

# STAT 22000 4, STAT 22000 4 - Statistical Methods and Applications - Instructor(s) - Daniel Xiang

Project Title: College Course Feedback - Spring 2024

Number Enrolled: **89** Number of Responses: **32** 

#### **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, July 11, 2024



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

#### Comments

Null hypothesis testing, Probability, Introductory Bayes Theorem, Expected Value, Least Squares Regression Analysis.

Probability, Normal Distribution, T-distribution, all topics covered in AP Stats

How to use R and underlying theories behind all the statistical tests

The different testing methods used to make inference on a population when its parameters are unknown.

Learned the basics of statistical inference and regression

Basic stats - see probability, lots of hypothesis testing, simple linear regression

Probability, Z-tests, T-tests, and linear regression are the things that go beyond the basic things that are probably expected of a basic math class (mean/median/mode/types of graphs/standard deviation). Additionally, using R to calculate statistics for large samples of data.

Correlation, z score test, t statistic for two sample, paired, proportions, hypothesis testing

To grasp an ability to contextualize statistical findings

Hypothesis Testing, Expectations, Variance, Central Limit theorem, Confidence intervals, Linear regression models, R code

Dan's lectures were great and really informative. The homeworks were a good way to practice skills too

How to calculate probability, how to evaluate an experiment and identify what type of experiment it is. How to use R studio to analyse large data sets

Hypothesis testing, linear regression

Basic stats

I learned a tremendous amount about everything relating to statistics – more simple things like histograms and box plots, but also everything about calculating probabilities, leading into confidence intervals and hypothesis tests, and ultimately linear regression.

Learned about fundamentals of STATs.

Probability and hypothesis test

I learned how to make statistical inferences and the idea of testing the significance of hypotheses.

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

#### Comments

I had to rely largely on my own self study methods to grasp the material in its entirety.

Lectures are recorded which is super helpful and weekly homework is fairly standard

The lectures have plentiful examples for us to understand the concept, and assignments serves as good practice before exams

The lectures slides were the most helpful component of this class for me. Reading through the slides on my own time was the most helpful aspect of the class with regards to my learning.

Lectures were very helpful and so were slides.

The lectures were comprehensive, the HW helped a lot.

Lectures went over the content from the textbook, which is the OpenIntro Statistics textbook (free PDF from publisher). Weekly homework was a mix of R coding and manual calculation/written theory questions. The first midterm was asynchronous, and split into a multiple choice math—style test and an R—coding test. The second midterm and final were more traditional, in—class tests with a mix of short—answer questions, true/false, and multiple choice. Both of the in—person midterms allowed a double—sided 8.5x11 notes sheet, which helped prevent the stress of memorizing dozens of similar but very slightly different formulas.

Lectures were very helpful

The lectures and slideshows laid out a clear expectation of what was to be known

A lot of the concepts was taught and explained in a clear manner. The lectures focused more on the theoretical explanations for each concept rather than the mathematical reasoning.

Lectures were helpful but I wish I took more advantage of labs and CL sessions

Lectures helped however I did most of my learning individually

lectures did a good job of contributing to my learning

Lecture slides were helpful for review

Lectures were extremely helpful in learning the material. Problem sets applied the learning from class to actual examples which were helpful to learn what kind of problems might appear on exams.

Lectures helped to understand concepts.

Lectures not very helpful (slides posted on canvas and attending lecture didn't add much to understanding), homework could be tedious because of r but good practice

Lectures and the practice examples were super helpful!

### Please respond to the following:

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
This course challenged me intellectually.	4.00	4.00	0.00%	11.54%	15.38%	34.62%	38.46%
I understood the purpose of this course and what I was expected to gain from it.	4.38	4.00	0.00%	0.00%	7.69%	46.15%	46.15%
I understood the standards for success on assignments.	4.38	5.00	0.00%	3.85%	7.69%	34.62%	53.85%
Class time enhanced my ability to succeed in graded assignments.	3.69	4.00	3.85%	15.38%	23.08%	23.08%	34.62%
I received feedback on my performance that helped me improve my subsequent work.	3.88	4.00	0.00%	7.69%	26.92%	34.62%	30.77%
My work was evaluated fairly.	4.31	4.00	0.00%	0.00%	11.54%	46.15%	42.31%
I felt respected in this class.	4.58	5.00	0.00%	0.00%	0.00%	42.31%	57.69%
Overall, this was an excellent course.	4.15	4.00	0.00%	3.85%	19.23%	34.62%	42.31%

#### Additional comments about the course:

#### Comments

Coding is not taught well at all. They just throw you into the fire and expect you to figure it out. Quite frustrating.

