Machine Learning (Fall 2022)

Instructor: **Ahmad, Uzair**
Subject: **CS**
Catalog & Section: **6140 02**
Course ID: **16580**
Objectives:

Enrollment: **44**
Responses Incl Declines: **22**
Declines: **1**

Instructor Related Questions: Uzair Ahmad (31 comments)

Q: What were the strengths of this course and/or this instructor?

1	The instructor is very nice. He answered all questions whether you post questions online or ask in class.
2	The professor was well-prepared to teach in the weekly recitations, displayed a lot of enthusiasm for the material, and made himself available for office hours.
3	The course covers a wide range of topics and the professor does a decent job of explaining the underlying math. I liked the interactive demos in class, and in general the professor is easygoing when asked for help.
4	Prof. Ahmad clearly enjoys teaching and is always helpful when I approach him.
5	The material covered is interesting and a deep dive into the topic.
6	Experience
7	This course had everything it needed to have. The right materials, the right professors, the right TAs and everything. The course inspired me to just jump straight into my Ph.D. and focus on ML.
8	He's available online to answer for questions and willing to help students
9	The topics of the course were good. The professor was interactive in the sessions.
10	The instructor was helpful in explaining the topics further where needed
11	There weren't many... Instructor and TAs held office hours and attended most of the time.

Q: What could the instructor do to make this course better?

1	N/A
2	1. Better weekly content videos: often the videos provided in the course lacked sufficient context & high-level perspective to introduce the week's topic. I found the videos jumped too quickly into the mathematical formulas without providing enough context for me to properly understand. Future students would benefit from the professor recording more videos with proper context and highlighting the most important aspects of the week's topics. 2. Ensure the topics that will be present on the weekly quizzes are emphasized in the weekly videos/readings. I found the weekly quizzes often included questions which were not in the week's content. 3. Offer the recitations on Mondays. Most of the class did not join the recitations live - they instead watched the recording afterwards. Therefore - please do the recitations as early in the week as possible so I have all week to leverage the recording. 4. Help students connect the course content to contemporary topics in machine learning / what we will find in industry.
3	To start with, it would be great if the course was better organized as noted above. Additionally, it would be great if the course materials were reviewed more thoroughly to match the class materials. Several topics on the quizzes (and even some on the homeworks, like GDA) were never discussed in class. In my view its ok to assign stuff that doesn't make it to lecture provided out-of-class materials are provided, but we weren't even given recommended readings each week (just three textbook recs at the start of the semester). I would have really appreciated chapter/topic readings that pertained to the quiz/hw materials each week. Finally, I really, really think the deadlines and course schedule need to be reviewed. The final project is due two weeks before the end of the semester... seemingly for no reason whatsoever, as there are no assignments between the project and the final exam. Schedule wise things other than that are mostly fine, except for the fact that this course has the absolute slowest turnaround time of any course I've taken. We have submitted four large assignments, and with very little time left in the semester I have only just now received feedback on two of them - and this feedback consisted of simply "good job", without any in depth comments or code review or anything. In other words, I'm receiving feedback at a rate of about 1 bit of feedback every 2 months. That's unacceptable. To cite a particularly frustrating example: we never received feedback on our final project proposal, and we didn't receive any guidance as to what the final should look like until... after the proposal was due. In general, I think the professor could better organize the teaching team to get course materials posted and assignments turned around more promptly.
4	Ensure all Canvas materials are released fully, well ahead of time. There were many times where I had time to study ahead in preparation for the next class and assignment, which would've enabled more classroom engagement. However, many materials were locked behind arbitrary time gates. This often left me scrambling to cover materials in time and overly stressed and unable to understand the class lecture enough to ask pertinent questions.
5	1) Better align course material with lecture/quizzes. We were frequently asked questions on weekly quizzes and projects that were not covered until following lectures. 2) Have more consistent instructions. Deadlines, project instructions, and grading criteria frequently were not set or were consistent depending on the day questions were asked. On occasion the TA and instructor would change instructions on assignments midway through a deadline 3) Be more flexible on deadlines. Projects were given 3 week turnaround times but some weeks we would not have covered the necessary information for 1.5 weeks. 4) Spend some more time updating/proofreading material. It was clear that this course was simply copy pasted from previous versions of this course and Andrew Ng's seminal curriculum in machine learning without any adaptation for the online format or order by which material is presented. Students frequently caught mistakes, typos, and inaccuracies on assignments which cost time and points. 5) Better quiz design. Grading on multiple choice quizzes was harsh considering most of the time we were not equipped to do them (Projects were better due to the open nature). Peers that I spoke with were frequently scoring in the 60-70% range and did not find ourselves learning much from them.
6	Understand we are not pro players and teach us more clearly
7	I honestly think he already did a lot. He gave us some challenging assignments but also provided help in solving them. I think for AI graduate students, I will suggest the university focuses on more courses like this than PDP which doesn't actually add any value to an ML or AI career.
8	The assignments could be a little shorter since it's very long and tough to balance between reading the materials, videos, and also the assignments
9	Better guidance and material could have been provided to better prepare us for the assignments and quizzes.
10	More robust explanation in the videos on what each symbol means when they're explaining the math behind the algorithms. It looked like undecipherable hieroglyphics to me (due to my weakness in math)

