DATA 11800 1, STAT 11800 1 - Introduction to Data Science I - Instructor(s): Dan Nicolae

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

Number Enrolled: **87**
Number of Responses: **45**

Report Comments

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

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

Comments
Basics of stats and python
Python
Python libraries used to interact with data (Pandas, NumPy), basic stats.
How to analyze different statistics related aspects using python instead of just calculating by hand
Basic of Python, and the basic of data analysis
Very practical course, learned so much Python and Pandas here. Jupyter has also become my workhorse for Python projects not just for data science
I learned how to work with datasets in Python, and we covered different elements of statistics, like sampling distributions, and confidence intervals.
Pandas/Dataframes in Python, Numpy, basic programming in Python. We did a fair amount of statistical testing towards the second half of the course.
I came into this course already having taken computer science and statistics courses, and the course perfectly bridged the gap between my knowledge in both avenues. I learned more of the specific coding skills necessary for Data Science.
Pandas skills
Python & statistics.
Learning how to work with and interpret data, using both code and non–coding techniques.
How to code for data science.
Python!!! Hypothesis and A/B testing
Learned different concepts about data science, python, probability, hyp. testing, etc.
Data Science and how to apply statistics in the programming lens.
How to write code and analyze data
Python coding for data science
making a plagiarism detector and coding a wordle
–Coding in Python with Python Pandas and Matplot Library. –Analyzing data and interpreting charts
I learned the basics of both coding in Python and statistical analyses.
Python and applying stat to programming
data analysis using python
Basic python, statistics and inference, dataframes. All of these skills came at an entry level and were easy to pick up on.
Pandas functions, data analysis, data interpretation, statistics. I found the course content interesting.
Data science, python, stats, plotting, conspiring, skulking, etc
Pandas, Numpy, basic statistical analysis
We learned how to code python from the start, a little bit of statistics like probability and hypothesis testing.
Python handling of data, some stats like binomial, hypothesis testing.
How to deal with data, construct data frame, use pandas to carry out hypothesis testing
Coding in python as well as libraries like Pandas, NumPy, and Matplotlib.
basic python coding
Entry–level coding and statistics

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

Comments
Slides are great, lab materials are great, the lecrtures are great.
Labs and assignments
Lectures were interesting and homework was useful to practice.
The assignments helped me understand the concepts that were taught in class more, and the lectures made it easier for me to understand instead of just reading the slides posted on our classroom
Lectures and office hours
Homeworks are very useful and where I learned the most about the coding part. Lectures definitely helped a lot with understanding the context of the problems introduced in the homeworks
I found the provided online textbook to be most helpful in my learning, while the lectures provided more of an introduction.
Lectures were helpful in going over the course content, but often felt rushed, so it would be necessary to go through them outside of class. Labs were useful for practice, though I did them later. Homework alone will not be enough.
Assignments helped further ingrain the lecture content.
Lectures were very helpful and Prof. Nicolae is very engaging and very good at explaining concepts, but they were so long and very draining. Missing one class is very detrimental. The class should be MWF and/or lectures should be recorded.
Lectures were really helpful, and weekly homework assignments ensured that class material was being learned. The midterm project was very helpful to find out what it's like to do real data analysis.
Lectures wonderful! Dan is a great teacher. TA's held amazing Office hours,; labs were super great for learning python basics
Homeworks were useful for learning, lectures not really.
Lectures were helpful, just sometimes would skip because it was at 9:30, but it would've been better if I had gone to all of them. Labs were helpful but optional.
Lectures were useful and practical showing coding examples
Textbook and lecture demos were helpful
lectures and labs were great
–Lecture were useful about 25% of the time. The rest were just the Professor going over the code for the lecture. The most important lectures were towards the end of the quarter.   –Labs and homework assignment were extremely helpful.
Lectures were very informative and it felt like I was learning something new each time.
Lectures and homework
The lectures and assignments were really helpful to look back on and learn from. Although optional, a few of the labs correlated nicely with what we were going over in class, making learning the concepts a lot easier.
Lectures, HW, and optional labs contributed to my learning.
Labs, demos, and assignments were all integral to increasing comfortability as well as ensuring engagement with the material and skills
Lectures were useful, especially the interactive Jupyter notebooks, which made it super easy to catch up on lectures that I missed or didn't fully understand.
Lectures would typically have a slide show that displays what is leaned and a python notebook that teaches you how the coding of the lesson.
We had weekly homework which was basically a bunch of coding questions.
The lecture slides are helpful to learn and understand materials
The lectures were not really that helpful, as we were mostly watching code that has already been written being ran rather than actually practicing writing code ourselves.
lectures went through concepts clearly
Assignments and lectures were the main source of my understanding
Lectures and labs were both very helpful

