

# Schmidt, Isaac (DATA C100 LEC 001 PRINC&TECH DATA SCI) - Summer 2021 (Instructor Version)

Project Title: Summer 2021 Evaluations

Courses Audience: **319**Responses Received: **263**Response Ratio: **82.45**%

Subject Details	
Name	DATA C100 LEC 001 PRINC&TECH DATA SCI
DEPT_NAME	DATA
DEPT_FORM	DATA
EVALUATION_TYPE	G
First Name	Isaac
Last Name	Schmidt

Creation Date: Monday, August 23, 2021

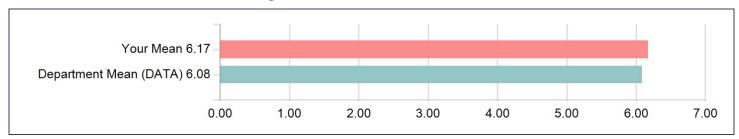


FOR YOUR INFORMATION: Please note that "Department Mean" for each rating question is calculated using all sections in your department. This may include both Faculty and GSIs depending on whether the department has selected a question item to be used for both.

## **UNIVERSITY WIDE QUESTIONS (QUANTITATIVE/RATING):**

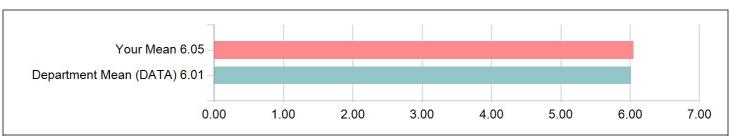
## The items in this section are asked across all courses at Berkeley.

Considering both the limitations and possibilities of the subject matter and the course, how would you rate the overall effectiveness of this graduate student instructor?



Considering both the limitations and possibilities of the subject matter and the course, how would you rate the overall effectiveness of this graduate student instructor?		
Options	Count	Percentage
1-Not at all Effective	2	0.86%
2	3	1.29%
3	3	1.29%
4-Moderately Effective	12	5.15%
5	22	9.44%
6	74	31.76%
7-Extremely Effective	117	50.21%
Statistics		Value
Response Count		233
Mean		6.17
Median		7.00
Standard Deviation		1.15

Considering both the limitations and possibilities of the subject matter and the course, how would you rate the overall effectiveness of this course?



Considering both the limitations and possibilities of the subject matter and the course, how would you rate the overall effectiveness of this course?		
Options	Count	Percentage
1-Not at all Effective	1	0.41%
2	3	1.22%
3	2	0.82%
4-Moderately Effective	22	8.98%
5	20	8.16%
6	97	39.59%
7-Extremely Effective	100	40.82%
Statistics		Value
Response Count		245
Mean		6.05
Median		6.00
Standard Deviation		1.11

## **DEPARTMENT PROVIDED INSTRUCTOR QUESTIONS:**

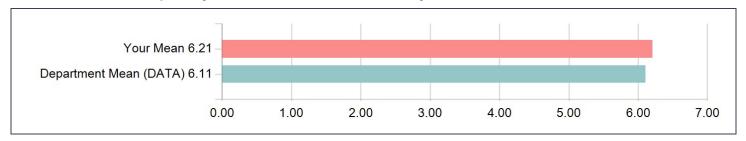
# Items in this section were selected by DATA for inclusion on this evaluation.

The instructor presented content in an organized manner.



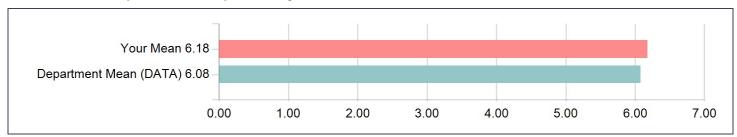
The instructor presented content in an	organized ma	ınner.
Options	Count	Percentage
1-Strongly disagree	2	0.79%
2	3	1.19%
3-Somewhat disagree	1	0.40%
4	12	4.76%
5-Somewhat agree	13	5.16%
6	80	31.75%
7-Strongly agree	141	55.95%
Statistics		Value
Response Count		252
Mean		6.31
Median		7.00
Standard Deviation		1.06

# The instructor developed my abilities and skills for the subject.



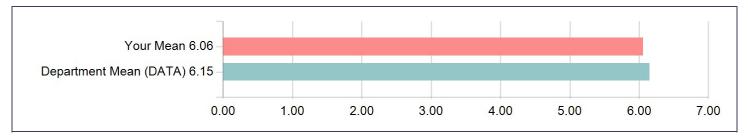
The instructor developed my abilities and s	skills for th	ne subject.
Options	Count	Percentage
1-Strongly disagree	2	0.79%
2	1	0.40%
3-Somewhat disagree	1	0.40%
4	15	5.95%
5-Somewhat agree	22	8.73%
6	90	35.71%
7-Strongly agree	121	48.02%
Statistics		Value
Response Count		252
Mean		6.21
Median		6.00
Standard Deviation		1.03