Q: What could the instructor do to make this course better?

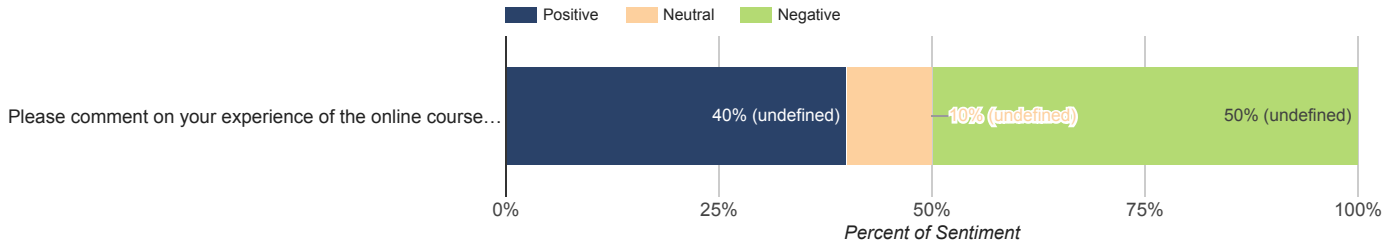
11	There were many... Give real implementation examples to go by that are provided in the course material that relate to how you are evaluating students for staters. Give refreshers to TAs so when people go to their office hours they can actually be helpful instead of "I don't know, I need to talk to the professor" or unhelpful/disinformation provided. Answer emails and piazza posts in timely manner (within 24 hours) Don't do videos with handwriting because the writing was not clearly readable sometimes. Please look at the sequence of your material as even though the way you labeled it looks correct, the actual content is out of order a bit. Please take into account people whom work such that if it is a Boston based course people might typically work from 8AM to 5PM normally Monday though Friday so something scheduled at 2PM is not very effective. If I take a quiz / exam please give a reasonable timeframe. If I take a quiz / exam please make sure the questions have the correct answers instead of me spending time to correct them or cause doubt in understanding. I would recommend taking a course on how to operate CANVAS. There is more, but I guess I am running out of space but I would start with the parts above.

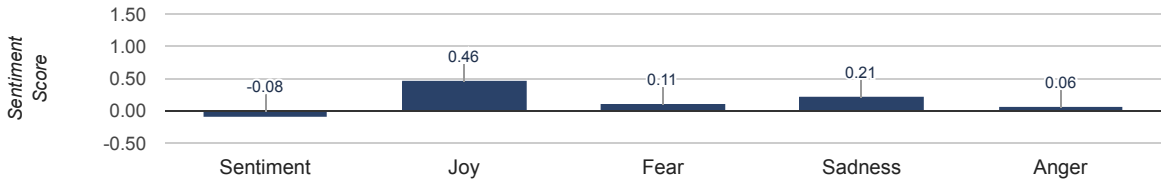
Q: Please expand on the instructor's strengths and/or areas for improvement in facilitating inclusive learning.

