



CAPP 30271 2 - Mathematics for Computer Science and Data Analysis - Instructor(s) Timothy Ng

Project Title: **Graduate Course Feedback - Winter 2024**

Number Enrolled: **29**

Number of Responses: **15**

Report Comments

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

Creation Date: **Wednesday, April 10, 2024**

Please review and evaluate your work in this course overall.

Comments
This course is, probably, the most difficult class in the CAPP requirements and it does not need to be. You will spend upwards of 50 hours per week on this class learning how to solve the questions asked of you on the Homework and Quizzes. I believe a professor change is needed if we want people to UNDERSTAND why and what we're doing, not just go through the motions.
The course overall is a good introduction to linear algebra concepts and is very fast-paced. Due to the system of weekly homework and quizzes, you are kind of forced to learn every week, which is very important the concepts from the first weeks are used constantly to understand the more advanced topics in the course.
This course was very difficult, and while I don't think I mastered all the material in the short time that we had, I do believe that I came out of the course with a solid basic grasp of linear algebra and how it will be useful in the future.
My experience was pretty negative overall. I felt overwhelmed by the amount of work and I felt like the instruction in class was a bit disconnected from the expectations on the homework and quizzes.
Most challenging core course I'm pretty sure. I did okay with the mathematical side but struggled mightily with the theoretical component.
I had a tough time keeping up with the concepts in this class, I see the value in it but could not retain what I learned in class and the homework was more so just trying to complete the requisite questions instead of understanding the idea behind them
Too fast pace with professor only talk vague ideas without elaborate anything. The course will only gives you tons of PL assignments which is useless for you to really understand the materials, considering the workload and assignment formats. Highly recommend to waive the class if you have chance.
This course was challenging for me. While the math actually came naturally to me, I struggled with understanding the concepts and how they apply to rest of the work I'd be doing in the program. I'm proud of powering through the tough material, but am ultimately still confused as to why this class is part of the CAPP required curriculum. Hopefully, it will become apparent to me in later quarters.
I struggled a bit taking this course in the sense that it was hard for me to connect the dots regarding the concepts covered in class. This made me solve problems the mechanical way instead of actually understanding the course better.

Please review and evaluate the course on the following:

1. I took away useful tools, concepts, knowledge, or insights from this course.

1 Strongly Disagree (0)

2 Disagree (3)

3 Neutral (4)

4 Agree (5)

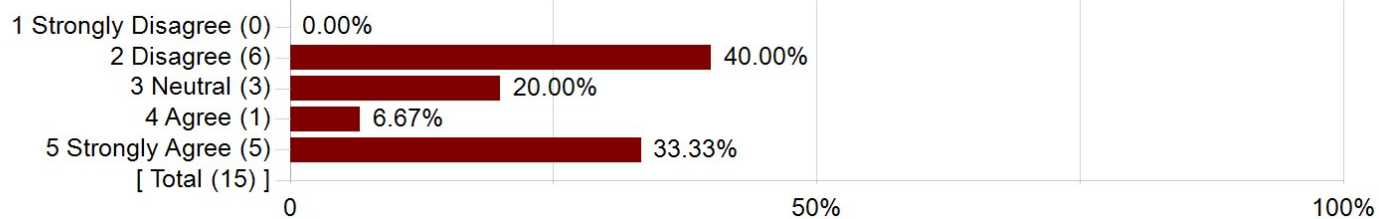
5 Strongly Agree (3)

[Total (15)]

Response	Count	Percentage
1 Strongly Disagree (0)	0	0.00%
2 Disagree (3)	3	20.00%
3 Neutral (4)	4	26.67%
4 Agree (5)	5	33.33%
5 Strongly Agree (3)	3	20.00%
Total	15	

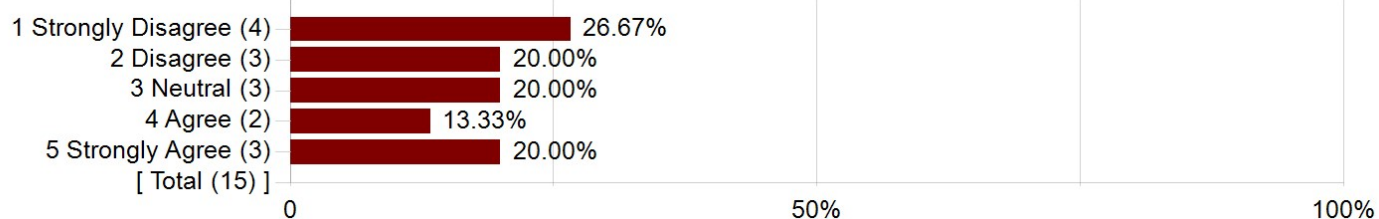
Statistics	Value
Response Count	15
Mean	3.53
Standard Deviation	1.06
Standard Error (base on SD)	0.27