Please respond to the following:

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This course challenged me intellectually.	4.49	5.00	0.00%	0.00%	7.69%	35.90%	56.41%
I understood the purpose of this course and what I was expected to gain from it.	4.28	4.00	0.00%	7.69%	5.13%	38.46%	48.72%
I understood the standards for success on assignments.	4.26	5.00	0.00%	10.26%	5.13%	33.33%	51.28%
Class time enhanced my ability to succeed in graded assignments.	3.97	4.00	2.63%	10.53%	13.16%	34.21%	39.47%
I received feedback on my performance that helped me improve my subsequent work.	4.13	4.00	2.56%	5.13%	15.38%	30.77%	46.15%
My work was evaluated fairly.	4.36	4.00	0.00%	0.00%	7.69%	48.72%	43.59%
I felt respected in this class.	4.50	5.00	0.00%	0.00%	7.89%	34.21%	57.89%
Overall, this was an excellent course.	4.23	5.00	5.13%	2.56%	10.26%	28.21%	53.85%

Additional comments about the course:

Comments
I think it is really just better to make labs a part of official schedule because not having lab as an official schedule made it impossible for me to attend any of the labs in person because they were clashing with my other courses.
The professor didn't really explain some of his assignment questions clearly, so my friends and I usually didn't know what we were supposed to be doing until we all crammed into a tiny office hours room. In addition, he sometimes goes off topic during class, but otherwise this was a fairly good course. However, despite them saying this is an intro data science class, unless you have had programming or stats experience before, this class will be hard for you, especially the programming part.
This course made me interested in the problem–solving and analysis behind Data Science, but as someone with no coding knowledge and limited knowledge of statistics, this course was difficult, at least in terms of the amount of time that I had to invest in completing the assignments.
loved the course!
Do not fall behind!
Grading was really different between different graders, felt a bit unfair at times
Professor Nicolae liked to stress that this wasn't a stats course, but a data science course(?) Not sure if that was supposed to encourage us, but for me, data science and stats go hand in hand. I honestly think there should be a prerequisite introductory stats course for DATA 118. I have zero background in stats, and that was the portion of the course of which I struggled with the most. If I had a better foundation of stats, I think I would've felt more comfortable during the final.
the course is very poorly designed
If you are taking this course without any prior statistics or coding experience, there may be a steeper learning curve than if you were to have some. However, it is still completely possible to perform well you may just have to put in more work outside of the class.
My friends weren't fans but I enjoyed it and learned a great deal
Homeworks are fairly doable even with little previous coding experience. People struggled on the final (our only written assignment of the year), and I suspect this is because it was such a sharp departure from the online work we did during the quarter.
It can be difficult if it is your first time coding, I personally did not feel so confident into my coding experience until the 5th week.
Poorly organized course. Don't show up to lecture, it is literally a waste of time. Better to learn from the slides and Jupyter notebook demos on your own — more efficient and less time consuming.
I would strongly recommend Professor Nicolae

I would recommend this course to:

	No	Yes
Highly-motivated and well-prepared students	7.69%	92.31%
Anyone interested in the topic	10.26%	89.74%

