to a whole new world of mathematics
- Very interesting topic in which the professor cares deeply upon general understanding
- Helpful TAs and fair exams.
- Very intellectually pleasing course
- Professor has the policy that drop the lowest grade in HW. Class atmosphere is good and the explanation from him is understandable easily.
- The professor and subject material were both great. He made the class thought provoking and somewhat challenging but not impossible through the homeworks and exams and was a very good lecturer. I learned a lot in this class. The tests were also a lot of fun. They were easier than the homeworks but required you to think, like all good exams should. I loved almost everything about this class.
- Zybooks is a good way to learn effectively, and the lectures go over example problems very well

Course:	EN.553.171.01.FA24: Discrete Mathematics
Instructor:	Apurva Nakade *
Response Rate:	13/13 (100.00 %)

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9 - What are the worst aspects of this course?

Response Rate	6/13 (46.15%)

• The TAs have no idea how to grade or give feedback.

• Make the difficulties of the sets more consistent

• The lecture notes posted to canvas sometimes lack a lot of content and context to what's currently being taught in class which makes it hard to stay informed when sick at home. When I tried to join via zoom I was left in the waiting room for the whole class.

• some of the classwork is hard though challenging.

• Having to pay for zybooks

• The homeworks are a little difficult to solve without TA help.

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10 - What would most improve this class?

Response Rate	6/13 (46.15%)

• Get TAs who know how to give feedback. Also get TAs who know how to grade.

• Make in class practice problems closer in topic and challenge to some of the problem set material, sometimes the sets bordered on impossible to solve without substantial hints which was frustrating when one's level of comprehension on exams and in class was up too par.

• Lectures are apparently already shown live on zoom, can you record and post them.

• TA should have a uniform standard of grading HW, as sometimes what TA told us to do in their sessions is still wrong and get mark deducted in HW.

• Not having to pay for zybooks

• More hints for homework or more strategies to solving problems

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11 - What should prospective students know about this course before enrolling? (You may comment on any aspect of this course such as assumed background, readings, grading systems, and so on.)

Response Rate	4/13 (30.77%)

• very accessible material regardless of math background

• A part of your homework grade is how understandable your proof is. Rewrite your hw answers to be neat and tidy.

• It is fun, thought-provoking, you will learn a lot but it is not too hard, and the professor is great. You also do not need any background knowledge.

• Basic background in counting and programming language is useful

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Course: EN.553.171.02.FA24: Discrete Mathematics
Instructor: Apurva Nakade *
Response Rate: 7/8 (87.50 %)

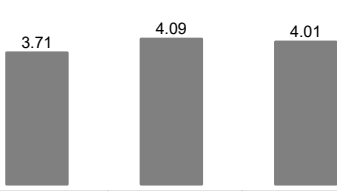### 1 - The overall quality of this course is:

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Poor	(1)	1	14.29%		
Weak	(2)	0	0.00%		
Satisfactory	(3)	2	28.57%		
Good	(4)	3	42.86%		
Excellent	(5)	1	14.29%		
N/A	(0)	0	0.00%		

Means: Question 3.43, School Level 4.18, Department Level 4.16

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
7/8 (87.50%)	3.43	1.27	4.00	11876	4.18	0.95	4.00	2000	4.16	0.96	4.00

2 - The instructor's teaching effectiveness is:

Apurva Nakade

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Poor	(1)	0	0.00%		
Weak	(2)	1	14.29%		
Satisfactory	(3)	3	42.86%		
Good	(4)	0	0.00%		
Excellent	(5)	3	42.86%		
N/A	(0)	0	0.00%		

Means: Question 3.71, School Level 4.24, Department Level 4.18

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
7/8 (87.50%)	3.71	1.25	3.00	13514	4.24	0.98	5.00	2089	4.18	1.04	5.00

3 - The intellectual challenge of this course is:

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Poor	(1)	0	0.00%		
Weak	(2)	0	0.00%		
Satisfactory	(3)	1	14.29%		
Good	(4)	2	28.57%		
Excellent	(5)	4	57.14%		
N/A	(0)	0	0.00%		