2. I received regular, effective feedback to help me understand where I was in the learning process.



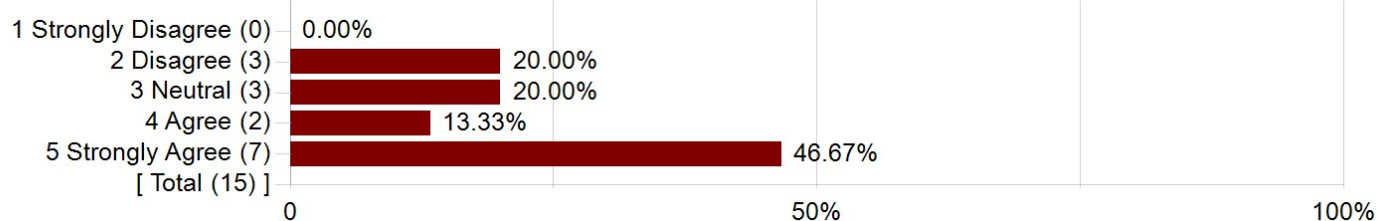
Statistics	Value
Response Count	15
Mean	3.33
Standard Deviation	1.35
Standard Error (base on SD)	0.35

3. I would recommend this course to other students.



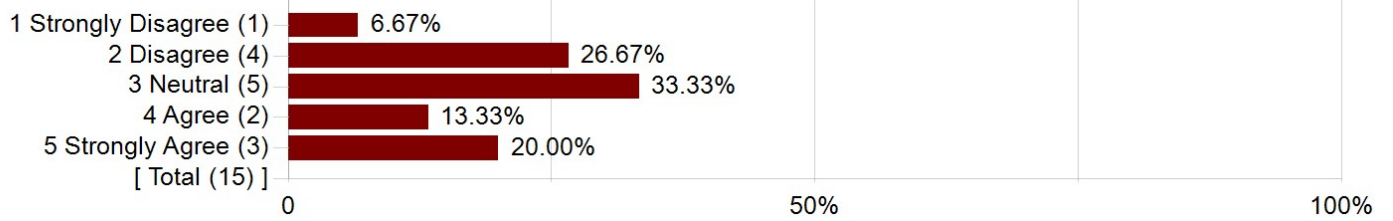
Statistics	Value
Response Count	15
Mean	2.80
Standard Deviation	1.52
Standard Error (base on SD)	0.39