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

Comments
The slides helped a lot when it came to the stats part
The labs he made
He was passionate about the topic and made lectures interesting, bringing case studies and useful examples.
The lecture slides were pretty helpful during class, but if you have previous experience, you honestly could've just learned by reading from the slides and not going to lectures at all
The lectures are great, also the homework is demanding but able to learn from them.
Professor Dan is very good at teaching the subject and his lectures are very engaging
The provided jupyter notebooks for each class lecture were helpful, as they generally aligned with the homework and labs.
He often went over the required pieces of code in lectures and explained things well.
Direct examples of the coding techniques that would have to be used on assignments.
Going through the notebooks in class as a method of lecturing is very helpful because we learned about concepts and practical applications in the same breath.
Prof. Nicolae is an extremely helpful and funny person, and also has a clearly very strong understanding of statistics and computer science.
Lecture examples were great; labs and Office Hours!
Ability to talk through examples.
How excited he was about the topic, and the diagrams that were demonstrated on the board.
Coding examples
Lectures were not very helpful but the lecture demos provided were instructive and clear
lectures and real–life examples
Professor Nicolae enjoyed using the board for some discussion topics, which I found really helpful. You can also tell he really enjoys teaching this subject.
I think Professor Nicolae's engagement was critical to my learning. He was always very passionate about the material and was very funny.
Lots of python examples
His lecture files were very helpful as they contained the code that we needed to use on our homework assignments.
Prof. Nicolae's lectures were really interesting, and he was very willing to answer questions.
Demos in python
Lectures and Jupyter notebooks for lectures. Professor Nicolae was also always upbeat, very kind and understanding, and a general joy to learn from.
He often provided multiple examples of what he is teaching and gave us time to think before teaching the topic to then asked the class to engage.
He posted pretty clear Jupyter notebook demos.
Lectures and homework
Using engaging examples in the code helped, and interacting with the class.
lectures
His lectures, particularly his interest in the subject

What could the instructor modify to help you learn more?

Comments
make labs mandatory so that the school system would secure that timeslot for students.
A clear outline of what we need to know for our final
Nothing.
He tends to go off track a bit. For example, the first two days of class was him talking about how he could use stats to analyze a question that confused society for a while, so while other classes were learning the actual programming part needed for the homework, we were learning about how python could be used to analyze stats, and then he gave an extremely brief crash course on python basics, which wasn't enough for the homework. Maybe if the teacher stayed on track for a majority of the class, most of us students wouldn't need to spend countless hours on google learning different python applications needed for our assignments.
I felt that the general communication about course structure and expectations (midterm project, number of assignments, etc) was somewhat lacking. In the future, a more detailed syllabus would be helpful.
Go somewhat slower in lectures.
My sole critique would be a further emphasis on statistics before coding. I think learning the math behind data analysis is more immediately and practically useful than the code used to apply it.
I think labs should be for a grade. There also should be an answer key of some kind for the final exam review, especially for the non–coding, pure statistics problems.
mandatory labs
Lectures more engaging.
The course expects a higher level of programming than I think is explained, and so there could be more in the beginning about how to get accustomed to a different platform for those with little coding experience, maybe a bigger lab or making the first couple required.
Recordings of videos about important topics
explain statistics more, focus more on the kinds of questions that come in the final
Make the homework assignment questions less vague! Ask the question the directly. Also, I think a final project for this course would've been more appropriate than the handwritten final.
I think if he had gone over a few more topics that were relevant to the PSETS
More practice and time to go through homework in class
be more prepared
Add helpful code into the lecture slides, as navigating the notebooks was difficult at times. That way the lecture slides contain both information involving stats and also code.
Nothing comes to mind.
Office hours were typically full so sometimes it was hard to find help.
Be better at Python. He was not extremely knowledgeable in this aspect. He also had trouble keeping the students' attention during lecture and students' presence in lecture in general. He is a very nice person though and holds helpful office hours.
Make the order of lectures better Too many stuffs in one lecture, might reduce a bit or make it more focused
Make us write more code instead of explaining already–written code.
more interesting lectures and clearer about what needs to be known/ not known for exam
Honestly making the labs a requirement would force me to go, I wish I would have gone more but with it not being a requirement I found it hard to incentivize myself to attend.

The Instructor . . .

