Northwestern

Individual Report for MATH_368-0_31: Introduction to Optimization (Apurva Nakade)

Project Title: **Course and Teacher Evaluations CTEC Spring 2022**

Courses Audience: **15**
Responses Received: **9**
Response Ratio: **60.0%**

Report Comments

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Creation Date: **Wednesday, June 15, 2022**

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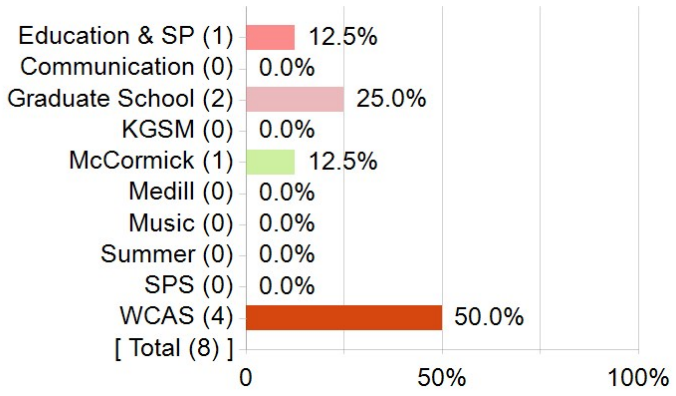
Course Evaluations

Instructor	Course
Apurva Nakade	**MATH_368-0_31: Introduction to Optimization**

DEMOGRAPHICS

Your School

Your School



Options	Count	Percentage
Education & SP	1	12.5%
Communication	0	0.0%
Graduate School	2	25.0%
KGSM	0	0.0%
McCormick	1	12.5%
Medill	0	0.0%
Music	0	0.0%
Summer	0	0.0%
SPS	0	0.0%
WCAS	4	50.0%

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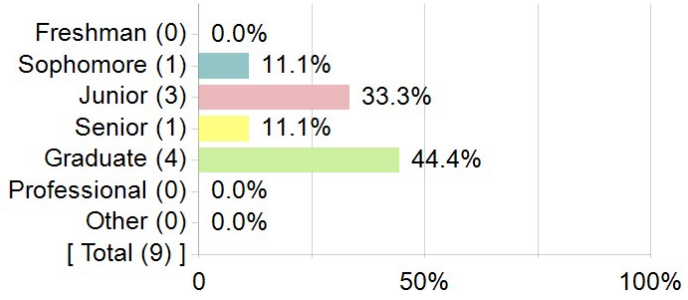
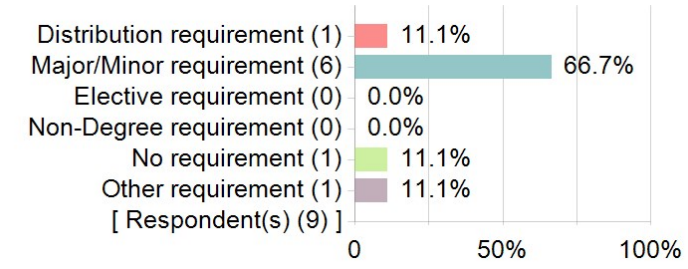
Your Class

Your Class



Options	Count	Percentage
Freshman	0	0.0%
Sophomore	1	11.1%
Junior	3	33.3%
Senior	1	11.1%
Graduate	4	44.4%
Professional	0	0.0%
Other	0	0.0%

What is your reason for taking the course? (mark all that apply)



Options	Count	Percentage
Distribution requirement	1	11.1%
Major/Minor requirement	6	66.7%
Elective requirement	0	0.0%
Non-Degree requirement	0	0.0%
No requirement	1	11.1%
Other requirement	1	11.1%
Respondent(s)	9	

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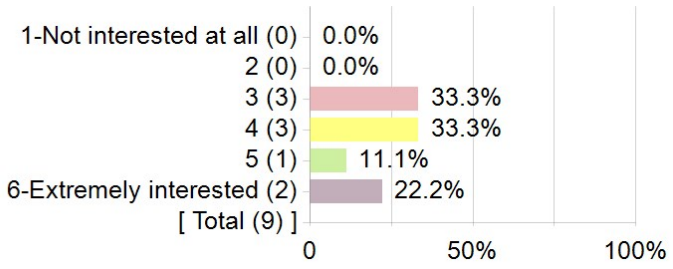
What was your Interest in this subject before taking the course?

