

2020 Spring Qtr. Course Evaluation Results

Course Title:	TTIC 31250 Introduction to the Theory of Machine Learning
Course Instructor:	Avrim Blum
Responses received:	43 (out of 54 enrolled students)

Did this course have a Teaching Assistant?				
No				
The course instructor communicates ideas and concepts clearly.				
Strongly disagree	Disagree	Somewhat agree	Agree	Strongly agree
			13	30
The course instructor explains the material in an interesting manner.				
Strongly disagree	Disagree	Somewhat agree	Agree	Strongly agree
		2	7	34
The course instructor is well-organized and uses class time efficiently.				
Strongly disagree	Disagree	Somewhat agree	Agree	Strongly agree
			6	37
The course instructor is accessible outside of class.				
In my experience, yes. (32) / I do not know. (11)				
Any comments about the course's online experience?				
Good online experience.				
Was pretty good.				
This course translated quite well to an online format				
Not the biggest deal, but I'd prefer it in person. Easier to ask questions and have a conversation.				
An online course is not ideal, but better than no course at all! In addition to that it would've been helpful to have the lectures be posted online so we could access them and review the material after class.				
Professor Blum did a great job of keeping pace up. He made time for questions but never let the lack of questions cause a lapse in the class				
It was fair. I did not have any issues				

Because usually we need kind of blackboard-writing, which maybe hard with a mouse, providing lecturer with writing pad can be a huge improvement for online experience.

It was far much better than the in-class experience.
There is less need to be fine mentally or physically to attend the course.
And it's much easier to ask questions and concentrate on what's being taught.

Nice

Looking at the PPT when doing theoretical proof is a little bit hard to catch. It would be better if it could be taught in person.

i wished that recorded video is available because sometimes my internet break up

It's totally ok, don't feel a real difference to the classroom experience.

I did wish there was a TA at a few points- since it was remote this quarter, I struggled to get all my homework questions answered. Other than that, Avrim was a great video lecturer and it was really nice to have the lectures recorded. much better than the other virtual class i took this quarter.

I wish there were fixed office hour times held weekly, where we could interact with both the professors and other students' questions without having to directly schedule a 1:1 meeting (which can be intimidating).

Also would have been helpful to see other peoples' questions. In zoom all questions were set to private.

Was smooth.

No

this went much better than i expected - really seamless

How was the pace of the course?

About right (38) / Too fast (5)

Outside of lectures, how much time (on average) each week did you spend working on coursework for this course?

2 to 4 hours (6) / 4 to 6 hours (12) / 6 to 8 hours (13) / More than 8 hours (11) / No answer (1)

The grading in the course was thorough and fair.

Strongly disagree	Disagree	Somewhat agree	Agree	Strongly agree
	1	4	14	24

Did the course meet your expectations?

yup! it was a fun class :)

Yes. It exceeded my expectations

Yes!

Yes, the course introduces basic theory to the Machine Learning and some cutting edge topics.

Yes, learn a lot.

Yes, it's very interesting as an introduction course in the theory of machine learning.

Yes, it was very good.

Yes, it was a good overview of aspects of theoretical ML, and gave me a good sense of what is out there.

Yes, it covered a wide range of topics which I found engaging and informative

Yes, I thought this was a great course!

Yes I did.

yes

Sort of. But maybe too difficult for a student without solid math base.

Mostly. Only that I expect this to be an introductory course in the sense that the concepts will be presented assuming that we know nothing about ML, but often it seems to be assumed that we know what a concept means, so there are not clear definitions before some words are used. This can be confusing especially since there seem to be many "jargons" in ML.

Kind of. It is more like algorithmic learning theory instead of statistical learning theory.

It was a lot more math-/theory-based than I expected; I thought it would have more to do with computer science and include programming exercises but that was not the case. Coming from a statistics background, I didn't feel prepared.

I feel that this course, while interesting, did not really address the type of machine learning that is most common in the real world. There was no mention of neural networks at all.

Exceeded them. I wasn't sure what Theory of ML was going in, but I enjoyed learning about the field.

I would recommend this course to other students.

No Answer	Disagree	Somewhat agree	Agree	Strongly agree
1	1	2	10	29

What did you like about this course?

Yes, I really like it. It gives me another view of machine learning.

Yes

Topics were explored deep enough to teach but not so deep as to become all-consuming

this was a great course, I learned a lot. all of the material was presented in a very intuitive and engaging way.

The variety of topics and relation to other fields.

The slides were really helpful, detailed, and clear.

The selection of material covered is really good. Also, Prof. Blum is good at providing intuition.

The professor is very available

The professor is nice and willing to answer question after class.

The professor has great passion and devotion for teaching this course.

