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Graduate Course Evaluation for Pengtao Xie
Department of Electrical and Computer Engineering

ECE 269 - Linear Algebra and Application
Section ID 65893
Section Number A00
Winter 2022

Number of Evaluations Submitted: 167
Number of Students Enrolled: 199

1. What is your reason for taking this class?

143 (87.7%):	Core Course Requirement
7 (4.3%):	Subject Area Requirement
11 (6.7%):	Elective
2 (1.2%):	Interest
4:	[No Response]

2. The Instructor was clear about course expectations.

112 (68.7%):	Strongly Agree
45 (27.6%):	Agree
5 (3.1%):	Neither Agree Nor Disagree
1 (0.6%):	Disagree
0 (0.0%):	Strongly Disagree
4:	[No Response]

3. The Instructor was well-prepared for class.

102 (62.6%):	Strongly Agree
56 (34.4%):	Agree
5 (3.1%):	Neither Agree Nor Disagree
0 (0.0%):	Disagree
0 (0.0%):	Strongly Disagree
4:	[No Response]

4. The Instructor organized class activities in a way that promoted learning.

104 (63.8%):   Strongly Agree
48 (29.4%):   Agree
9 (5.5%):   Neither Agree Nor Disagree
2 (1.2%):   Disagree
0 (0.0%):   Strongly Disagree
4:             [No Response]

5. The Instructor promoted and encouraged questions and discussion.

119 (73.0%):   Strongly Agree
39 (23.9%):   Agree
5 (3.1%):   Neither Agree Nor Disagree
0 (0.0%):   Disagree
0 (0.0%):   Strongly Disagree
4:             [No Response]

6. The Instructor provided feedback (written/oral) in a way that promoted learning.

114 (70.4%):   Strongly Agree
37 (22.8%):   Agree
10 (6.2%):   Neither Agree Nor Disagree
1 (0.6%):   Disagree
0 (0.0%):   Strongly Disagree
5:             [No Response]

7. The Instructor was accessible to students outside of class (office hours, e-mail, etc.).

127 (77.9%):   Strongly Agree
28 (17.2%):   Agree
8 (4.9%):   Neither Agree Nor Disagree
0 (0.0%):   Disagree
0 (0.0%):   Strongly Disagree
4:             [No Response]

8. I would recommend this instructor overall.

113 (67.7%):   Strongly Agree
45 (26.9%):   Agree
9 (5.4%):   Neither Agree Nor Disagree
0 (0.0%):   Disagree
0 (0.0%):   Strongly Disagree

9. What is your overall rating of the Instructor?

114 (68.3%):   Excellent
42 (25.1%):   Above Average
11 (6.6%):   Average
0 (0.0%):   Below Average
0 (0.0%):   Poor

10. General comments about the Instructor's performance
Please keep your comments constructive and professional, abiding by the Principles of Community

- Best professor ever

- ████████████████████████████████ Dr. Xie not only cares about students' ability to learn but also cares about students' mental health and well-being.

- Dr. Xie is the best professor ever! The subject in this class isn't easy for those who are not in Machine Learning. However, Dr. Xie gives us enough examples and prove theorems together. Besides, Dr.Xie always tries to answer all questions when students ask during his lecture and gives us a better understanding of the materials. I'm so glad he's teaching this course, and I've learned a lot! Thank you very much, Dr. Xie!

- Excellent instructor! Love his every course!

- good

- Great professor, super considerate.

- Great!

- He did well, but sometimes I can't follow him

- He explains the content in an easy-to-understand manner.
  And the feedback from students is well reflected in the educational content.

- He is really nice!

- He is very professional and knowledgable, explains course materials in a very detailed way. Also, he values students' feedback more than a lot of the Instructors I've seen in UCSD. In the first few weeks, he gave surveys to students to evaluate his speech in classes. He is also very caring for students, including the students who live in different time zones. He understands that a lot of students are worried about the pandemic, and lets the students vote for their preferred modality of class.

- He was great and very student friendly!

- He's a very generous professor caring students and clear about materials.

- HWs are pretty difficult and no matter if you know all the materials in class, you cannot solve HW4 and HW3.

- I really enjoyed the course. The instructor explained everything clearly to the point that i didn't have to refer the textbook.
  Apart from concepts, he also focussed on applications. Overall an amazing experience.

- Prof has a stronghold of the material. He is very active, motivated to teach, friendly during the class. He cared about the students a lot throughout the quarter. His teaching was good.

- Professor Hsieh is very diligent and efficient, effective and well-prepared on all his course alignments, discussion board and assignments. I think it is not easy to handle a large math and programming course like this and doing it so well at the mean time (cause there are always many questions) so well done the Professor and TAs !