What was your interest in this subject before taking the course?

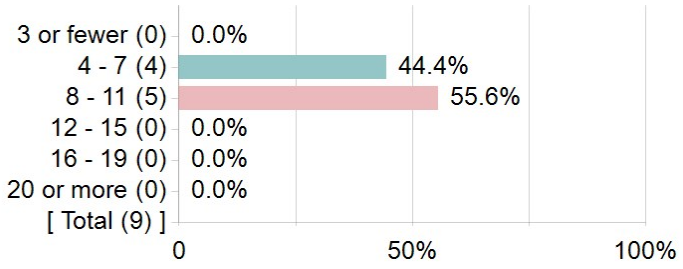


Options	Count	Percentage
1-Not interested at all	0	0.0%
2	0	0.0%
3	3	33.3%
4	3	33.3%
5	1	11.1%
6-Extremely interested	2	22.2%

TIME-SURVEY QUESTION

Estimate the average number of hours per week you spent on this course outside of class and lab time.

Estimate the average number of hours per week you spent on this course outside of class and lab time.



Options	Count	Percentage
3 or fewer	0	0.0%
4 - 7	4	44.4%
8 - 11	5	55.6%
12 - 15	0	0.0%
16 - 19	0	0.0%
20 or more	0	0.0%

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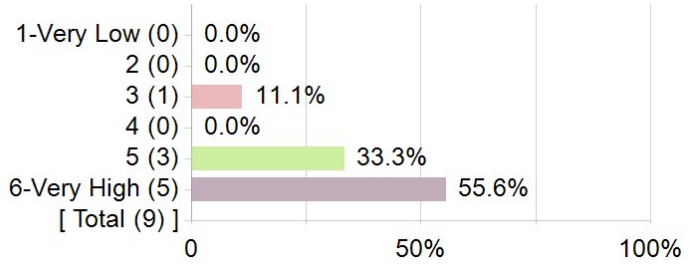
COURSE QUESTIONS

Provide an overall rating of the course.

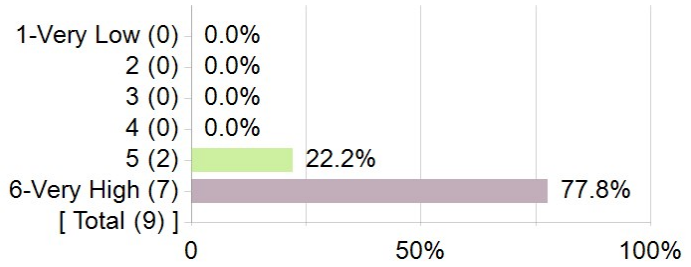
Provide an overall rating of the course.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	1	11.1%
4	4	0	0.0%
5	5	3	33.3%
6-Very High	6	5	55.6%
Statistics			Value
Response Count			9
Mean			5.33
Median			6.00
Standard Deviation			1.00

Estimate how much you learned in the course.

Estimate how much you learned in the course.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	2	22.2%
6-Very High	6	7	77.8%
Statistics			Value
Response Count			9
Mean			5.78
Median			6.00
Standard Deviation			0.44

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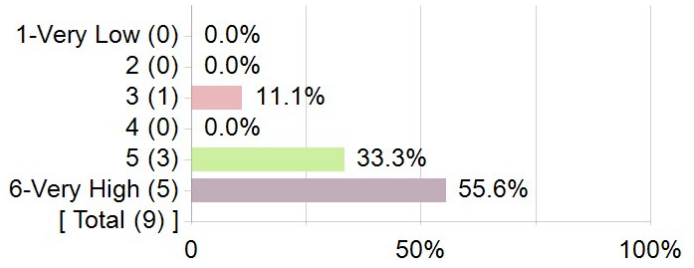
Rate the effectiveness of the course in challenging you intellectually.

