



# DATA 11800 3, STAT 11800 3 - Introduction to Data Science I - Instructor(s): Amanda Kube

Project Title: **College Course Feedback - Autumn 2023**

Number Enrolled: **86**

Number of Responses: **45**

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## Report Comments

Opinions expressed in these evaluations are those of students enrolled in the specific course and do not represent the University.

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Creation Date: **Friday, February 2, 2024**

**What are the most important things that you learned in this course? Please reflect on the knowledge and skills you gained.**

Comments
Python and how to manipulate large data files with pandas, numpy.
The fundamental basics from the first week or two
Coding in Python, and how to get data from a spreadsheet into usable information
Basics in Python and how to analyze and manipulate data
This course helped me with my problem-solving skills and helped me learn more about the pandas and numpy libraries.
Python usage for Data Science analysis.
Python and visualization skills
The basics to python and coding in general
Basic python, basics of statistical significance testing, confidence intervals, sampling, collecting data etc
I learned the basics of coding and how to apply it to learn from data and make large pieces of data into more digestible tables and graphs
How to interpret data, some aspects of machine learning, basics of python.
Introduction to coding, using numpy and pandas, basic statistics concepts, data visualization, hypothesis testing.
Introduction to data science pipeline, develop ability to be informed and critical readers of quantitative, data-based arguments, understand foundational concepts of probability and statistics, develop skills to apply probability and statistics for data analysis
I learned about the fundamentals of data analysis and statistics. Specifically we learned how to use numpy and pandas.
I learned how to analyze and present data using the pandas Python package.
Introduction to python: functions, syntax, intersection between coding and statistics, hypothesis testing, simulations
Intro to probability and bootstrapping.
I learned how to analyze code and statistical problems.
Coding Python for ds. Including items like making arrays, selecting specific columns, how to create data visualization graphs.
Basic coding skills in python, probability/statistics (hypothesis testing, p-values, etc.)
I learned the basics of python like manipulating dataframes. Also a lot of basic statistics concepts and you learn how to combine statistics concepts and coding.
I learned how to do hypothesis testing, confidence intervals, and also how to code with different libraries in python. This was very useful to developing my skillset as a student
Learned to use python and do basic data analysis
Basic Python programming, statistics as it relates to coding
the notebooks and assignments
I learned a lot about the fundamentals of data science and how to apply them in code.
Coding skills as well as some statistic skills
Python basics, data collection, pandas and numpy, functions and iterations, probability and distributions, statistics
The basics of python needed to handle and interpret data.
Python, numpy, pandas, probability, hypothesis testing
Introduction to python with lists, arrats, dataframes and an introduction to statistics