Means: Question 4.43, School Level 4.26, Department Level 4.33

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
7/8 (87.50%)	4.43	0.79	5.00	11697	4.26	0.85	4.00	1979	4.33	0.82	5.00

4 - The teaching assistant for this course is:

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Poor	(1)	0	0.00%		
Weak	(2)	0	0.00%		
Satisfactory	(3)	3	42.86%		
Good	(4)	1	14.29%		
Excellent	(5)	2	28.57%		
N/A	(0)	1	14.29%		

Means: Question 3.83, School Level 4.24, Department Level 4.17

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
7/8 (87.50%)	3.83	0.98	3.50	11595	4.24	0.97	5.00	1967	4.17	1.00	4.00

Course:	EN.553.171.02.FA24: Discrete Mathematics
Instructor:	Apurva Nakade *
Response Rate:	7/8 (87.50 %)

5 - Please enter the name of the TA you evaluated in question 4:
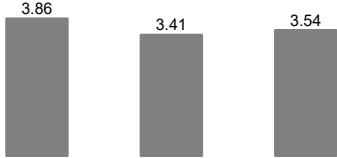
Response Rate	5/8 (62.5%)

- Eileen
- Eileen Stiles
- Eileen Stiles
- Eileen
- Eileen Xialu Stiles

6 - Feedback on my work for this course is useful:

Response Option	Weight	Frequency	Percent
Disagree strongly	(1)	0	0.00%
Disagree somewhat	(2)	1	14.29%
Neither agree nor disagree	(3)	1	14.29%
Agree somewhat	(4)	4	57.14%
Agree strongly	(5)	1	14.29%
N/A	(0)	0	0.00%

Means: Question 3.71, School Level 4.09, Department Level 4.01

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
7/8 (87.50%)	3.71	0.95	4.00	11485	4.09	1.02	4.00	1924	4.01	1.00	4.00

7 - Compared to other Hopkins courses at this level, the workload for this course is:

Response Option	Weight	Frequency	Percent
Much lighter	(1)	0	0.00%
Somewhat lighter	(2)	0	0.00%
Typical	(3)	3	42.86%
Somewhat heavier	(4)	2	28.57%
Much heavier	(5)	2	28.57%
N/A	(0)	0	0.00%

Means: Question 3.86, School Level 3.41, Department Level 3.54

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
7/8 (87.50%)	3.86	0.90	4.00	11511	3.41	0.96	3.00	1937	3.54	0.88	3.00

8 - What are the best aspects of this course?

Response Rate	5/8 (62.5%)

- I like about how the course requires intellectual challenges, which develops my mathematical insight and foundation.
- Dr. Nakade is an excellent teacher and really explained not only the material but how it was useful in different ways. He also seems to care greatly about the course and the students as well.
- The material is interesting and covers a lot of new areas of mathh
- Concepts
- Lectures & TA sections are very helpful

9 - What are the worst aspects of this course?

Response Rate	4/8 (50%)

- None.
- TA grading is very subjective to the TA and can often be extremely harsh. On multiple occasions a small mistake that some TAs would have marked as -1 or -2 was instead -5 or more. Additionally, when I showed homework to have it checked by TAs, they might say that it makes sense, but then it would still be marked incorrect, sometimes for the exact thing that I had asked another TA if it was logically sound.
- The tests were held in an extremely loud room that prevented anyone from being able to properly focus.
- Difficulty

Course:	EN.553.171.02.FA24: Discrete Mathematics
Instructor:	Apurva Nakade *
Response Rate:	7/8 (87.50 %)

10 - What would most improve this class?	
Response Rate	4/8 (50%)

• None.

• Moving the due date for assignment resubmissions to the day after the homework for the week is due. It was often difficult to get to reviewing my previous submission, as it would be released late on Wednesday or on Thursday, in time to submit it on Thursday night with both work for this course and others.

• Narrow the scope of the course or least the topics on the tests

• Make it easier

11 - What should prospective students know about this course before enrolling? (You may comment on any aspect of this course such as assumed background, readings, grading systems, and so on.)	
Response Rate	4/8 (50%)

• Approximate hours expected for each wk to finish weekly written assignments.