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Organized the course clearly.	4.32	5.00	0.00%	7.89%	7.89%	28.95%	55.26%	0.00%
Presented lectures that enhanced your understanding.	4.21	4.00	0.00%	5.26%	15.79%	31.58%	47.37%	0.00%
Facilitated discussions that were engaging and useful.	4.09	4.00	0.00%	7.89%	13.16%	31.58%	36.84%	10.53%
Stimulated your interest in the core ideas of the course.	4.21	4.50	0.00%	7.89%	13.16%	28.95%	50.00%	0.00%
Challenged you to learn.	4.47	5.00	0.00%	0.00%	10.53%	31.58%	57.89%	0.00%
Helped you gain significant learning from the course content.	4.30	5.00	0.00%	2.70%	21.62%	18.92%	56.76%	0.00%
Was available and helpful outside of class.	4.25	4.00	0.00%	5.41%	10.81%	35.14%	45.95%	2.70%
Motivated you to think independently.	4.45	4.50	0.00%	0.00%	5.26%	44.74%	50.00%	0.00%
Worked to create an inclusive and welcoming learning environment.	4.66	5.00	0.00%	0.00%	5.26%	23.68%	71.05%	0.00%
Overall, this instructor made a significant contribution to your learning.	4.38	5.00	0.00%	2.70%	13.51%	27.03%	56.76%	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
didnt go to any of the sessions
Henry Josephsen
Henry
Yuwei
Henry Josephson
Henry Josephson. He was very good on the occasions I came to office hours, explaining concepts that may have been somewhat rushed in class. He was also effective at hinting me towards the solution without giving it outright.
Henry
Henry Joseph helped me understand concepts without giving direct answers, and challenged me to figure out issues with what I already knew. Yuwei Cheng was great with instructing in office hours, and helped direct me to sources to where I can work to the answer on my own.
Henry Josephson— wonderful teacher!!
Henry Josephson
Henry Josephson, his office hours were super helpful, with homework and general questions for the class!
Cissy Choy
richard was great!!
Yuwei Cheng. She was pretty helpful during office hours and helped immensely for the final preparation.
Henry Josephson
Yuwei
Henry Josephson. I found his office hours and availability to contribute most to my learning.
Huyen–Ahn Giang; available to meet outside of class to discuss grading but was not very consistent about providing feedback (skipped some questions resulting in zeros) and wasn't able to answer inquiries as to the optimal answer
Yuwei Cheng and Henry Josephson. They were both helpful but it seemed that there was a significant disconnect between each TA's understanding of what the homework wanted from us, which was an issue because we could be punished for this during the homework grading.
Yuwei Cheng. She is always helpful and clear about our class materials. She helped me a lot for my hw and project.
Henry Josephson was helpful in the office hours and helped us with the homework assignments a lot. I feel like no one ever had time for the "labs" so either making them required and cutting down on the homework length or getting rid of them and doing more actual coding in class would be helpful.
Yuwei

The TA/CA or Intern. . .

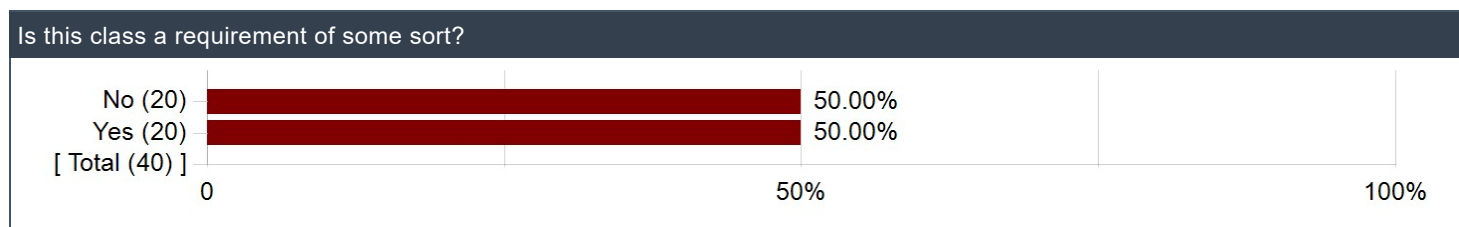|	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Facilitated discussions that supported your learning.	4.43	5.00	3.85%	0.00%	3.85%	26.92%	53.85%	11.54%
Gave you useful feedback on your work.	4.32	5.00	3.85%	7.69%	3.85%	19.23%	61.54%	3.85%
Stimulated your interest in the core ideas of the class.	4.28	5.00	3.85%	3.85%	7.69%	26.92%	53.85%	3.85%
Challenged you to learn.	4.58	5.00	0.00%	0.00%	7.69%	23.08%	61.54%	7.69%
Helped you succeed in the class.	4.72	5.00	0.00%	0.00%	0.00%	26.92%	69.23%	3.85%
Was available and helpful outside of class.	4.80	5.00	0.00%	0.00%	0.00%	19.23%	76.92%	3.85%
Overall, this individual made a significant contribution to your learning.	4.64	5.00	0.00%	0.00%	7.69%	19.23%	69.23%	3.85%