The problem sets were very instructive and helped to reinforce concepts taught in class.

The material was thorough, well researched and well presented.

The online delivery of the course made it easy to attend the lectures even on one's worst days because you sit at the comfort of your laptop and take the course.

The professor was accessible and very helpful outside the class which made it easier to understand concepts which were sometimes hard to comprehend from the class.

The given homeworks encouraged one to read course material and supplementary material which further helped in understanding the material.

The instructor conveys motivation and intuition very well. Homeworks include interesting problems.

The HW problems were good...they were interesting and some were very challenging.

The course covered a broad range of topics, which made me familiar with with the basic knowledge of the literature, to dive down further if needed.

The content was honestly fun to think about. Prof. Blum has an interesting and non-intimidating way of presenting course material

Proofs were very thorough and rigorous

Prof. Blum is a clear lecturer, and explained even rather difficult theoretical concepts in an easy to understand way.

Overall, the course is good, with well designed contents and the assignments are neither too difficult nor too easy. The exercises let us review the course content while the problems let us learn further.

lectures were really clear, and the homework assignments had really nice problems on them - they tested understanding of the material well, and the solutions themselves were pretty elegant/gratifying to arrive at

Interesting algorithms and models.

intensive pace

instructor was great. content was great

I liked the problem sets a lot! The problems were extremely rewarding to do.

Explanations in lecture were clear and provided helpful intuition, homework problems were interesting.

What did you dislike about this course? What should be changed?

The pace of teaching is a little bit fast for me. I think it is because of the special format of remote learning. It takes more time to digest the information.

The definitions of some terms are not clear enough.

student-done grading might be a little non-standard, but doesn't seem like a big deal

Reading resources were only assigned for some of the lectures, although I would have liked to have secondary sources recommended for each topic. I would have also appreciated set TA/professor office hours as opposed to having office hours be exclusively privately arranged.

Nothing.

Nothing really. I liked the style of the homeworks, I think it improved my learning to have simple problems as solo exercises and more difficult ones to discuss with a friend

nothing

No, I don't have comments

n/a

More readings to help understand the material				
Maybe better if combine the algorithm with some simple code implementation?				
It'd be nice if it could not be on zoom. lol				
It would have been nice to have 1 or 2 TA's for the course.				
If we have more quarters of online learning it would be great to have the lecture recordings be made available on Canvas.				
I was sad that a few lectures started late / ended early / were cancelled (1 of each). Since this quarter started late, I felt like we could have covered more. But, this quarter has been full of unusual circumstances, so I can't feel too upset.				
I thought the course was really hard, but I do not think that is a bad thing				
I think it will be helpful to have a TA or regular office hour.				
I think all is great. If next year it could be taught in person, it would be better. Looking at the PPT when doing theoretical proof is a little bit hard to catch.				
I do not like the slides of this course, because it is kind of messy when I use it after class. And I still prefer rigorous definition of every thing. For example, in the first class of PAC model, since I was familiar with statistics and not familiar with machine learning theory, I did not know the problem we consider is only binary classification, but I was thinking about regression problem and y could be anything. So when I was taking the first class, I got very confused. But if everything could be formulated in a lecture note, then I think it will be fine.				
I couldn't follow what was going on in lectures, I would just go over the slides slowly on my own. I think if I had a stronger background in math/proofs it could've been fine. It was really hard for me to understand the intuitive meaning of a lot of the theorems/equations we discussed.				
Aside from the intuitive lectures, I hope the instructor could give more formal definitions to make things clear. It's usually possible to find a more formally defined materials in the reading materials, but recommended readings are not always available and not as organized.				
A minor gripe is that sometimes, reading slides after class made me confused (especially when there were proofs). While the lectures were very clear, sometimes if it had been a few weeks, going back and looking at the slides to recall the details was a bit hard.				
A lot of the topics towards the end of class felt scattered, it was a lot of information to absorb at once before moving onto another topic quickly.				
Also would have been nice to see more overarching themes (ie this concept is fundamental and useful for x , y , z applications) and connections to real world applications				
Also would have like more information about neural networks, especially as viewed through the SQ-model and VC-dim analysis				
The homework assigned was appropriate and helpful?				
Strongly disagree	Disagree	Somewhat agree	Agree	Strongly agree

		1	11	31
Was The TA available?				
The course did not have a TA				
Was the TA knowledgeable on the course matter and helpful?				
Not applicable				
Additional comments about the TA:				
Not applicable				
How difficult was this course?				
Very easy	Easy	Average difficulty	Difficult	Very difficult
	2	14	16	11
Overall, how would you rate this course? <i>(Rate 1 to 5: 1 = poor quality course; 5 = high quality course)</i>				
Average Rating:			4.67	