4. The material in this course was constructively challenging.



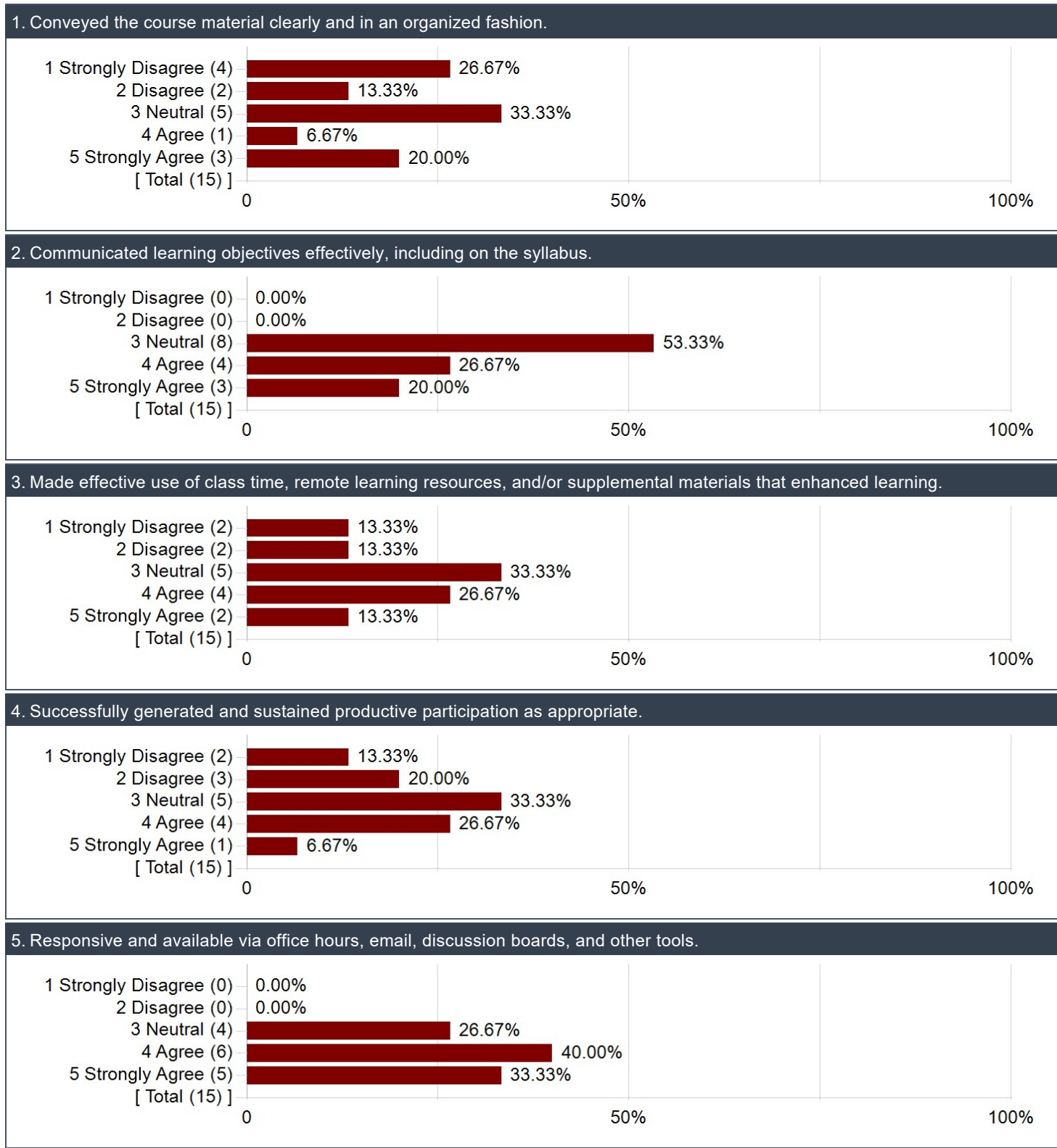
Statistics	Value
Response Count	15
Mean	3.87
Standard Deviation	1.25
Standard Error (base on SD)	0.32

5. I felt that the classroom was an inclusive learning environment for me.



Statistics	Value
Response Count	15
Mean	3.13
Standard Deviation	1.25
Standard Error (base on SD)	0.32

Please review and evaluate the faculty on the following:



Please elaborate on any of your responses above.

Comments
I think that Timothy is a good professor but the course itself is hard, so as a result there were some times that the classroom was not understanding very well the topic that was being taught.
The course goes so quickly it's pretty hard to keep up. When the class responds to questions in silence its often because we do not know the answer.
It is difficult to evaluate this course, because on one hand, we have a lot of content to cover in class which means there simply is no way to do all the learning during class sessions, but on the other hand I think just a little more use of examples and contextualization would go a long way in helping ground themselves in the material and maintain understanding.
Tim definitely goes above and beyond when it comes to teaching the class
The Lecture Notes were a great resource, but the class was tough to follow along
Too many topics needed to be covered in a short time resulting difficulties to understand what we learnt. Finally, only finished the homework without learning too much thing.

What aspects of the instructor's teaching contributed most and least to your learning?