# The instructor explained concepts clearly.



The instructor explained concepts clearly.		
Options	Count	Percentage
1-Strongly disagree	2	0.80%
2	3	1.20%
3-Somewhat disagree	1	0.40%
4	15	6.00%
5-Somewhat agree	21	8.40%
6	87	34.80%
7-Strongly agree	121	48.40%
Statistics		Value
Response Count		250
Mean		6.18
Median		6.00
Standard Deviation		1.10

## The instructor encouraged student questions.



The instructor encouraged student questions.		
Options	Count	Percentage
1-Strongly disagree	4	1.62%
2	1	0.40%
3-Somewhat disagree	2	0.81%
4	25	10.12%
5-Somewhat agree	29	11.74%
6	63	25.51%
7-Strongly agree	123	49.80%
Statistics		Value
Response Count		247
Mean		6.06
Median		6.00
Standard Deviation		1.25

## I would recommend this instructor to others.



I would recommend this instructor to others		
Options	Count	Percentage
1-Strongly disagree	3	1.20%
2	1	0.40%
3-Somewhat disagree	4	1.59%
4	15	5.98%
5-Somewhat agree	22	8.76%
6	74	29.48%
7-Strongly agree	132	52.59%
Statistics		Value
Response Count		251
Mean		6.20
Median		7.00
Standard Deviation		1.15

#### What do you think are the strengths of this instructor?

#### Comments

Clear and organized

The instructor had really great walkthrough videos. He was also very active on Piazza

Presentation, organization, knowledge of the material, and engagement.

Great at explaining concepts in lectures/lab walkthroughs, very engaging lecturer

Generally responsive on piazza & super helpful during OH!

Clear explanation. Easy to understand.

He has a very good vibe and approach to learning and explains things at a very human level.

His enthusiasm for the subject is contagious

Pretty good at explaining

Very approachable and explains material in a way that is actually learnable

He was there in labs and always present content with full strength and was very helpful overall.

Know material well

He is strong in his mastery of the material he's teaching and how he connects with us students trying to learn the material. Able to step down to the level of our perspective and walk us through problems.

Isaac has been a constant figure in this summer all throughout the course. He is engaged with students and provides clarity when needed. Additionally, his instruction throughout the course has been absolutely second to none.

Issac is one of the best teachers I've had for coding. He is clear, understanding, and focuses on us actually learning the material.

One of the best instructor I have ever had. Very approachable and understanding of students.

He was very accessible in piazza and also kept the material interesting during live lecture.

approachable

Personable and sweet.

Overall pretty good

Explains concepts thoroughly

Great communicator and careful with their words. Parsing these concepts is a big challenge and accurate language is important for an instructor, especially in the pre–recorded context where students cannot ask for clarification on the spot.

Very responsive and approachable. And because they are students, it was comfortable me to ask for advice about classes and things that most students wonder about.

Again, the response is similar to the other instructor. I think the lectures presented by both the instructors were amazing, simple and I really wish that for future summer semester they revise some of the older summer lectures to include their own. What really worked for me was going back to the videos and replaying them but having them go over every single detail in formulas to explaining concepts and summarizing them helped me understand concepts better.

Empathy and understanding with studnts, lots of avenues for communication

I feel like they understand our perspectives better because they were students of this class.

Like his way of explaining the materials especially during labs.

Great lab walk through videos and nice and helpful in office hours. He took feedback really well, he read all of our periodic feedback forms and if given an action item to improve, he did.

Isaac's lecture style and lab walkthroughs made this class more casual, which I enjoyed as a change of pace from usual lecture styles. He was also transparent to us about what he and Raguvir were experimenting with in the class, and were reasonable with logistic issues. Overall a great experience in the course, and Isaac himself shared a lot during live sessions to help us students continue in the DS field/figure out where to go next.

Isaac didn't teach at all. All lecture videos were from previous semesters.

## Charismatic

Great presentations of the lectures. Very responsive on Piazza and was very helpful.

Both instructors were extremely considerate (one of the best I've seen) of students. They made many accommodations – various OH and discussion sections, homework extension if the server had crashed, and more. The course was very organized and that really helped despite the fast–paced nature of summer courses.