## Describe how aspects of this course (lectures, discussions, labs, assignments, etc.) contributed to your learning.

Comments
Labs were good, but the in-class coding exercises were really useful for HW.
lectures are ok, labs are not bad, homeworks are awful.
Lectures with new concepts were presented usually in the form of Jupyter notebooks.
Homework assignments, labs, and lectures were all very key for my learning in this class
I think that the lectures were engaging and well-structured, and the assignments usually supplemented the course material well – the professor also provided a textbook that was useful to look at for overviews of the concepts.
Lectures were not great, and most of my learning came from assignments.
The lectures were very informative, and all the homework and labs really help the learning of this class.
The lectures and assignments helped.
Lectures were really helpful, Professor Kube was very receptive to student questions
The lectures and labs combined to teach me a lot. I could then apply this knowledge to the homework, although sometimes it was more difficult and I would have to go to office house.
office hours and the course textbook were most helpful for me, but I know classmates got a lot out of the lectures.
Problem sets were very helpful and reviewing concepts and lectures had good examples that we would cover.
The lectures allowed me to gain a greater understanding of Python and the homeworks and labs were good exercise to make sure I understood how to code.
I think the assignments and labs were helpful to my learning. Lectures, not as much.
The homeworks and labs were quite effective in teaching you the skills you need to find trends in data, create simulations, and test hypotheses
Assignments and labs were the most helpful in helping me learn the material. Lectures were organized.
The textbook and homework problems were the best resource.
The lectures were very helpful. Definitely go to office hours. The homeworks are SO SO SO SO hard if you have no coding knowledge but if you actually try to work through them the knowledge you'll gain will be great (coming from someone with 0 coding experience prior to this class).
Lectures were great, homeworks were difficult but helpful for learning the skills.
The labs gave more practice than just the homework problems and were helpful because you were given the right answers instantly. Some of the labs did not match the weeks, but were still helpful later on once we got to the concept.
The lectures provided the new content while the TA office hours provided a more intimate setting where we could ask more specific questions about the content
The assignments were pretty helpful and so are the optional labs. Lectures are sometimes useful sometimes a waste
Professor Kube's lectures were the most helpful! Optional labs were also good for understanding content that wasn't asked in homework assignments.
the labs weren't really helpful, the lectures were quite helpful.
The professor was very engaged during lecture, often asking questions and hosting surveys to keep students' attention. Furthermore, she had an obvious passion for her work. Also, she gave out optional labs each week that were helpful for learning the content.
I really in favor of Prof. Kube's lecture notes
The lectures were very informative and clear and the homeworks built on the material we learned in class.
Assignments reflected content taught in lecture and applied them in new cases that use sad knowledge to ensure full understanding.
Labs, textbook, lecture slides
the homework and labs were the most important.
Office hours with Professor Kube are very helpful in addition to lectures

## Please respond to the following:

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This course challenged me intellectually.	4.37	5.00	2.44%	0.00%	9.76%	34.15%	53.66%
I understood the purpose of this course and what I was expected to gain from it.	4.15	4.00	4.88%	0.00%	7.32%	51.22%	36.59%
I understood the standards for success on assignments.	3.71	4.00	9.76%	9.76%	12.20%	36.59%	31.71%
Class time enhanced my ability to succeed in graded assignments.	3.53	4.00	10.00%	10.00%	22.50%	32.50%	25.00%
I received feedback on my performance that helped me improve my subsequent work.	3.61	4.00	7.32%	7.32%	26.83%	34.15%	24.39%
My work was evaluated fairly.	3.63	4.00	4.88%	14.63%	19.51%	34.15%	26.83%
I felt respected in this class.	4.05	4.00	4.88%	2.44%	12.20%	43.90%	36.59%
Overall, this was an excellent course.	3.83	4.00	4.76%	7.14%	14.29%	47.62%	26.19%

## Additional comments about the course:

Comments
wish the homeworks aligned better with the code in the lectures. also wish there was an announcement/advance warning when there would be a sub
This class is not ideal for those without prior experience in Python. The learning curve is definitely pretty steep.
Prof. Kube is great and very knowledgeable in her area, however, she could've been more compelling when giving lectures. Sometimes I felt like I had gone to class for nothing. Something interesting for prospective students: she doesn't give extensions, and instead drops your lowest graded homework. Take it as you want it, can be good, can be bad.
The homework problems and what is expected from each is very vague. The wording of the problems yield many different possible interpretations that can provide very different results. Often times, to get clarification on wording attending TA office hours was required. Additionally, it often feels like to get any clarification on syntax or a specific function to solve a problem, you have to find the solution on stack overflow. And within the lectures themselves, it feels like there is a lot of missing functions that are not taught that would seriously streamline the homework and such.
Course was extremely difficult for me, but I got through it. Wasn't the fault of the professor that I struggled, I just found the content challenging.
Overall very interesting class but definitely got harder towards the end
I think this course is not as quantitative as it should be. I didn't really understand the point of the midterm project, which was written and much more qualitative than it should've been.
the final was very hard
The course had an unfair evaluation of homework and interpreting code. They did not explicitly explain directions and overall it was very vague on the standards that we were required to uphold.
I'm being so for real right now this course is so difficult if you have 0 coding experience. The homeworks were honestly the hardest part. The midterm project was okay since you had time to work on it but the final was SO HARD, even if you have coding experience it was so difficult. Honestly, if you want to learn, and you have an easier quarter, take it! I was going to do a DS major/minor but not anymore lol. I definitely can say that my repertoire grew (but at what cost). The class is interesting though.
Sometimes I would do the homework and the lectures/lectures slides were not the most helpful with figuring out the homework. I understand the purpose was that you use the textbook/notes to figure out the concepts, but the course was very fast paced and there was a lot of content so it was hard to keep up and prioritize learning it all.
The first p set after the drop deadlines is really hard but it gets much easier from there on out
Professor Kube is great!
Very good class, I really liked Professor Kube. However, I believe the final did not cover much of what we actually did; it kind of deviated from data science– harming my overall grade.
Did not feel supported in learning, sometimes harsh, didn't get helpful feedback
Professor Kube is so willing to help and is incredibly inspiring!

