

DATA 11900 3, STAT 11900 3 - Introduction to Data Science II - Instructor(s): Amanda Kube

Project Title: College Course Feedback - Winter 2024

Number Enrolled: **38**Number of Responses: **26**

Report Comments

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

Creation Date: Thursday, March 28, 2024



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

Comments

Cross validation, clustering, regression types

Logistic and linear regression

Regression models (Ridge, Lasso, Linear), Statistical Analysis, Machine Learning (neural networks, cross validation), a bit of SQL

Machine Learning Fundamentals

I learned the many machine learning models and how they work conceptually, and even hard coded the functions for some models (when possible), which really helped establish the concepts in my mind. I learned how to implement ML models in python, how to optimize them to produce the best performance. I became much more comfortable with diving into documentation of functions and libraries, and figuring out how to tweak them to make them work the way I want.

regression and classification models, clustering, SQL

Machine learning, regression techniques, and a bunch of subtopics within those.

significntly improving my skills in data analysis and creating analaytical models

Applying skills from DATA 118, Linear Regression, Logistic Regression, Neural Networks

Data wrangling, regression, neural networks, decision trees

We learned a lot of introductory machine learning techniques and important data science concepts like linear/multiple regression, etc.

Various methods of classification, neural networks, lasso/ridge

great

ML concepts

Linear regression, classification, neural networks, and other models by which to predict and evaluate variables

Basic data science principles

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

Comments

Lecture, office hours, and homework assignments were helpful.

The lectures were very fast paced and hard to fully grasp the material if you have not had any previous experience with the topics.

I felt that homework was the best reinforcement of what was taught in class. Professor Kube was an engaging lecturer but the class was hard to follow at times especially when it came to the statistics

Homework, Labs helped practice learning

The lectures were super useful, Professor Kube is very well organized and great at explaining the concepts. Her notebooks are detailed enough to help you grasp the topic even without attending the lecture if necessary (although I don't recommend it). The topics build up very nicely on each other.

The assignments ensured you study and understand the concepts discussed in class, and how to implement them. I did not find the labs as useful as in DATA 118 though.

lectures were helpful, labs weren't that helpful.

I personally found the lectures difficult to follow. We were simultaneously learning complex statistics concepts while also being shown the code for it. The slides and the jupyter notebooks were often just blocks of dense code with a few comments, which was very difficult to parse through. I wish the concepts and the code were taught more in depth separately, so that I would not be so overwhelmed during the lectures.

The homework assignments were equally bad. I often found myself just copying the code from the lecture slides and changing the names of my variables, and I rarely knew if my code was running properly. (that being said, my homework grades were relatively high, so I wonder if the TAs simply didn't know my code wasn't working when they graded it).

The single most useful aspect of this course that actually did contribute substantially to my learning was the recorded final review session that I watched from a previous quarter (not officially part of this class). Having a TA walk through everything at a high level was very helpful.

the lectures and provided jupyter notebooks were useful. Dr. Kube also answered all questions thoughfully when asked in class. The labs were a useful way to learn more within the class.

Lectures were the most helpful.

The lectures were moderately helpful; I generally was able to better understand concepts and code from the textbooks. Often the lectures would include textbook examples and I do not think they were always the most helpful with doing the homework. We also had a group project which was a good way to practice what we were learning.

Lectures were the bulk of it, plus the Python notebooks accompanying them. Labs and assignments helped me through hands—on experience and keeping me on—track.

great

All parts of this class were crucial to my understanding of the concepts.