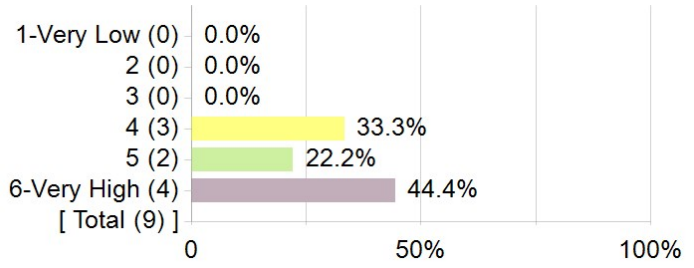
Rate the effectiveness of the course in challenging you intellectually.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	1	11.1%
4	4	0	0.0%
5	5	3	33.3%
6-Very High	6	5	55.6%
Statistics			**Value**
Response Count			9
Mean			5.33
Median			6.00
Standard Deviation			1.00

Rate the instructional materials (texts, audiovisual materials, etc.) used in this course.

Rate the instructional materials (texts, audiovisual materials, etc.) used in this course.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	3	33.3%
5	5	2	22.2%
6-Very High	6	4	44.4%
Statistics			**Value**
Response Count			9
Mean			5.11
Median			5.00
Standard Deviation			0.93

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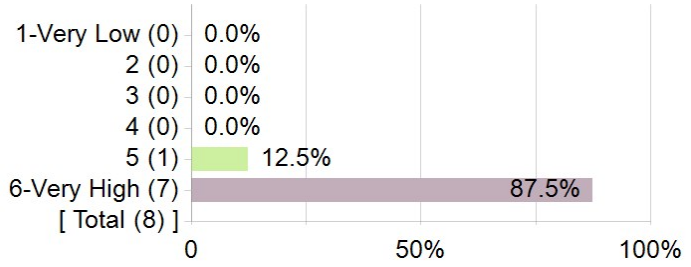
INSTRUCTOR QUESTIONS

Provide an overall rating of the instruction.

Provide an overall rating of the instruction.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	1	12.5%
6-Very High	6	7	87.5%

Statistics	Value
Response Count	8
Mean	5.88
Median	6.00
Standard Deviation	0.35

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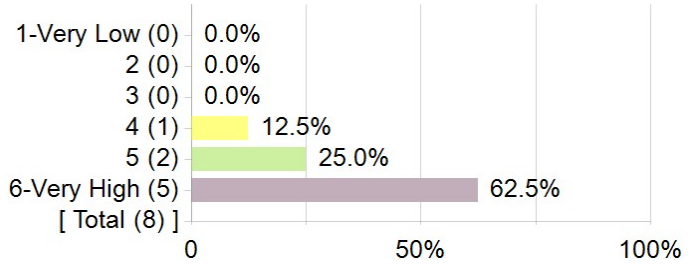
Rate the effectiveness of the instructor in stimulating your interest in the subject.

Rate the effectiveness of the instructor in stimulating your interest in the subject.

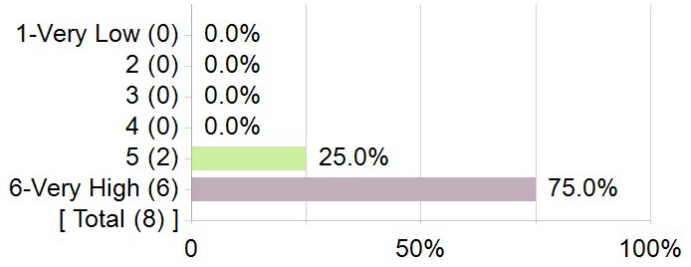


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	1	12.5%
5	5	2	25.0%
6-Very High	6	5	62.5%

Statistics	Value
Response Count	8
Mean	5.50
Median	6.00
Standard Deviation	0.76

Rate how well prepared the instructor was for the class.