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

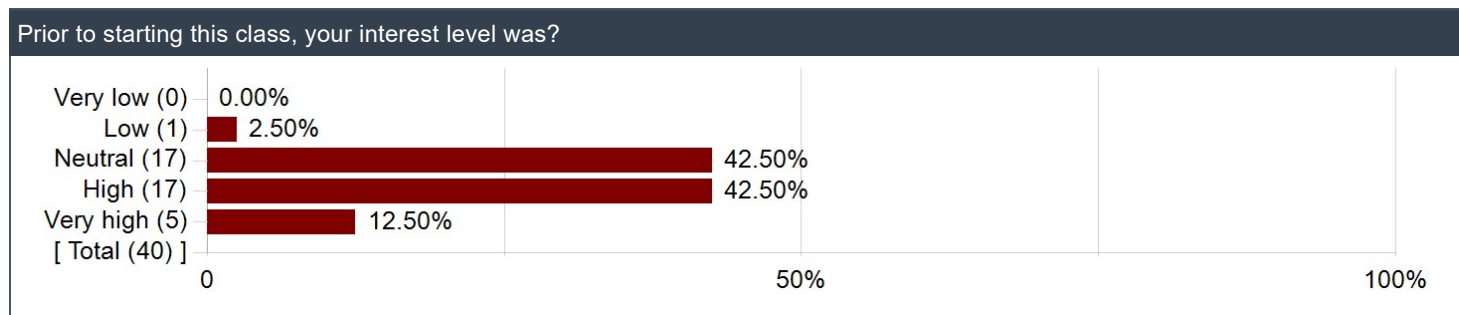|	Mean	Median	No Gain	A Little Gain	Moderate Gain	Good Gain	Great Gain	N/A
Laboratory Experience	4.25	4.50	0.00%	0.00%	20.00%	20.00%	40.00%	20.00%
Field Trips	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Library Sessions	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%
Review Sessions	4.33	5.00	0.00%	0.00%	10.00%	0.00%	20.00%	70.00%
Writing Seminars	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

Other course elements not mentioned above:

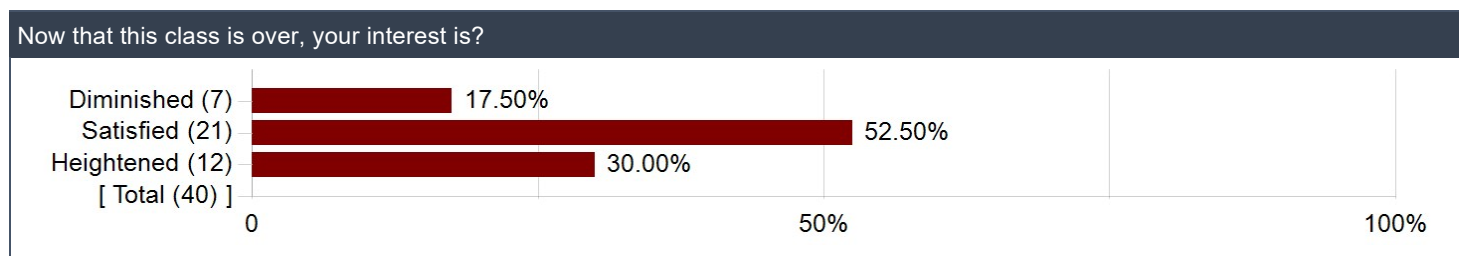| Comments |
|---|
| Labs were not graded–– this meant I didn't prioritize them before other classwork and they just piled up. Since they take a lot of time & effort and are pretty important to our learning, I think they should be worth some points, at least just to boost our grades. |

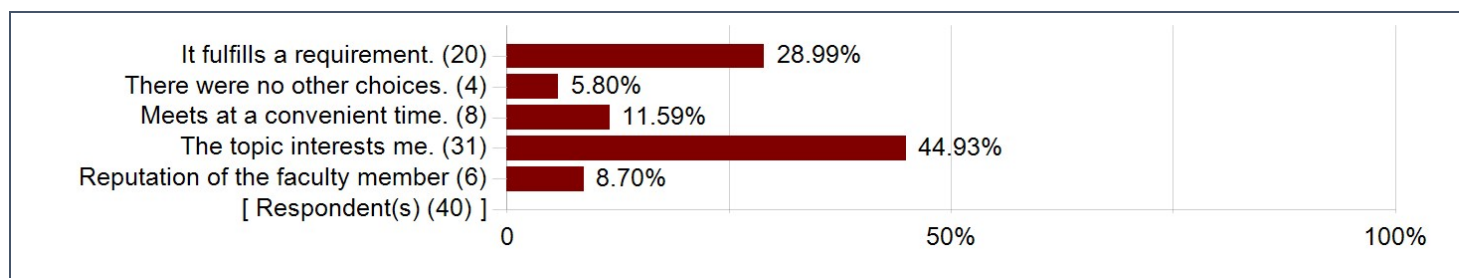## Is this class a requirement of some sort?