## I would recommend this course to:

	No	Yes
Highly-motivated and well-prepared students	4.76%	95.24%
Anyone interested in the topic	14.63%	85.37%

## Thinking about your time in the class, what aspect of the instructor's teaching contributed most to your learning?

Comments
She was thorough about the content she taught and helpful during class if any of us had questions.
clear learning materials
Prof Kube was very open to questions during lectures and was kind and approachable. She was able to explain and clarify concepts in different ways to enhance understanding.
I think that the instructor was very clear and methodical in terms of her lectures and provided us with the lecture slides so that we could follow along.
Assignments and case studies were quite useful.
The lectures
Her slideshows
She was very well-prepared, and answered questions very well
The lectures and answering questions were very useful
Office hours were most important. I found the lectures hard to follow.
The lectures were helpful and the Jupyter notebook material from lectures was very helpful for understanding concepts.
Her lecture notes and the textbook
Nothing really. I feel like the concepts in class were not presented in a very clear manner.
The live coding examples during lecture slides were helpful to translate ideas into programming.
Professor Kube was eager to answer questions or provide assistance. Lectures helped us understand the material.
Lots of office hours and simplifying complex concepts
There were no aspects to which my instructor contributed. The lectures were on a very different level of the homework.
Prof Kube was super open to helping us, restating/reexplaining confusing concepts (especially topics such as bootstrapping). I will say though we move at a very fast pace so it's hard to learn things unless you review
The lectures. Prof. Kune also clearly cares about her students, and she was always available to help outside of class.
It was most helpful when we got examples in the weekly labs.
She was very clear and structured in her course. She also made sure to communicate thoroughly through Ed discussion which was a platform that was more efficient than Canvas at delivering information to students
She's a good lecturer and explains everything pretty well
Professor Kube is a great lecturer, she's super knowledgeable and very helpful in office hours.
weekly assignments
How active she was in class and on Ed.
Generally, the lectures were decently informative and overall not problematic.
Nothing but the HW / Labs helped
Office hours were helpful and class was decently helpful well
Lectures and office hours

## What could the instructor modify to help you learn more?

Comments
Talk more about what is on the HWs.
align homeworks with code from lectures, be more reasonable when it comes to personal emergencies and homework extensions
I think that it would help if we went over more problems in class together.
Make her lectures more engaging.
Adding like a slide of helpful functions every once in a while to help streamline stuff.
Go over problems that are on the homework instead of just reading off of the slides
Not much
i was satisfied with what the professor did
Would be helpful to have all important code formulas/syntaxes in one place... doing it through examples made it confusing at times.
Give us more practice in class on the materials we were taught
Going more in depth on data science topics and things that are actually representative of what we get tested on and are expected to learn.
Not sure
Have guided examples.
Make homeworks easier.
nothing
Give more examples of particular concepts especially the statistics ones because the final exam question was more statistics based and you had to solve math problems.
Maybe more practice tests to help prepare for the final? It was difficult to prepare for the final because that was our only exam that we took in the course.
I think providing additional practice problems aside from the homework would give people more opportunities to refine their skills.
Use canvas for important announcements because I don't know how ed works and don't get notifications
I always found it helpful when she went through long chunks of code line by line
nothing
Nothing, she did an excellent job,
maybe practice exams covering what she did on the final.
I wish the instructor would be more patient sometimes, especially when asked questions as sometimes I genuinely did not understand the content, and she was unwilling to elaborate sufficiently.
Upload lectures, do more explaining less just reading the slide
Maybe pointing us in the direction towards more outside resources, but we did have access to the textbooks and lectures

