

STAT 28200 1, STAT 28200 1, CAAM 28200 1, CAAM 28200 1 - Dynamical Systems with Applications -Instructor(s): Alexander Strang

Project Title: College Course Feedback - Winter 2022

Number Enrolled: 11 Number of Responses: 9

Report Comments

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

Creation Date: Monday, April 4, 2022

blue®

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

Comments

Not only quantitatively dealing with the dynamical models but qualitatively interpreting them.

Bifurcation theory, nonlinear dynamics, chaos, stability analysis

Techniques to analyze nonlinear dynamical system

Analysis of linear and nonlinear dynamical systems, applications to physics, biology and other areas of modeling, strange attractors, chaos and universality.

Applications of ODEs, geometrical ways of thinking, foundations of dynamics

Dynamical systems, linear and nonlinear analysis techniques

Great class, very informative

Great professor, very engaging and enthusiastic about the material

Very good at explaining difficult concepts and very helpful during office hours

100% recommend the class

flows in 1D, bifurcations, linear stability analysis, 2D flows and classification of equilibria, higher dim linear and nonlinear systems, limit cycles, more bifurcations, lorenz equations, some more discrete time maps

Stability analysis, time-scale separation.

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

Comments

Lectures were very insightful.

Lectures are well presented. Prof. Strang gives enough intuition for the main theorems and grounds them with lots of examples.

The lectures were excellent. They were very well prepared, clear and thorough.

lectures were clear and intelligible

Notes were incredible and lectures engaging.

Please respond to the following:

This course challenged me intellectually.	Mean 4.63	Median 5.00	Strongly Disagree 0.00%	Disagree 0.00%	Neutral 0.00%	Agree 37.50%	Strongly Agree 62.50%
I understood the purpose of this course and what I was expected to gain from it.	4.75	5.00	0.00%	0.00%	0.00%	25.00%	75.00%
I understood the standards for success on assignments.	4.50	5.00	0.00%	0.00%	12.50%	25.00%	62.50%
Class time enhanced my ability to succeed in graded assignments.	4.50	5.00	0.00%	0.00%	25.00%	0.00%	75.00%
I received feedback on my performance that helped me improve my subsequent work.	4.75	5.00	0.00%	0.00%	0.00%	25.00%	75.00%
My work was evaluated fairly.	4.63	5.00	0.00%	0.00%	12.50%	12.50%	75.00%
I felt respected in this class.	5.00	5.00	0.00%	0.00%	0.00%	0.00%	100.00%
Overall, this was an excellent course.	4.50	5.00	0.00%	0.00%	12.50%	25.00%	62.50%

Additional comments about the course:

Comments

I would really recommend this course to people from science field that has limited math background but want to explore.

Dr. Strang was one of the best lecturers I have had. His lectures were very clear, with a good amount of motivating examples and great discussion of complex topics. He is an excellent pedagogue, and very knowledgeable about the topic and surrounding areas.

The workload was kind of ridiculous. The class content was very interesting and the lectures were extremely well-presented, but the homework assignments and exams were all so long. Not difficult, but just very tedious and time consuming. The midterm in particular was mentally exhausting because it took around 8 hours of nearly non-stop work. The requirement of a final paper and a take home exam (which was also very long) also felt too much to reasonably expect a student to complete.

Alex is an incredible instructor. Genuinely cares about the students and their education.

I would recommend this course to:

	No	Yes
Highly-motivated and well-prepared students	0.00%	100.00%
Anyone interested in the topic	11.11%	88.89%

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

Comments

He taught the process of thinking in the class, which was very helpful when I worked on the assignments.

Alexander was very clear when explaining and prepared the lectures very well.

Clear presentation and interesting examples.

Dr. Strang presented some of the most well prepared lectures I have ever seen. The definitions and examples were very well motivated, theorems and constructions, even when not proven, were elucidating and we were shown how to apply them to real problems. He is an absolutely excellent instructor. He is also very kind, accessible over email and in office hours, and helpful.

Note taking and lecturing at the same time- the lectures went step by step and made concepts more intuitive.

Posting notes online is very helpful, using the iPad for class is very helpful

Lectures were extremely well presented, Professor Strang is really great at lecturing and explaining things. His diagrams are also really

Knowledge and genuine interest in the subject. Want to have the students succeed.

What could the instructor modify to help you learn more?

Comments

HWs were pretty long but he adjusted it as the class went on.

Probably spend less time in algebra and more time in concepts harder to understand since the lecture time is limited.

Sometimes homework can be a bit repetitive, specifically the linearization part.

The problem sets were certainly on the long end, but other than that this was an excellent course. Short of making ODE's a prerequisite (which would allow for more discussion of nonlinear dynamics and further topics past linear systems), I do not think that there is anything that this course is lacking.