This class is basically AP Stats but they do get annoyed when you don't show formulas that you can just do on a TI-84 which stat functions

Nothing new if you have taken AP exam, this course even less than the AP exam cover

Daniel Xiang is an amazing instructor!

very boring class. Everything could be learned through the lecture slides

The material is pretty straightforward and can generally be learned quickly, with a few nuances.

Fairly easy

This was a well structured coursw

I wish I took advantage of the resources more, but I still did well without them

Interesting, engaging, and you will learn a ton.

expect it to be harder than you would think

#### I would recommend this course to:

	No	Yes
Highly-motivated and well-prepared students	16.00%	84.00%
Anyone interested in the topic	8.00%	92.00%

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

#### Comments

Recorded lectures

My instructor will sometimes stop and ask if students have any questions

Xiang would periodically pose questions to the room which gave me time to take pause and absorb everything prior, and think about the application of the material.

Lecture slides.

He is very nice and patient when answering questions, he also really encouraged participation and remembered people's names.

Going over the content clearly with an element of interaction was very helpful.

Lecture Slides were really good

Very informative lectures

Our instructor interpreted the slides and made the material much more clear

When Dan helped clarify our questions. Some students asked some really interesting questions during class which Dan would promptly answer.

I loved Dan's lectures

Opening up questions for the class to answer allowed students to learn off each other

Office hours and lectures were well done

I honestly did not like the way this class was taught. I think the professor was teaching almost as if expecting students to already have a background in the topic. I could have never gone to class and just read the textbook and I would probably have been better off.

lecture slides

Professor Xiang was amazing – his slides were clearly organized, he explained everything thoroughly, and he was always helpful whenever anybody had a question. He was available to meet with, and a very nice guy.

Asked students questions during lecture, helped create learning environment.

Timely responses to email questions

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

#### Comments

Understand that a lot of problems people know how to do them on a calculator and don't make everyone write everything out if they know how to

Nothing really

Overall, I thought Xiang was a good lecturer who did his best to explain concepts in an intuitive and understandable manner and there's not much I would change about his teaching style.

Have formal review sessions before midterms / final.

It would be nice if the lecture recordings were on Canvas rather than on Zoom.

nothing

Lectures were sometimes hard to follow along. I learned most of the class material by studying the lecture slides on my own time.

Possibly more example problems

Perhaps it would be beneficial to also use the whiteboard to complete the examples. This way everything would need to be written from scratch which may help clarify the important values we will need to complete the questions.

Maybe uploading the slides after classes.

N/A, Professor was very good.

more practice problems/exams

n/a

Incorporate more examples that apply all the complex formulas we learn, but than that nothing

In more complicated concepts, break down to be easier.

the class was very monotone, and not very engaging. this is partially the fault of the material, but it is a shame that the instructor did not seem more enthusiastic about the subject

More commentary/explaining beyond slides during lectures

#### The Instructor . . .

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Organized the course clearly.	4.42	4.00	0.00%	0.00%	3.85%	50.00%	46.15%	0.00%
Presented lectures that enhanced your understanding.	4.19	4.00	0.00%	7.69%	7.69%	42.31%	42.31%	0.00%
Facilitated discussions that were engaging and useful.	4.04	4.00	3.85%	3.85%	15.38%	26.92%	38.46%	11.54%
Stimulated your interest in the core ideas of the course.	3.96	4.00	3.85%	7.69%	15.38%	34.62%	38.46%	0.00%
Challenged you to learn.	4.12	4.00	3.85%	3.85%	15.38%	30.77%	46.15%	0.00%
Helped you gain significant learning from the course content.	4.15	4.00	0.00%	7.69%	11.54%	38.46%	42.31%	0.00%
Was available and helpful outside of class.	4.42	5.00	0.00%	0.00%	15.38%	26.92%	57.69%	0.00%
Motivated you to think independently.	4.15	4.00	0.00%	3.85%	19.23%	34.62%	42.31%	0.00%
Worked to create an inclusive and welcoming learning environment.	4.27	4.00	0.00%	0.00%	19.23%	34.62%	46.15%	0.00%
Overall, this instructor made a significant contribution to your learning.	3.96	4.00	3.85%	11.54%	11.54%	30.77%	42.31%	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

I have never been to TA session, so I really can not commit on this section

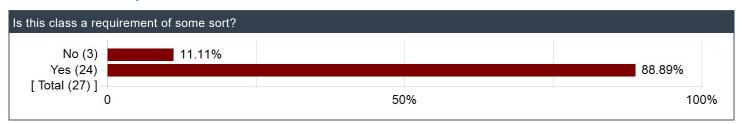
#### The TA/CA or Intern...