## The Instructor . . .

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Organized the course clearly.	4.30	4.00	2.50%	0.00%	7.50%	45.00%	45.00%	0.00%
Presented lectures that enhanced your understanding.	3.98	4.00	2.50%	7.50%	12.50%	45.00%	32.50%	0.00%
Facilitated discussions that were engaging and useful.	3.58	4.00	5.00%	10.00%	17.50%	32.50%	17.50%	17.50%
Stimulated your interest in the core ideas of the course.	3.95	4.00	2.56%	5.13%	20.51%	38.46%	33.33%	0.00%
Challenged you to learn.	4.18	4.00	2.56%	2.56%	10.26%	43.59%	41.03%	0.00%
Helped you gain significant learning from the course content.	3.95	4.00	5.13%	7.69%	12.82%	35.90%	38.46%	0.00%
Was available and helpful outside of class.	4.00	4.00	7.69%	2.56%	7.69%	46.15%	35.90%	0.00%
Motivated you to think independently.	4.08	4.00	2.56%	5.13%	12.82%	41.03%	38.46%	0.00%
Worked to create an inclusive and welcoming learning environment.	4.00	4.00	2.56%	5.13%	15.38%	43.59%	33.33%	0.00%
Overall, this instructor made a significant contribution to your learning.	3.90	4.00	7.50%	5.00%	15.00%	35.00%	37.50%	0.00%

**Please include the name of the TA/CA/Intern you are evaluating. What aspects of the TA's teaching contributed most to your learning? What could the TA modify to help you learn more? Please include any additional feedback for the TA/CA/Intern.**

Comments
Nico
Richard Huang, Owen Karpf. They are very helpful and they should keep it up!
Richard Huang
Richard Huang Helped go over questions on homeworks and hosted a Final Exam extra help session where he went over everything taught in the class over the quarter
The TAs graded very strictly without regard for alternative answers that were correct.
Owen Karpf. Owen was the most helpful to TA in my opinion. Not that I am expecting the answers for homework assignments, but it was almost as if the other TAs were too afraid to give answers that they were not very helpful at times. It could have just been my experience. But Nico would help and ensure you figured out the code.
I went to several TA office hours
Nico Posner, Richard Huang, and more. They were helpful in debugging code and describing what was taught in class in a different way through different examples. I think more review sessions or possibly midterm project review would have been nice
no idea
Richard was great
Richard
Nico Posner. He was very helpful and responsive on Ed.
Richard
Owen Karpf Owen was a very helpful TA during office hours and helped clarify concepts from class and on the homework.

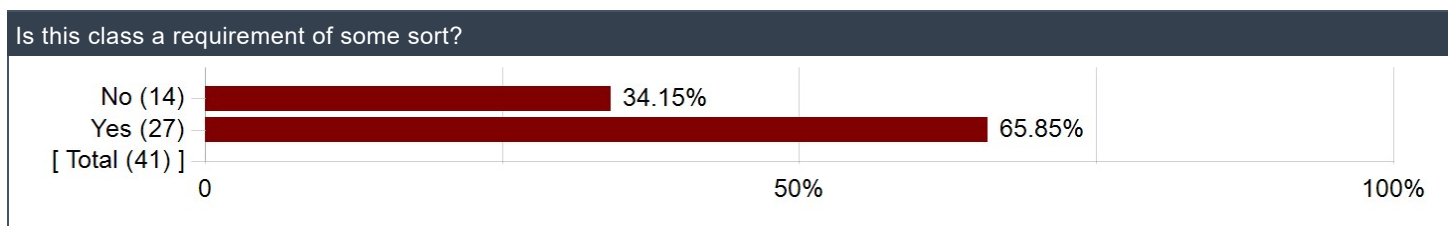
## The TA/CA or Intern. . .