- Professor Pengtao taught the concepts really well and made sure that he derived complicated things from scratch and also provided intuitive examples of application of topics.

- Professor Xie is highly responsible and considerate to this course. I highly appreciate the live proof of theorems in class.

- Professor Xie is really nice and patient!

- Professor Xie is very prepared is does a good job of deriving results for students in the class. His pace for the lecture is good and he is very accommodating to students needs especially given the impact that COVID has had on remote learning.

- Professor Xie is very professional and kindly minded. Giving up detailed knowledge about this core course and instructions.

- Sometimes, when the instructor try to prove something that is hard, his temple is a bit faster which makes me had a hard time understand it.

- Spent a considerable amount of effort addressing student's questions and being flexible throughout the course.

- Thanks Professor, you are very nice and patient. One concern is that, maybe when you prepare for the class materials next year, you could also include the reference of your lecture notes. Thank you very much.

- The instructor's concern with the student's learning and performance is truly commendable. His performance is an outstanding example of how to lead a balanced class. Homework, projects, and exams were still challenging but also made in a way for every student to succeed should they put in the appropriate amount of work. Expectations were clear and pacing was almost perfect.

  The instructor's success was also heightened by the fact that he continually asked for feedback during the course which made the class better with honest and constructive communication. This only one example of how the instructor showed concern for the students and made decisions to help them succeed and better understand the course material.

  Easily one of the best instructors I have had the privilege of studying under.

- The professor has been very kind in adjusting the requirements/deliverables of the course as per the COVID situation. He has been very kind in adjusting the difficulty level of the course and deadlines as well. The topics were covered in detail in the course. Overall, I am very happy to have enrolled in this course and I had a great amount of learning from this course, which will be useful for my other courses and projects.

- The professor instructs the course well and is prepared for this course. I only missed that for some parts of the class we had no reference book and relied on slides for some contents, which for me was not great since for some parts of the course I would rely on reading the chapters and do more practice exercises. But other than that it is great. The professor is also very understanding of graduate student's struggles and difficulties and allows flexibility for delivering activities.

- Very awesome and caring. Can't believe Dr. Xie is a new professor.

- Very considerate

- Very good professor.

- Very kind, always available to answer questions, very clear lectures

- Very knowledgeable instructor and taught the subject very thoroughly. However, I would have appreciated the content more if the underlying intuition behind the concepts was also explained.

- Well-prepared for the course material and very clear teaching

- When it came to the lectures, the instructor seemed a little unclear on some of the topics which confused me at times. However, they would always make sure there are additional information to clear up any confusion.

11. I would recommend this course overall.

107 (64.1%):	Strongly Agree
50 (29.9%):	Agree
9 (5.4%):	Neither Agree Nor Disagree
1 (0.6%):	Disagree
0 (0.0%):	Strongly Disagree

12. What is your overall rating of this course?

101 (60.5%):	Excellent
50 (29.9%):	Above Average
16 (9.6%):	Average
0 (0.0%):	Below Average
0 (0.0%):	Poor

13. What were the particular strengths of this course?

- Balance workload

- detail on proof

- Giving the fundamental knowledge of linear algebra, and general ideas of some applications such as deep learning.

- Grace days!
  Not long lectures

- great instructor who is always available for the students.

- He always makes everything clear to understand.

- Helps me understand Deep learning and ML algorithms better

- Homework assignments and Project. I really enjoyed working on them and I learnt all the important concepts of the course while solving them.

- I've taken linear algebra during my undergrad such as rank, dimension, or nullity to solve matrices mainly. However, this class is very different than what I've learned. It gives that linear algebra isn't just solving matrices and vectors. Now, I have a better understanding of why or how matrices or vectors are defined and have more meanings.

- Interesting topics

- It is a combination of coding and math, very useful for students' future work/research.

- It is a very important course. Sort of foundations of Machine Learning and i really liked the way Professor taught it.

- It is easy to follow. You can learn comprehensively about linear algebra after taking this course.

- It teaches linear algebra comprehensively, from a math standpoint. It is very helpful in my study.

- It's not just theory but prof covers application also this gave me better understanding about the theory.

- kind professor, clear lecture slides, clear expectations, good pace of teaching

- Knowledgeable, helpful and patient.

- practical

- Recording the lectures, discussions, constant posts on Piazza were all elements of the course which helped in learning the course concepts.

- Steady pace of all the core concepts. HWs and assignments are good. Prof. teaching and his efforts for taking care of students is great.

  The discussion sessions and TA are also great. Provided a great review of core concepts.