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Facilitated discussions that supported your learning.	3.00	3.00	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%
Gave you useful feedback on your work.	3.00	3.00	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%
Stimulated your interest in the core ideas of the class.	3.00	3.00	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%
Challenged you to learn.	3.00	3.00	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%
Helped you succeed in the class.	3.00	3.00	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%
Was available and helpful outside of class.	3.00	3.00	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%
Overall, this individual made a significant contribution to your learning.	3.00	3.00	0.00%	0.00%	66.67%	0.00%	0.00%	33.33%

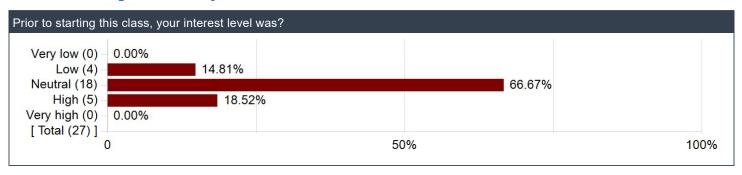
# How much did the following elements of the course contribute to your learning gains?

	Mean	Median	No Gain	A Little Gain	Moderate Gain	Good Gain	Great Gain	N/A
Laboratory Experience	3.00	3.00	0.00%	0.00%	100.00%	0.00%	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%

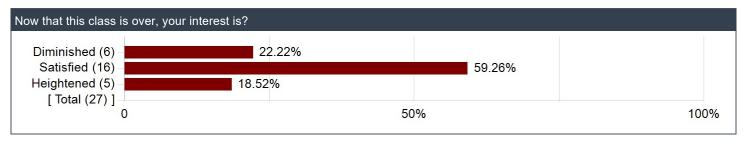
## Is this class a requirement of some sort?



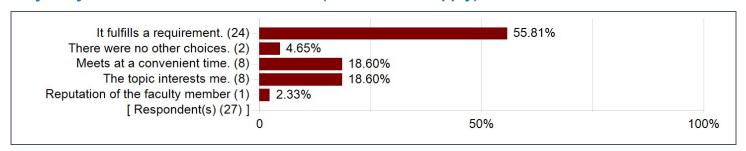
### Prior to starting this class, your interest level was?



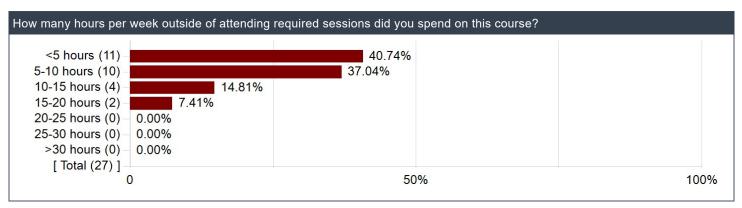
### Now that this class is over, your interest is?



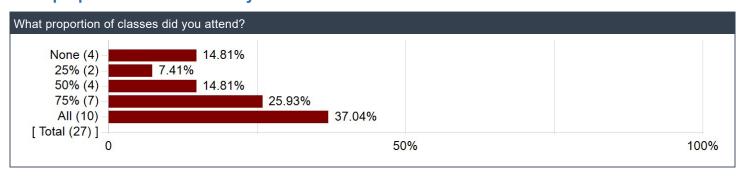
### Why did you choose to take this course? (Select all that apply)



# 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

It was challenging.

If you took AP stats this class is a breeze

For an intro level class the grading was overly harsh and teaching was poor.

It is not hard if you have taken AP stats before. If you have not, the course pace might still be a bit fast

I took a run-of-the-mill stats course in high school which definitely helped in my understanding of the material from this class. The content up until the 2nd midterm and even a few topics afterward were mostly review for me, so not very difficult. However, the last few units were all new to me and somewhat difficult to learn, though no more than standard advanced math.

Definitely gets a lot more difficult after first midterm, but still very manageable.

pretty easy

Having never taken a stats class before or math beyond Calculus 3, but with a bit of coding experience in Python, I found the course material and structure really easy. It is a very introductory class, and is very approachable for beginners.

Not too difficult, but I have done AP Stats

Fairly easy

I took statistics in high school and this built on that foundation, but not too intensely

I had no statistics background coming in but had completed math 15300 and cs 14100. I found both of these courses to be extremely helpful especially since parts of the homework required us to write code in R. The learning curve was steep at first but it became more manageable as I grasped the basic concepts.

Requires work but not too hard

pretty easy for neuro major

Homeworks were tedious and the class was more difficult than anticipated (no background in stats)

I've never taken statistics before, but it is definitely easy to learn if you go to class, read the textbook, and apply yourself. The class was very interesting and you'll learn a lot about stat!

Course was manageable — had taken high school and community college STATs before — but was very different in comparison to those two experiences

i had never taken a class in statistics, and i found it to be more challenging than expected. it was also challenging to use R, and there was not much real guidance in the programming

Manageable