• This course requires a very different approach than any math course I have previously taken. The prerequisites listed in SIS are somewhat misleading, students should probably have completed calculus I and II to be able to fully appreciate some of the content or understand how it can be applied in other forms. The grading system is slightly harsh and subjective to the individual TA, where some small mistakes can be heavily penalized or large ones can be minimized, depending on the grader due to the nature of proofs.

• It is not required to have any background in proofs, but it is taught and graded as if you have a background in them so try to pre-study how to write proofs beforehand

• Its ahrd

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Course: EN.553.171.03.FA24: Discrete Mathematics
Instructor: Apurva Nakade *
Response Rate: 19/20 (95.00 %)

1 - The overall quality of this course is:

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Poor	(1)	0	0.00%		
Weak	(2)	1	5.26%		
Satisfactory	(3)	2	10.53%		
Good	(4)	8	42.11%		4.21 / 4.18 / 4.16
Excellent	(5)	8	42.11%		
N/A	(0)	0	0.00%		Question / School Level / Department Level

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
19/20 (95.00%)	4.21	0.85	4.00	11876	4.18	0.95	4.00	2000	4.16	0.96	4.00

2 - The instructor's teaching effectiveness is:

Apurva Nakade

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Poor	(1)	0	0.00%		
Weak	(2)	0	0.00%		
Satisfactory	(3)	1	5.26%		
Good	(4)	6	31.58%		4.58 / 4.24 / 4.18
Excellent	(5)	12	63.16%		
N/A	(0)	0	0.00%		Question / School Level / Department Level

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
19/20 (95.00%)	4.58	0.61	5.00	13514	4.24	0.98	5.00	2089	4.18	1.04	5.00

3 - The intellectual challenge of this course is:

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Poor	(1)	0	0.00%		
Weak	(2)	0	0.00%		
Satisfactory	(3)	2	10.53%		
Good	(4)	7	36.84%		4.42 / 4.26 / 4.33
Excellent	(5)	10	52.63%		
N/A	(0)	0	0.00%		Question / School Level / Department Level

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
19/20 (95.00%)	4.42	0.69	5.00	11697	4.26	0.85	4.00	1979	4.33	0.82	5.00

4 - The teaching assistant for this course is:

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Poor	(1)	2	10.53%		
Weak	(2)	4	21.05%		
Satisfactory	(3)	7	36.84%		
Good	(4)	3	15.79%		3.05 / 4.24 / 4.17
Excellent	(5)	3	15.79%		
N/A	(0)	0	0.00%		Question / School Level / Department Level

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
19/20 (95.00%)	3.05	1.22	3.00	11595	4.24	0.97	5.00	1967	4.17	1.00	4.00

Course:	EN.553.171.03.FA24: Discrete Mathematics
Instructor:	Apurva Nakade *
Response Rate:	19/20 (95.00 %)

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5 - Please enter the name of the TA you evaluated in question 4:

Response Rate	13/20 (65%)

- Adam Tsou
- Adam Tsou
- Adam Tsou
- Spencer Huang
- Thursday 3-3:50
- Adam Tsou
- Adam Tsou
- Adam Tsou
- Adam Tsou
- Adam Tsou
- Adam Tsou
- adam tsou
- Thursday 3-3:50

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6 - Feedback on my work for this course is useful:

Response Option	Weight	Frequency	Percent
Disagree strongly	(1)	0	0.00%
Disagree somewhat	(2)	3	15.79%
Neither agree nor disagree	(3)	0	0.00%
Agree somewhat	(4)	9	47.37%
Agree strongly	(5)	7	36.84%
N/A	(0)	0	0.00%

Means: Question 4.05, School Level 4.09, Department Level 4.01

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
19/20 (95.00%)	4.05	1.03	4.00	11485	4.09	1.02	4.00	1924	4.01	1.00	4.00

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7 - Compared to other Hopkins courses at this level, the workload for this course is:

Response Option	Weight	Frequency	Percent
Much lighter	(1)	0	0.00%
Somewhat lighter	(2)	0	0.00%
Typical	(3)	4	21.05%
Somewhat heavier	(4)	11	57.89%
Much heavier	(5)	4	21.05%
N/A	(0)	0	0.00%

Means: Question 4.00, School Level 3.41, Department Level 3.54

Response Rate	Mean	STD	Median	School Level	Mean	STD	Median	Department Level	Mean	STD	Median
19/20 (95.00%)	4.00	0.67	4.00	11511	3.41	0.96	3.00	1937	3.54	0.88	3.00

Course: EN.553.171.03.FA24: Discrete Mathematics

Instructor: Apurva Nakade *

Response Rate: 19/20 (95.00 %)

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8 - What are the best aspects of this course?