Please I'm begging you to make the assignments shorter they are just so ridiculously long. Cool guestions and topics, but the workload was exhausting.

The course is incredibly heavy on the workload, to the point of approaching over-pedantic.

The Instructor . . .

	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Organized the course clearly.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	0.00%
Presented lectures that enhanced your understanding.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	0.00%
Facilitated discussions that were engaging and useful.	4.63	5.00	0.00%	0.00%	0.00%	37.50%	62.50%	0.00%
Stimulated your interest in the core ideas of the course.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	0.00%
Challenged you to learn.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	0.00%
Helped you gain significant learning from the course content.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	0.00%
Was available and helpful outside of class.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	0.00%
Motivated you to think independently.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	0.00%
Worked to create an inclusive and welcoming learning environment.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	0.00%
Overall, this instructor made a significant contribution to your learning.	4.88	5.00	0.00%	0.00%	0.00%	12.50%	87.50%	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.

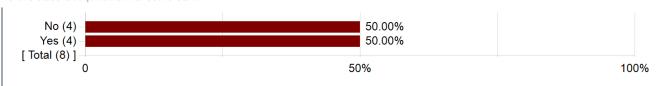


The TA/CA or Intern. . .

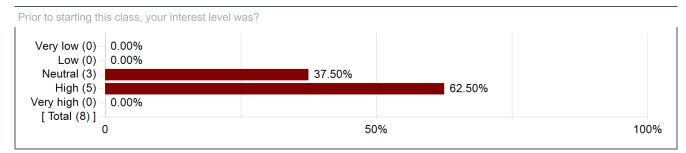
	Mean	Median	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	N/A
Facilitated discussions that supported your learning.	4.00	4.00	0.00%	0.00%	33.33%	0.00%	33.33%	33.33%
Gave you useful feedback on your work.	4.00	4.00	0.00%	0.00%	33.33%	0.00%	33.33%	33.33%
Stimulated your interest in the core ideas of the class.	4.00	4.00	0.00%	0.00%	33.33%	0.00%	33.33%	33.33%
Challenged you to learn.	4.00	4.00	0.00%	0.00%	33.33%	0.00%	33.33%	33.33%
Helped you succeed in the class.	4.00	4.00	0.00%	0.00%	33.33%	0.00%	33.33%	33.33%
Was available and helpful outside of class.	4.00	4.00	0.00%	0.00%	33.33%	0.00%	33.33%	33.33%
Overall, this individual made a significant contribution to your learning.	4.00	4.00	0.00%	0.00%	33.33%	0.00%	33.33%	33.33%

Is this class a requirement of some sort?

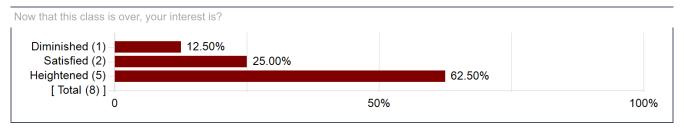




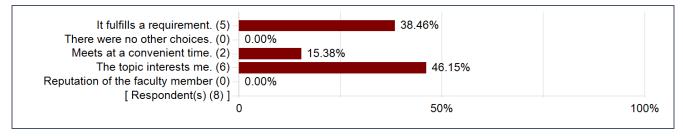
Prior to starting this class, your interest level was?



Now that this class is over, your interest is?

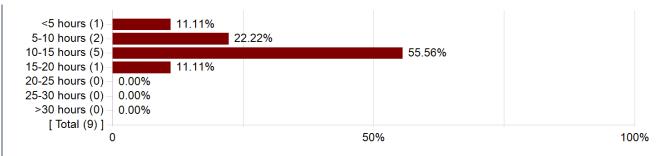


Why did you choose to take this course? (Select all that apply)



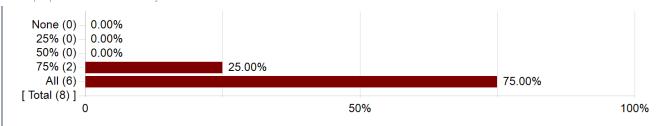
How many hours per week outside of attending required sessions did you spend on this course?





What proportion of classes did you attend?





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

Comments

Although I forgot many things about Calc and linear algebra, he explained the necessary concepts in the lectures. So, it was not a problem at all.

Prof. Strang taught in a way that even students with limited math background can follow.

The course is at a very good level, where it is neither too easy to the point of being boring nor too difficult to the point of being discouraging.

Need the appropriate background. If so, not bad

might be useful to review linear algebra, also having some background knowledge of odes is helpful but not required

Content difficulty is not too hard or too easy.