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Facilitated discussions that supported your learning.	3.50	4.00	6.25%	18.75%	0.00%	12.50%	25.00%	37.50%
Gave you useful feedback on your work.	3.93	4.00	0.00%	12.50%	12.50%	31.25%	31.25%	12.50%
Stimulated your interest in the core ideas of the class.	3.75	3.50	0.00%	6.25%	31.25%	12.50%	25.00%	25.00%
Challenged you to learn.	3.64	4.00	0.00%	12.50%	25.00%	31.25%	18.75%	12.50%
Helped you succeed in the class.	3.87	4.00	0.00%	18.75%	12.50%	25.00%	37.50%	6.25%
Was available and helpful outside of class.	4.23	4.00	0.00%	0.00%	13.33%	40.00%	33.33%	13.33%
Overall, this individual made a significant contribution to your learning.	3.87	4.00	0.00%	12.50%	25.00%	18.75%	37.50%	6.25%

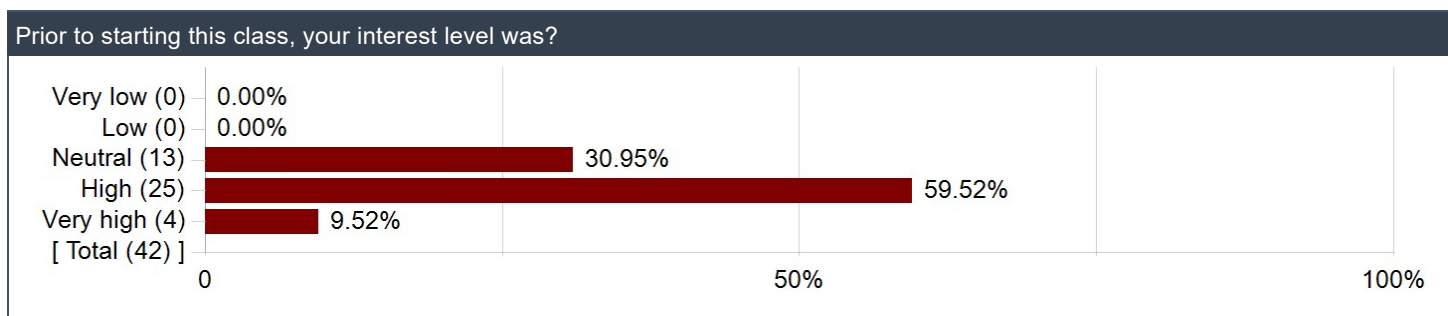
## How much did the following elements of the course contribute to your learning gains?

	Mean	Median	No Gain	A Little Gain	Moderate Gain	Good Gain	Great Gain	N/A
Laboratory Experience	3.20	4.00	0.00%	40.00%	0.00%	60.00%	0.00%	0.00%
Field Trips	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Library Sessions	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Review Sessions	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Writing Seminars	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