Response Rate	15/20 (75%)

- The concepts learned are useful and interesting.

- good teaching, able to make abstract concepts more concrete and understandable

- I think the lecture is very well-taught and ties concepts together. The Zybook homework is also a good way to learn the concepts prior to the lecture and written homework. Written homework regrade requests are nice since the written homework is challenging.

- Teacher is good

- The exams were well-organized

- Passionate instructor

- Teacher instruction

- The lectures went by quickly and were engaging, and the material was generally interesting even if it was difficult

- It really makes you think outside of the box sometimes, you can't just stick to the most basic definitions of certain theorems and expect to get the answer all the times

- I like how the professor opens a lot of office hour.

- Challenging

- I loved that the professor did numerous practice questions during lectures, which was helpful for us understanding the concepts even better.

- Instructor was very good, and taught in a way that made the concepts easy to understand

- Fun topics, interesting gateway into discrete mathematics

- learning about diverse proofing techniques about math expanding my horizons of proofs

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9 - What are the worst aspects of this course?

Response Rate	13/20 (65%)

- Exams are a bit challenging and not easy to prepare for.

- heavy courseload

- I found that section wasn't particularly effective. My TA would not have a lot of questions prepared and would brush over explaining the homework problems very quickly, just verbally explaining mostly. I also found that the homework grading often wasn't very helpful. I'd lose points with the only comments being "not sufficient" or something just as short, which made it hard to fix or learn from my mistakes.

- Homework is hard

- The grading of homework was sometimes harsh

- Grading is harsh and homework is overkill

- Homework load

- TA

- This course is very exam heavy

- The written homework is a bit too difficult.

- The workload and the difficulty of the concepts; however, I know this is how discrete math is.

- not much,

- n/a

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10 - What would most improve this class?

Response Rate	11/20 (55%)

- Solutions to written homeworks after they are being graded.

- I think more office hours or more trained TAs. I've gone to a multiple office hours where the TAs didn't show up or hadn't looked at the homework yet. Considering the rigor of the homework, I think that having more support for the assignments would be very helpful. Also, I work on Wednesdays which is when most of the office hours were, so I couldn't attend any. Having some more office hours on Monday or Tuesday would also help greatly.

- Less homework

- Be more clear about grading criterion of homework and what is the expectation of writing style. Make this class a writing intensive one because it is very proof based.

- Having more resources to study for tests. Homework is too difficult and zybooks is too basic often. Lack of resources to prepare from

- Shorter homework

- The TAs were not super useful, but the Professors office hours usually made up for it if needed.

- Perhaps instead of only 3 big exams, also incorporate a few quizzes

- Give more time for the written homework due date.

- None

- n/a

Course:	EN.553.171.03.FA24: Discrete Mathematics
Instructor:	Apurva Nakade *
Response Rate:	19/20 (95.00 %)

11 - What should prospective students know about this course before enrolling? (You may comment on any aspect of this course such as assumed background, readings, grading systems, and so on.)	
Response Rate	13/20 (65%)

- This course may require more time to study/learn the concepts.
- if you are familiar with proofs, this course should be quite straightforward. If not, it may be a little challenging.
- Understand that the homework does take a lot of time.
- The homework is hard The exams are kinda hard too
- It is very writing intensive
- Honors discrete is an easier course if you want a good grade
- Good professor, difficult homework
- The proofs can be a bit tedious, but get easier with experience and feedback on assignments.
- It's very proof based and the assignments can be heavy depending on your highschool math background, there's a lot of writing (of math)
- The test is fair but the written homework will require a decent amount of time, so be prepared.
- its quite hard and its heavy
- The prospective students should make sure they don't have problem doing basic algebra and math functions in order to do well in this course.
- it requires time (hws) but worth it!