Lectures and mainly assignments

Labs, assignments and TA office hours are where youll do the most learning

Please respond to the following:

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This course challenged me intellectually.	4.73	5.00	0.00%	0.00%	0.00%	27.27%	72.73%
I understood the purpose of this course and what I was expected to gain from it.	4.36	4.00	0.00%	4.55%	0.00%	50.00%	45.45%
I understood the standards for success on assignments.	3.91	4.00	0.00%	13.64%	18.18%	31.82%	36.36%
Class time enhanced my ability to succeed in graded assignments.	3.95	4.00	0.00%	4.55%	22.73%	45.45%	27.27%
I received feedback on my performance that helped me improve my subsequent work.	3.73	4.00	4.55%	9.09%	22.73%	36.36%	27.27%
My work was evaluated fairly.	3.82	4.00	0.00%	13.64%	22.73%	31.82%	31.82%
I felt respected in this class.	4.36	4.50	0.00%	0.00%	13.64%	36.36%	50.00%
Overall, this was an excellent course.	4.00	4.00	0.00%	13.64%	9.09%	40.91%	36.36%

Additional comments about the course:

Comments

This course is much more difficult conceptually to 118, but easier coding—wise. At times, what was expected from the questions on the Psets were unclear, but overall do—able. Go to office hours!!! It is the best way to succeed in the class. Also, the prof and TAs several times did not respond to Ed discussion posts, and people would get pressing questions unanswered for days.

I think all concepts discussed in class should be tested in the assignments. Some concepts fell through the gaps and were not included in the assignments, like decision trees, RF, boosting and neural networks. I don't feel as confident in those as I am in the other concepts I tackled in the assignments.

I wish we had had more homework assignments that were not coding involved but were written packets like the final review homework. I felt that many questions on the final was formatted in a way we had not practiced or even seen before, so I felt a bit blindsided. After reviewing some of the relevant lecture slides post–final, I still found that I was unable to answer the questions I missed on the final. I also dislike how we do not get answers to out homework assignments or practice exams — it would substantially contribute to my learning, but the professor withholds because she wants to reuse the homeworks next quarter.

Biggest takeaway: If you take this course, expect to have an easy A in the class until your final, which is worth 40% of your grade and is very difficult (many questions test edge cases and have no room for partial credit.) I expect the average on the final to be in the 70s, so if you are an average student in this class with an A average going into the final, you will likely leave with a B+.

Could have benefited from deeper explanations of the stats/math

great

N/A

We weren't given feedback or answers to our homeworks or practice tests. Made it very hard to learn and a get a good idea of what was supposed to be going on. Minimal opportunities to practice with practice problems.

N/A

I would recommend this course to:

	No	Yes
Highly-motivated and well-prepared students	4.35%	95.65%
Anyone interested in the topic	8.70%	91.30%

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

Comments

Professor Kube was very accommodating to questions that came up during lecture and welcomed engagement from students. Lectures were well structured and organized

Office Hours was helpful

Professor Kube was very approachable and willing to offer her help after every single class, and she would wait till she answers everyone's questions, whether that be on the assignments or in the field. After every class, a line would form to ask her questions and she would answer every single one.

clear and thorough explanation

I appreciated that professor Kube offered to stay after class almost every day to answer questions. I wish she had taken that as a sign that many people were confused by the lectures.

I loved when she would add onto the lecture code by challenging us to modify it or even to think of other ways to code the same thing using different libraries or functions

Prof. Kube's lectures contributed the most to my learning. The check ins were also helpful.

great

The lectures

The slideshows

Lecture slides/notebooks

What could the instructor modify to help you learn more?

Comments

Answer more questions on Ed and email more immediately

Spent more time on each topic and went more in depth as well as included more hands-on practice examples in class.

The expectation on assignments was very unclear and many marks were often deducted for very minor mistakes. It felt like the TAs were also not very in touch with the professor which made things more disorganized.

Slow pace down if possible

The project felt very impact–less and futile. Using datasets from kaggle felt like the project is very rudimentary and useless. I would like to attempt to use what we've learned on real life problems, to experience the usefulness of ML firsthand. Also, the randomized way of forming the groups are not ideal, as you could get matched up with partners that are not putting in the effort, not attending classes etc.