## Is this class a requirement of some sort?

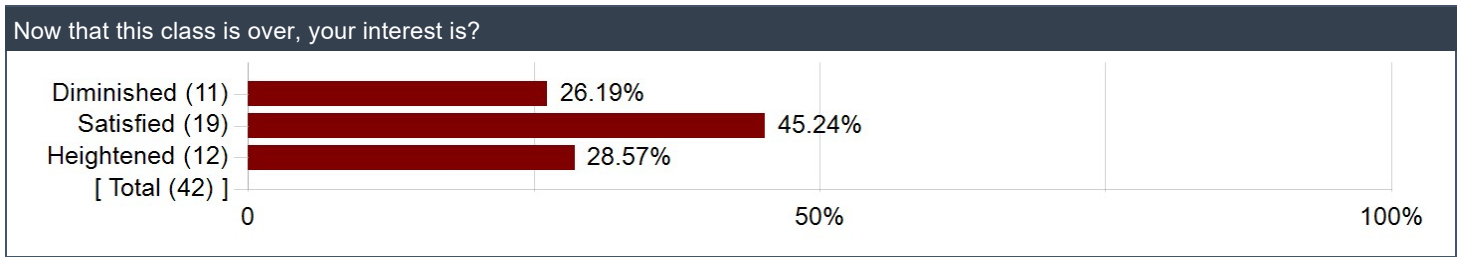


## Prior to starting this class, your interest level was?

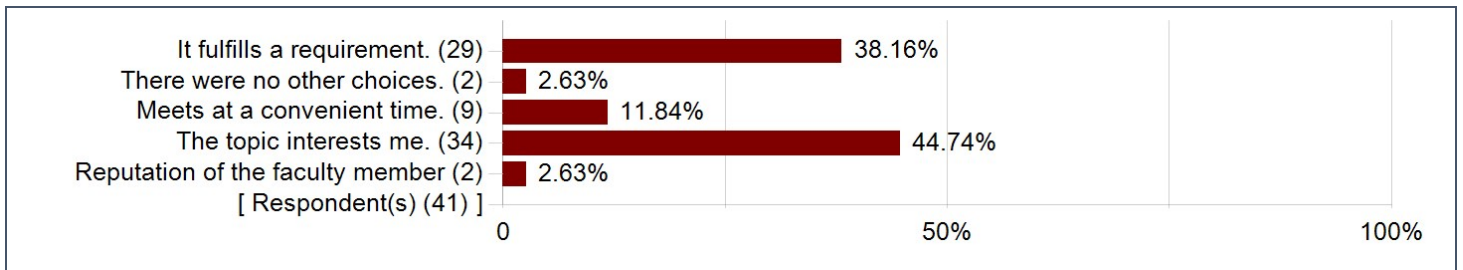




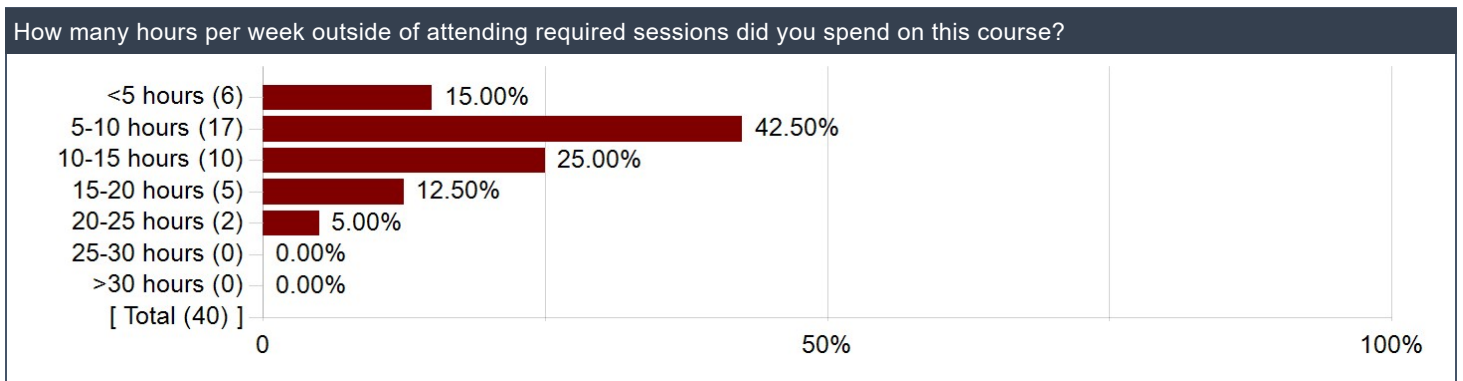
## Now that this class is over, your interest is?