Is this class a requirement of some sort?

No (20) — 50.00%
Yes (20) — 50.00%
[Total (40)]

0   50%   100%

Prior to starting this class, your interest level was?

Prior to starting this class, your interest level was?

Very low (0) — 0.00%
Low (1) — 2.50%
Neutral (17) — 42.50%
High (17) — 42.50%
Very high (5) — 12.50%
[Total (40)]

0   50%   100%

Now that this class is over, your interest is?

Now that this class is over, your interest is?

Diminished (7) — 17.50%
Satisfied (21) — 52.50%
Heightened (12) — 30.00%
[Total (40)]

0   50%   100%

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

It fulfills a requirement. (20)	28.99%
There were no other choices. (4)	5.80%
Meets at a convenient time. (8)	11.59%
The topic interests me. (31)	44.93%
Reputation of the faculty member (6)	8.70%
[Respondent(s) (40)]	

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

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

<5 hours (7)	17.50%
5-10 hours (24)	60.00%
10-15 hours (6)	15.00%
15-20 hours (1)	2.50%
20-25 hours (2)	5.00%
25-30 hours (0)	0.00%
>30 hours (0)	0.00%
[Total (40)]	

What proportion of classes did you attend?

What proportion of classes did you attend?

None (0)	0.00%
25% (2)	5.26%
50% (5)	13.16%
75% (14)	36.84%
All (17)	44.74%
[Total (38)]	
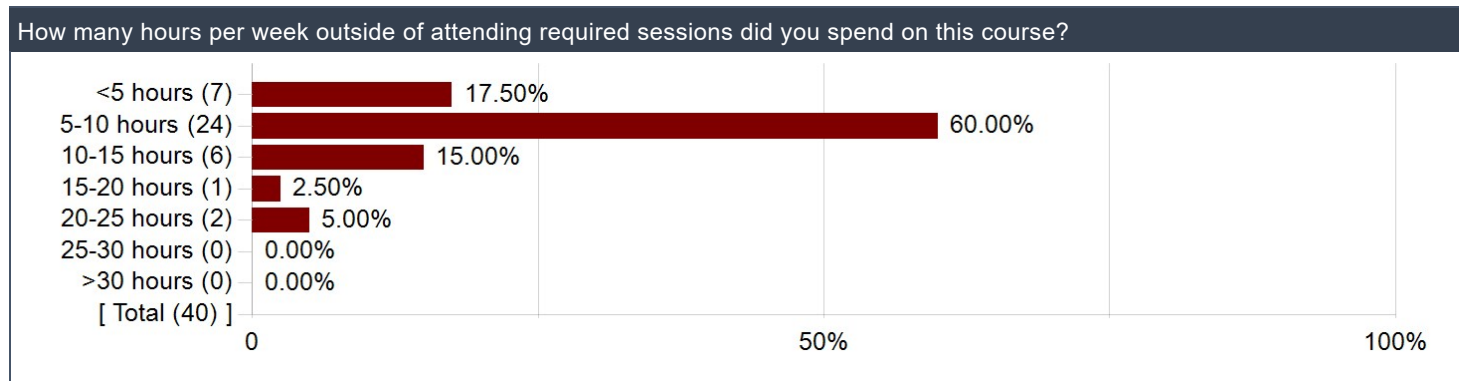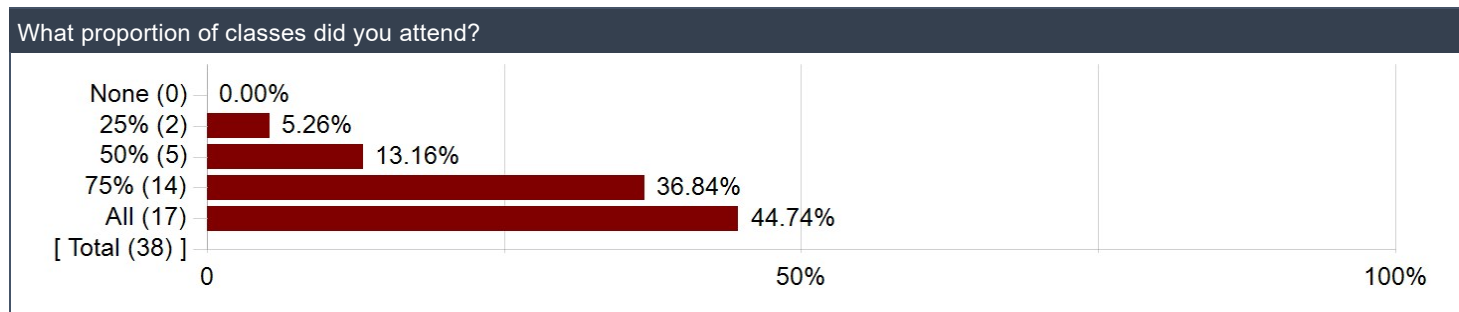
Please comment on the level of difficulty of the course relative to your background and experience.