Comments
Uploading class notes, but it would be more helpful if they were uploaded before class.
I really enjoyed Praire Laern
Tim was very willing to answer questions in and after class. However, because of the speed of the course and individual class sessions, sometimes the material came too fast to even know what questions to ask to increase your understanding.
I think the instructor often took silence to mean the class understood what he was saying when most people were so lost they didn't even know how to ask a useful question.
The fact that he designed and maintains so much around Prarielearn's setup for teaching linear algebra is GOAT behavior for sure. As a tool it definitely works very well for bridging the gap between theoretical or by-hand linear algebra (something that will never matter for most CAPP students in terms of utility) and the practical tools that they will most likely spend very long periods of time interfacing with.
There weren't enough pauses in the class to make sure people were understanding, it sometimes felt like the point of the class was just to get the information out, and not for us to comprehend
You have to self study.
I think the PrairieLearn setup was helpful in that I was able to practice and perfect problems. It sometimes felt like the lectures were disconnected from the homework problems — for PageRank, for example, we spent a lot of time going over what it meant conceptually (the history, the purpose, etc.) but then the homework was lots of complex pagerank matrices calculations.
The only part of the instructors teaching that contributed to my learning were his notes. His time in the classroom was not effective and I was routinely confused even when I asked for him to repeat the information or give examples. This is in large part because when you ask for a clarification Tim just repeats the information back at you and does not try to explain it further in any way. Additionally he does not use examples very often even though that is the primary way most people learn math. If Tim is going to be teaching this course again then he really needs to overhaul his teaching style because right now the information is not communicated effectively and we actually really need these concepts for machine learning.

Please suggest any changes that could improve this course (e.g., class material, class structure, assignments, inclusive pedagogy).

Comments
1. Uploading lecture notes prior to class 2. Providing more examples and talking through steps, rather than just writing steps that were pre-solved on the board. 3. Providing numpy reference sheet.
If the class responds to questions in silence, please slow down.
I think having a mid-quarter review of where we have gone and the relevance of the material to outside applications would be very helpful. I think this would help contextualize what we learned, and potentially give a minor reprieve from the amount of work most CAPP students had to complete this quarter.
I think there is just too much content to get through in this class. Really learning all the material would require more time.
I'm pretty sure my lack of theoretical understanding was my fault, not Tim's.
Perhaps changing the pace of the class, not sure
Either make this class to 2 quarter, or at least slower the pace to let us really understand the topics. The setting now let us be a machine of finishing PL.
Having a quiz right before the exam was tough in terms of preparation and time management. I might consider restructuring the number/timing of quizzes for that reason.
Do not make HW 8 material appear on the final exam. You learn it less than a week before the final and in our case, Tim didn't even teach it, we just had to read the notes because he was sick and yet the information appeared in multiple exam questions. This is beyond unfair. Additionally, in the real world, nothing is going to be "no notes". Having notes does not mean you don't understand the information. It means you have curated it in a way that enhances your understanding and lets you work effectively.
He needs to go over examples from the homework and quizzes in class. The class would be vastly improved if he bothered to connect the conceptual to the practical. I think that's where he's losing students

Please comment on how respected, valued, and included you felt as a participant in the course.

Comments
Tim's office hours are very accessible
I felt respected throughout the course
I felt respected.
Good
normal boring class because of material itself.
I rarely felt compelled to participate in class, but when I did, Professor Ng would answer my questions clearly and concisely.

Please include the name of the TA 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.

Comments
Jaskirat is the best TA! She breaks even the most abstract concepts down into clear, concrete steps. Since she will not be here for next years' iteration of the class, it may be useful to norm the TA expectations around what she did: structured slide deck per session, breakdown of proof and computation problems, and numpy review.
Manuel is very good and in his TA a lot of the topics that were taught in the class were explained with applied examples, so was a very good complement to the class to understand the topics in a better way.
Manuel – very dedicated and passionate about teaching and supporting us!
My TA was Manuel. He was always willing to help and would follow–up if gained further insight into a topic or question.
Manuel was my TA. He was great. It was very helpful to talk to someone who had suffered through this experience before.
Manuel Mendez, great TA, was very prepared for the lectures after the quizzes and kept it entertaining. Easy to talk to and very responsive online, helped us understand a lot of what we were unsure about, especially in his office hours
TA is much more better than profesor, who only give you some vague ideas without elaborating anything.
My TA was Manuel Mendez. Manuel was very kind and encouraging during our TA sessions. Sometimes, it felt like Manuel was learning the material at the same time we were, which could be challenging in the later weeks. I think prepared slides would be helpful for me, at least, to absorb the material better.
I found the help provided by the TAs helpful, especially that of Divij and Manuel who helped us understand the concepts better.
Divij, Jasikaur and Manuel were great TAs.
Manuel Mendez, the TA session is a bit unorganized overall, it seems that sometimes he is not very prepared for class instruction
Manuel. I would give the TAs more time, a lot of the tutorials felt a little rushed.