Please, please, please change the lecture format. I absolutely cannot stare at a block of code and understand a new complex regression technique.

nothing much

Walk through more parts of the code from the lectures.

great

Please reflect more what is said in the lectures on the slides.

Going into the final, 70% of our grade was still undetermined so maybe having the project earlier or the homeworks weighted more would have been helpful.

Practice problems. We did so little practice problems and got almost no feedback.

Make it consistent on whether the course focuses on conceptual or computational

The Instructor . . .

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Organized the course clearly.	4.16	5.00	0.00%	10.00%	15.00%	20.00%	50.00%	5.00%
Presented lectures that enhanced your understanding.	4.32	4.00	0.00%	0.00%	10.00%	45.00%	40.00%	5.00%
Facilitated discussions that were engaging and useful.	3.88	4.00	0.00%	5.00%	30.00%	20.00%	30.00%	15.00%
Stimulated your interest in the core ideas of the course.	4.26	4.00	0.00%	0.00%	10.00%	50.00%	35.00%	5.00%
Challenged you to learn.	4.37	4.00	0.00%	0.00%	5.00%	50.00%	40.00%	5.00%
Helped you gain significant learning from the course content.	4.21	4.00	0.00%	10.00%	5.00%	35.00%	45.00%	5.00%
Was available and helpful outside of class.	4.32	5.00	0.00%	0.00%	20.00%	25.00%	50.00%	5.00%
Motivated you to think independently.	4.26	4.00	0.00%	0.00%	10.00%	50.00%	35.00%	5.00%
Worked to create an inclusive and welcoming learning environment.	4.21	4.00	0.00%	5.00%	10.00%	40.00%	40.00%	5.00%
Overall, this instructor made a significant contribution to your learning.	4.16	4.00	0.00%	5.00%	10.00%	45.00%	35.00%	5.00%

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

Paarth Sharma

Paarth Sharma, super TA. He was an important part of my learning experience in this course.

Paarth Sharma. He was helpful during the office hours on the homework assignments. He even extended his weekly office hour by an hour (2 hours total) which was helpful because his day to offer the office hours was the night before homework was due.

great

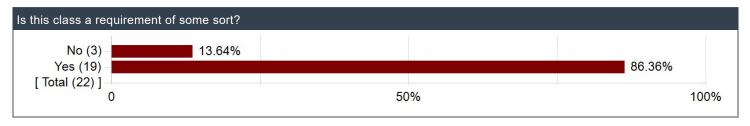
The TA/CA or Intern...

	Strongly					Strongly		
	Mean	Median	Disagree	Disagree	Neutral	Agree	Agree	N/A
Facilitated discussions that supported your learning.	4.20	4.00	0.00%	0.00%	0.00%	66.67%	16.67%	16.67%
Gave you useful feedback on your work.	4.20	4.00	0.00%	0.00%	0.00%	66.67%	16.67%	16.67%
Stimulated your interest in the core ideas of the class.	4.20	4.00	0.00%	0.00%	0.00%	66.67%	16.67%	16.67%
Challenged you to learn.	4.20	4.00	0.00%	0.00%	0.00%	66.67%	16.67%	16.67%
Helped you succeed in the class.	4.17	4.00	0.00%	0.00%	0.00%	83.33%	16.67%	0.00%
Was available and helpful outside of class.	4.17	4.00	0.00%	0.00%	0.00%	83.33%	16.67%	0.00%
Overall, this individual made a significant contribution to your learning.	4.00	4.00	0.00%	0.00%	16.67%	50.00%	16.67%	16.67%

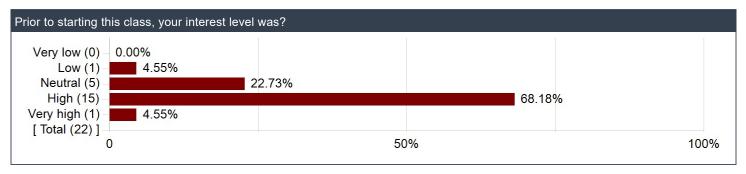
How much did the following elements of the course contribute to your learning gains?