Comments
I had some experience with Python, which helped a lot. Then again, didn't have any stats knowledge, and struggled in that part. If you don't have any background in both, you might struggle a little. (It is very doable still)
First few classes are used to introduce Python, very easy with background in coding. Then it gets more challenging but is very manageable.
Very high, and I went into the class with a programming and stats background
Very demanding
The course was relatively easy as I had taken stats and had known another object–oriented programming language
I had no coding experience, and very little experience in statistics, and I felt that this course was very difficult, or at least very time consuming. In terms of workload, I spent the majority of time on the coding assignments, and as a result, absorbed less of the statistics that were being taught.
Having some background in Python and a solid background in statistics, it was just the right level – not too hard but not too easy either.
The class initially had a steep learning curve, but was only moderately difficult afterwards.
I learned R in biostats and in StAT 220, so the coding wasn't horrible. It just takes some practice to get used to all the syntax and such. I would recommend keeping a running document of all the commands you learn in class & in lab, with their syntax & function explained for quick reference.
Honestly very easy, as long as you are capable of understanding concepts as they are being introduced in lecture.
might be a lot to catch up on if you have never programmed before... take some time prior to the class to understand what it means to program in the first place (it helps immensely). I learned small basics brieflt over the summer before, and fared well in the class as a result, despite never having coded before.
Decently difficult, had a learning curve to pick up new concepts.
Surprisingly difficult for someone with decent coding experience but minimal statistic skills
I had some experience with coding before (I took CS 151 and 152 in 2021–2022 AY), so the first 7 weeks were fairly simply but then some of the more statistical coding was a bit difficult
I have a little bit of python coding experience and while the first two week were relatively easy, the rest of the course was decently challenging. If you have no coding experience, this class is either going to make you or break you. I put in many extra hours over my weekends learning how to code. Luckily, that paid off and I did end up learning a ton, but youtube and google were my best friend to learn how to properly code with python pandas. Additionally, if you have no stats background, this class will definitely be challenging, but still doable. Leverage the use of office hours and the TAs.
You DEFINITELY need Computer Science and Statistics background. The "no background needed" on the course catalog is a complete lie.
It was quite difficult as it felt like I was doing a lot of learning on my own time.
More difficult towards the end
I did not have any prior coding background so I found it difficult at first, but once understanding the basics it all became very doable.
The course was alright for me in terms of difficulty, but I had prior data science/Python experience.
I had some python and stats experience, I found it to be the right level of difficulty for the beginning of the data science major sequence
Took AP CS and AP Stat in high school, CS 141, CS 142, and STAT 234 the previous two quarters. With this background, the course was fairly easy — my college classes had prepared me for coding in Python for the most part (had to learn a little more of Pandas) and for statistical methods (hypothesis testing, confidence intervals, sampling). You do not need this level of background to take this course and you can succeed without it, but if you are well versed in Python and basic statistics you will find the course easy.
With no prior coding experience and being my first ever quarter it was very difficult because of UChicago's pacing but with practice and time you are able to get use to it.
I knew a bit of Python from previous classes and took AP Statistics. Without previous coding or stats knowledge, this course is pretty hard and you would be fighting an uphill battle.
If you have no prior experience of python, it might be challenging.
Pretty difficult to understand. I had a bit of Python experience in high school, but even then you have to go over every lecture to understand the coding.
It is difficult but manageable. The final will be tougher than you think it will be