1	N/A
2	The professor is clearly passionate and very knowledgeable about machine learning.
3	What I really wish would happen, and the entire school is guilty of this, is offering more example problems DURING class to demonstrate the concepts being taught. The entire class of students should be brought together to solve example problems while being guided to the correct answer by the instructor. That is the whole point of meeting in classroom. It is not to sit there and hear a repeat of the module's videos.
4	The instructor is incredibly caring and patient in explaining the theoretical foundations behind concepts. The professor was frequently available to offer assistance and clarify confusion.
5	Good topics
6	In my opinion, the professor has all his bases covered.
7	The communication of announcements could have been more clear and better course material could have been provided.
8	A little more instructions with homework would've been nice to have
9	Please compare the course material to the assignments and tell me where I should get the answers from, if you can't get the answer that is probably a sign you should include the item in your course material instead of googling for hours.

Questions to Assess Students' Online Experience (10 comments)

Q: Please comment on your experience of the online course environment in the open-ended text box.





1	This course is a big challenge for me. But I learned a lot in this course. ★★★★★
2	Overall the online course environment was satisfactory. The course required a significant amount of online research and "out of the book" investigation. This is not a course for someone expecting all the content to be laid out and well organized for them. ★★★★★

Q: Please comment on your experience of the online course environment in the open-ended text box.

3	Unfortunately, this course was pretty poorly organized. Materials, communications, and even submissions were split between Canvas, Teams, and Piazza. As a result, it was often difficult to locate relevant documents - for example, we were required to submit final project assignments first to Teams, then to Canvas, _then_ were required to comment on others' submissions on Teams, until that proved too difficult and we were instead supposed to comment on Canvas, until _that_ proved too difficult, so we were supposed to review through google forms. Similarly, it was often difficult to locate readings for the course, and updates to assignments could be scattered across many mediums. For example, for A3 (available on canvas) there were mis-specified GridSearch parameters in one of the problem statements that would have led the GridSearch to run for an intractably long time. A student asked about this on Piazza, where they were eventually redirected to Teams, where an update to the assignment was provided. This platform split repeatedly lead to Byzantine search processes just to find answers to simple questions or even find assignments. I think the class would be greatly improved by picking one, maybe two, online platforms to teach through and sticking to that. ★★☆☆☆
4	Forming study groups by time zone and possibly location should be encouraged early on in the course. ★★★☆☆
5	The online environment was difficult to collaborate in as students were not always provided the correct or consistent information. Lecture material frequently did not align with material from modules that we were expected to utilize. ★☆☆☆☆
6	The coursework, assignments are not much related ★☆☆☆☆
7	This course is exactly the reason I enrolled at NEU. The professor made me fall in love with the course. Theories for lectures just so we understand the intuition behind certain things, and practicals for assignments to ensure we put into practice what we gathered from theory. ★★★★★
8	The assignments and quizzes were taxing and there was no proper guidance from the professor to navigate the assignments and quizzes. ★☆☆☆☆
9	The class learning curve was too steep for an Align student with no college level experience with complicated math. Even cs5800 algorithms was easier to comprehend. I needed too much work to catch up on the conceptual and math side of the algorithms but managed to do well in the coding side when it came to assignments. ★★★★☆
10	I would simply advise people not to take this course, along with other AI courses at NEU. You are graded based on implementations you didn't learn based on the most basic highest level of understanding of a topic and somehow you are expected to know this without being shown or examples provided in the course. What do you honestly expect people to do, not google?I googled my entire way through without an ounce of your assistance and the TAs barely helped. I can safely say I learned slim to nothing from your course. Complete waste of time without the use of real implementation ...That is all... ★★☆☆☆

Student Self-Assessment of their Effort to Achieve Course Outcomes (10 comments)

Q: What I could have done to make this course better for myself.

1	I think that may be better before I take some basic ML classes.
2	Take a short online course on linear algebra beforehand.
3	Had an actual background in Linear Algebra.
4	Find peers to work with sooner
5	Interactivity and clearing doubts for assignments
6	I think I would have spent some extra time on the theoretical aspect. But trust me I enjoyed doing the assignments so much that I get carried away sometimes and don't even care about the theory and intuition behind the codes I write.
7	Spent more time reading the course materials
8	Try to read the course material more thoroughly.
9	Not taken it with my lack of strong math foundation
10	Not be working my normal full-time job to attend the office hours for assistance despite the claim "classes can be for the working person" as this feels like false advertising as practically little to no assistance was shown for people who work full-time jobs for a masters program...