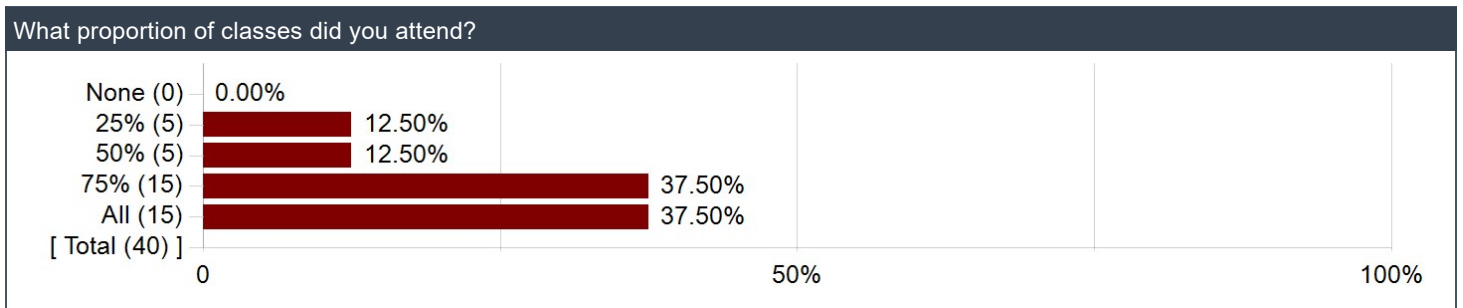
## Why did you choose to take this course? (Select all that apply)



## How many hours per week outside of attending required sessions did you spend on this course?



## What proportion of classes did you attend?



## Please comment on the level of difficulty of the course relative to your background and experience.

Comments
homeworks were unreasonably hard, midterm was fine
As someone with no previous Python, the course began to feel like a nightmare once advanced concepts began to be introduced. Definitely not great for people without coding experience.
I had some prior experience in R and Python from CS 141. The coding portion of the class felt easy for me, but I struggled with probabilities
The beginning was quite given I know Python coding, however, it gradually increased in difficulty.
It is very doable, regardless of prior experience. Go to TA office hours and you will be fine.
appropriate
Pretty difficult if you have no background in computer science/coding or stats which I did not.
Moderate Difficulty
I had no background in python, so this class was somewhat difficult. Since I had absolutely no background in coding, I did a little worse than the average student, but I am still very satisfied with what I learned in the course.
had never taken a coding class before, and this one was 100% a steep learning curve for me.
I already had a little bit of prior knowledge with Python but even then I found the course to be challenging
I think if you are someone with no python or stats experience, you will struggle with some of the concepts. I had python and stats background, so I breezed through the homeworks. The midterm and final was not so stats heavy, so maybe those without my background wouldn't find it too bad.
The course is not too difficult if you keep up with the assignments and labs
I had some prior experience with R and this course was moderately difficult but rewarding.
Had background in coding and data science so it was fairly easy. Hardest parts were probability and statistics stuff
I though this course was difficult and I have no background in statistics but a little in python.
SO SO SO SO OSO HARD IF YOU DO NOT HAVE ANY DS BACKGROUND. If you are willing and have time to learn, go for it. I'm lucky that I only took 3 classes so I could focus a lot of time on this class
As someone who didn't have any coding experience prior to taking this class, I would say that it was hard, but not impossible. If you put in the work to understand the pssets and lectures, it's completely doable, and it actually gives you a set of useful new skills.
As someone who never coded before, it was pretty difficult and it was very fast paced. With the statistics, it kind of assumed you had prior experience because they went right into topics and did not give a lot of foundation. You should be prepared to devote a bit of time to this class because it picks up pretty quickly.
It was stimulating as somebody who had already learned python. This brought a new dimension that I had not previously learned about
felt very managable at first and then got much harder but still pretty managable
Very hard. Statistics background is helpful
Not too bad for an intro course! I took STAT 220 which helped a lot at the end of the quarter, but I'd recommend going to office hours if you've never coded before.
overall recommend taking if you have a prior coding experience. other than that, final was quite tricky
Not too hard as someone with some prior python exposure and much more R exposure
The class itself was fine as I have done the intro cs sequence. The final was quite difficult as it was all probability and statistics focused even though that was not the intention of the class.
I had not taken any coding or DS or stats classes beforehand. This was a very challenging course because of this