Rate how well prepared the instructor was for the class.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	2	25.0%
6-Very High	6	6	75.0%

Statistics	Value
Response Count	8
Mean	5.75
Median	6.00
Standard Deviation	0.46

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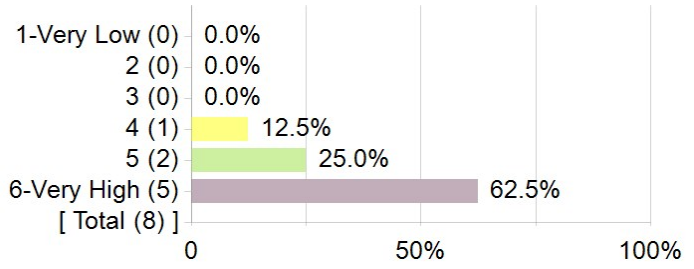
Rate the effectiveness with which the instructor communicated course content and ideas.

Rate the effectiveness with which the instructor communicated course content and ideas.

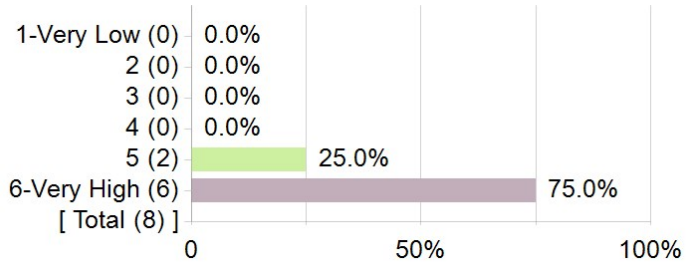


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	1	12.5%
5	5	2	25.0%
6-Very High	6	5	62.5%

Statistics	Value
Response Count	8
Mean	5.50
Median	6.00
Standard Deviation	0.76

Rate the instructor's enthusiasm in teaching this class.

Rate the instructor's enthusiasm in teaching this class.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	2	25.0%
6-Very High	6	6	75.0%

Statistics	Value
Response Count	8
Mean	5.75
Median	6.00
Standard Deviation	0.46

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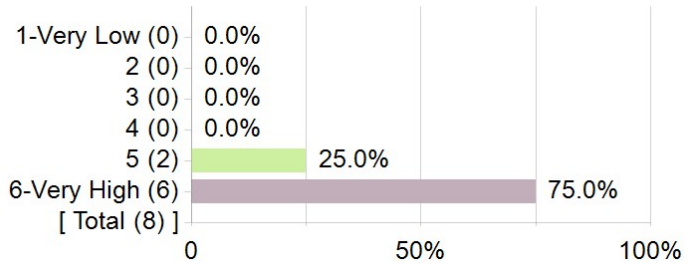
Rate the usefulness of OneNote.

Rate the usefulness of OneNote.

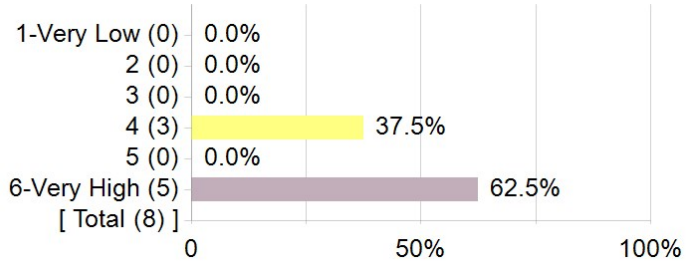


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	2	25.0%
6-Very High	6	6	75.0%

Statistics	Value
Response Count	8
Mean	5.75
Median	6.00
Standard Deviation	0.46

Rate the usefulness of homework assignments and Excel worksheets.