- Taught practical aspects of linear algebra, making a relatively abstract concept more accessible to the uninitiated. The assignments and project components were very well done, encouraging students to explore practical aspects of the subject

- The clear and constant communication. The actions on the instructor to enable his students to do well.

- The math class includes so many details and the professor and TAs provide many resources from either math stack exchange or other materials, it shows that the professor it and expert and he is solid in the field.

- The professor is very helpful.

- The strengths of this course were that the project and homework always went hand in hand and the assignments were clear to understand to an extent.

- The workload is light and the professor is considerate.

- This is an important basis for machine learning, communications and signal processing. It is a very difficult course but I understand it is important for our career.

- We can get answers to questions posted on piazza faster than in other subjects.

- Well covered, the Prof and TAs are all nice!

14. What suggestions do you have for making this course more effective?

- - Lecture slides could be more detailed.

- Can't get any better than this.

- Consider giving partial credit for homework.

- Easier HWs would help a lot.

- Have a more detailed lecture slides and more examples because when working on an assignment some problems were a little confusing if not given an example.

- I think professor Xie can practice his English more fluently.

- I think that forbidding the TAs and instructor from collaborating at all on the homework is actually detrimental to learning. They didn't want to work together during office hours to enesure fairness among students, but I think that while maybe more fair this actually inhibits learning.

  Maybe I should have worked on the optional practice homeworks with the TAs to get the most out of this, unsure.

- I would provide more practice exercises that are not just from past midterms, especially because the class involves so much theorems that practice is the only way to assimilate content.

- In terms of theory, it would have been better if the instructor could also specify the intuition behind the concepts

- More detailed slides.

- One suggestion: More in-class doubt discussions would have been better.

- Overall it's a very excellent course but maybe prettier slides ?

- Reproduction Hilber Kernal space is just too difficult to understand.

- The online classes sometimes become monotonous and students can't concentrate. Engagements/interactions with students can be increased during classes to avoid dropout.

- There were some errors and confusion in the homework. Perhaps phrasing homework questions better would help ease some confusion and help make the course more effective. But this only a minor suggestion as the course was already very effective.

- This is a very nicely designed course but I think that project should have more weightage instead of the mid-term exam. Homework assignments, Project and End-term exam would make this course a little more effective than currently, according to me.

- While scribbling on top of existing slides. Prof. can leave space before hand and scribble in a particular order. Because when we plan to refer to annotated slides, we may not fully know the order of scribbling in a slide.

15. What one concept did you take from this class that will shape your future?

- Applications of matrices and variety of algorithms that are based on them.

- Eigenvalue and eigenvector

- It is very difficult to pick one concept from the course as the whole of Linear Algebra is very important for Robotics, Machine Learning and Deep Learning. So, this course as a whole will be very important for me in my future projects and in my field.

- Linear algebra background which is a foundation of many vision/ signal algorithms.

- Linear algebra is important for ML and Data science, and I can learn all the basics I need.

- Linear Algebra is not a subject of the past. Everyday applications deploy linear algebra till date!

- Linear Space.

- Manipulating data with multiple dimensions and implementing mathematical equations to it

- Matrix

- PCA, eigenvalues, and eigenvectors for computer vision applications.

- PSD matrix, eigen values and vector space overall I felt the course content will be very useful in other machine learning courses

- Since this course is very fundamental, I believe it can help me in many aspects.

- This class did very well with helping me better learn how to prove mathematically abstract concepts which is vital for progress in academia.

16. Do you have any other comments to add to your evaluation?
Please keep your comments constructive and professional, abiding by the Principles of Community

- Exams should be in-person for a fair evaluation

- I do not have any other comments in particular. I have tried to cover all my points in the questions above. Thank you very much for taking this evaluation.

- I've massive respect for this professor. Thank you.

- Overall good course.

- Overall I recommend this course and instructor.

- Thank you for understanding that this quarter was hard on everyone

- Thank you for your enthusiasm and insight for your lectures.

- Thank you so much for your teaching and consideration throughout the winter quarter - you have been a great Professor amidst the remote learning situation!

- Thank you, Professor

- The professor was highly considerate about the pandemic and its effect. He made great efforts to make sure everybody understood the concepts and were able to do their assignments. Kudos to Prof. Xie!

- This is the best instructor I have had at UCSD thus far.

Please note that any responses or comments submitted by evaluators do not necessarily reflect the opinions of instructors, Electrical and Computer Engineering, Academic Affairs, or UC San Diego. Responses and comments are made available without auditing or editing, and they may not be modified or deleted, to ensure that each evaluator has an opportunity to express his or her opinion.