	Mean	Median	No Gain	A Little Gain	Moderate Gain	Good Gain	Great Gain	N/A
Laboratory Experience	3.33	3.00	0.00%	16.67%	50.00%	16.67%	16.67%	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	2.50	2.50	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%
Writing Seminars	N/A	N/A	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%

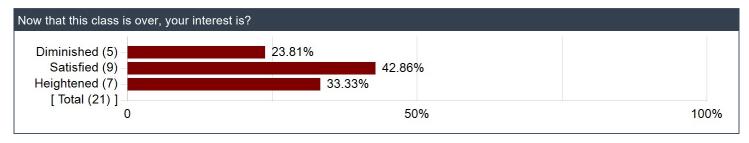
Is this class a requirement of some sort?



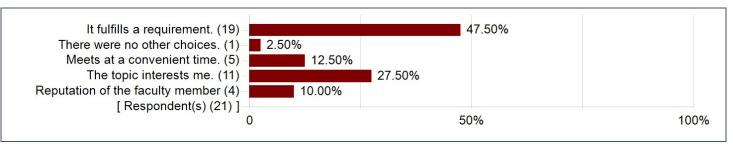
Prior to starting this class, your interest level was?



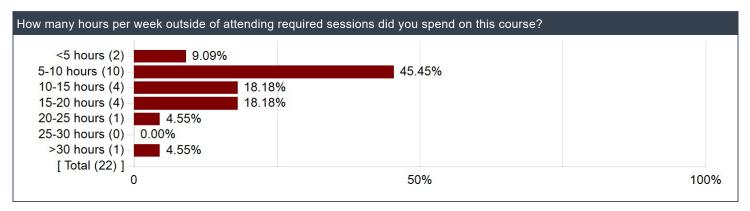
Now that this class is over, your interest is?



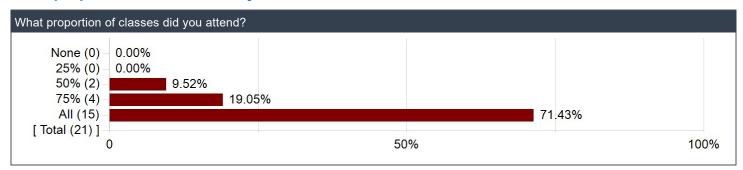
Why did you choose to take this course? (Select all that apply)



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

Definitely a step up from data 118, class moves quickly and a lot of pretty deep statistical concepts that without proper background can be a little tough to grasp.

I took DATA 118 the previous quarter with the same professor and found this class to be more challenging, but manageable.

data 118

Do-able with 118 experience, more conceptually difficult but should be ok if you go to office hours.

The course is pretty difficult even with the background of 118

Pretty difficult to comprehend concepts.

You'll be well prepared if you take DATA 118 before. Be prepared to go to office hours for the hw every week though.

I took CS 141, Stats 220, SSI, and DATA 118, and still found this course to be very difficult. It wasn't unmanagable, but it may require you to watch youtube videos and read online articles since there was no formal textbook.

It was a difficult class as someone who came into the sequence with no coding experience but It was friendly to beginners like me.

Difficult jump from 118, but not impossible

I struggled quite a bit in the class and I took DATA 118 with the same professor. You have to work really hard to stay on top of the material because we cover a lot of things in this class.

This was definitely on the harder side, but I think I came away with thorough understanding as a result. It helps that I was familiar with Python and computer programming in general, so I was able to properly focus on the new stuff.

It is easy if you put the work in.

hard even with 118

I think that for both intro to data science 1 and 2, you MUST have coding experience to succeed. Both courses minimize learning of the basics of coding, and if I didnt have coding experience, I believe I would struggle more than I already was.