Rate the usefulness of homework assignments and Excel worksheets.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	3	37.5%
5	5	0	0.0%
6-Very High	6	5	62.5%

Statistics	Value
Response Count	8
Mean	5.25
Median	6.00
Standard Deviation	1.04

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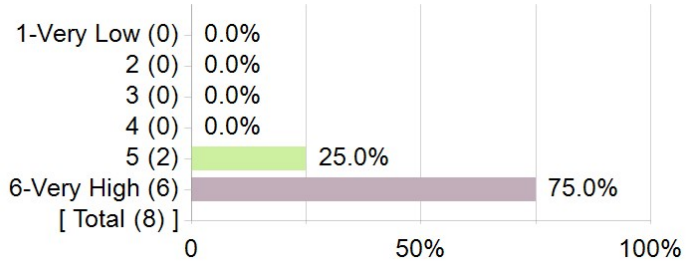
Rate the usefulness of the office hours.

Rate the usefulness of the office hours.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	0	0.0%
5	5	2	25.0%
6-Very High	6	6	75.0%
Statistics			**Value**
Response Count			8
Mean			5.75
Median			6.00
Standard Deviation			0.46

OPEN-ENDED QUESTIONS

Did the course help you learn? Why or why not?

Comments
Yes
Yes. It was taught well and at a digestible pace. The level of difficulty of homeworks were on par with what we had learned to do in class, which helped me understand the concepts better.
Yes. It presented interesting information that I could use in real world problems.
The course was very well designed with homework being the main emphasis and plenty of help from office hours. Though, I wish homework solutions were posted.

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Please summarize your reaction to this course focusing on the aspects that were most important to you.

Comments
The course is well organized and is good for getting started in optimization.
Homework was prioritized more than assessments, really prioritizing our own learning and grasping of the material.
Apurva is phenomenal! He broke down key concepts with ease, and homework questions went over a variety of different examples. Optimization is interesting as a whole due to it wide applicability in other fields, but I felt this was an enjoyable course because of Apurva.
Apurva is awesome, Ben is the best math TA i've had at NU. Not a super hard class, I recommend to anyone
This course was great! It moves at a very digestible pace and homeworks are very reflective of what is covered in class. Exams and homeworks are very reasonable and there is minimal theory / proofs used —- the course is largely computational.
Optimization is a really useful and practical math course that all math majors should take. It isn't very proof–heavy and focuses more on computation.
This was the best math class I've taken so far at Northwestern. For the first time, I feel like I will carry the material I learned in class for years and years, as it's so applicative to real world problems. Apurva is a fantastic instructor and very approachable. I'd recommend this course and anything that Apurva teaches to anyone interested.

What are the primary teaching strengths of the instructor?

Comments
Serious and responsible for the work, patient and care for the people. An expert in using technology in class
Very kind, respectful, and helpful in all aspects of instructing! Also very communicative and clear with expectations and guidelines (made frequent canvas announcements).
He explains difficult concepts in a digestible way, and makes sure everyone has the time and space to ask questions and apply the material they are learning.
Very organized and helpful. His notes were super clear and super helpful (typed up + OneNote).
Clearly communicating ideas and concepts, and being approachable and helpful after class and in office hours

What are the primary weaknesses, if any, of the instruction?

Comments
N/A
He doesn't post solutions to the practice exams. Solutions to the practice exams help students make sure they are doing the problems correctly and for a lot of people, it is how they learn best. This was a very difficult hurdle that compromised my ability to prepare for and feel confident for the exams.
–

Can you offer suggestions for improvement?

Comments
N/A
Post practice exam solution keys
–

Suggest improvements to the lecture format.

Comments
N/A
None
–
Lectures were great

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Suggest improvements to homework assignments and Excel worksheets.

Comments
I think it is better to have sample solutions for the HW.
Perhaps placing the excel worksheets we've seen from class lectures in Canvas.
excel sheets could be annotated or it could be made more clear where the formulas are coming from. homework assignments are fine but it would be nice to include screenshots of the textbook problems so we don't have to waste time digging though the textbook to find the problems. (just feels like busy work for us).
Maybe include fewer excel worksheets since it is very stressful to have seven worksheets accumulate throughout the quarter. Maybe 5 instead of 7 and give us more time to work on them in discussion sections.
–
Upload homework solutions!

Suggest improvements to office hours.

Comments
N/A
None
–

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