The instructor was very enthusiastic about course materials which made listening to him explain concepts more interesting.

Isaac was particularly effective during Live Sessions, where he would direct the conversation effectively, in a way that encouraged

student participation, and was also educational. He was always great at answering questions about course topics, and going beyond them.

Clear lectures and easy to understand format.

even though he gave away lab solutions without promoting learning, he was a bit effective in teaching some new things

Very clear explanations and reasonable and friendly.

Very accommodating to students in the online semester. Provides a lot of different resources, knowing that everyone has different learning styles. Very organized class. & Explanations are very clear

Very thorough explanations.

This instructor was very approachable, always seemed to be in good spirits, and taught the material in an incredibly cohesive manner so that it was well understood by students. Isaac allowed students to feel comfortable to ask questions as well as relayed information very well so that there was never much confusion at all on not just material but due dates too.

I appreciated how the lectures (recorded this semester) were clear and concise. I liked that the slides provided a lot of information, and that the instructors highlighted which segments of information were most important. I thought that the code demos really helped elucidate the concepts of lecture.

Great videos!

organization

Well organized class structure delivers information in a nicely digestible manner. Lab walkthroughs help a lot to prepare for homeworks.

Presented content very clearly

thoroughly explaining things

Same with above, I never went to any office hours, only watched the lectures which were fairly good and concise.

Presents material in a very clear manner and at a reasonable pace. Very thorough explanations!

Isaac was also very clear when explaining the difficult concepts.

Similar to Raguvir, Isaac is very enthusiastic about the material and is always willing to help those who may be confused with the content.

Personable

Useful videos.

he was fun? i just said that

Would always provide detailed explanations during lecture and also during the lab walk throughs.

Clear lectures, replies to emails promptly, highly intelligent and knowledgeable.

Clarity

A lot of dedication! and humor haha

Very good at meeting students wherever they are and building up their knowledge to the level of course content. Explanations are super clear and easy to follow!

Teach everything very clearly with demo and practices

Great!

good

encouraging

The instructor was fairly clear and helpful.

Same as above. Very organized with the content. Appreciated the broken down videos by subject. Also was receptive to student feedback and questions. Very nice demeanor.

explanation/lab walkthrough/lecture videos are very clear and they help me understand the materials a lot. He's really good at teaching. He's also very good at logistics and answering questions on Piazza.

Incredibly high engagement on Piazza; humbly accepts fault for issues with website inaccuracies.

Isaac does a great job presenting and breaking down ideas/problems into their core components for his lab walkthroughs and the lectures he is in.

Isaac was very clear in his explanations.

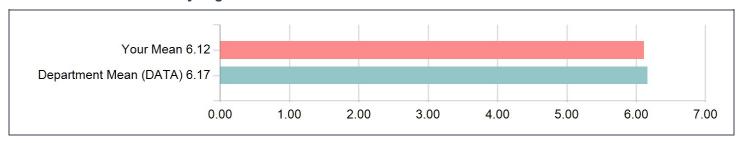
Isaac explained all the labs very clearly and I really ejoyed following along his videos.

Isaac did a good job walking through the labs but there still not much explanation about the core concepts that were also not gone over clearly in lectures.

## **DEPARTMENT PROVIDED COURSE QUESTIONS:**

# Items in this section were selected by DATA for inclusion on this evaluation.

The course was effectively organized.



The course was effectively organized.		
Options	Count	Percentage
1-Strongly disagree	1	0.39%
2	2	0.78%
3-Somewhat disagree	7	2.71%
4	15	5.81%
5-Somewhat agree	28	10.85%
6	83	32.17%
7-Strongly agree	122	47.29%
Statistics		Value
Response Count		258
Mean		6.12
Median		6.00
Standard Deviation		1.13

## The course developed my abilities and skills for the subject.



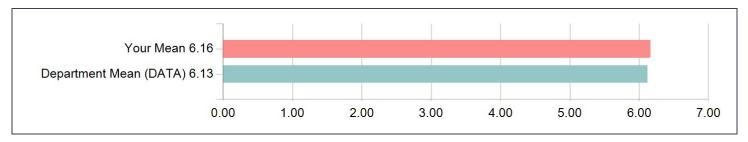
The course developed my abilities and skill	ls for the	subject.
Options	Count	Percentage
1-Strongly disagree	1	0.39%
2	1	0.39%
3-Somewhat disagree	4	1.56%
4	16	6.25%
5-Somewhat agree	30	11.72%
6	88	34.38%
7-Strongly agree	116	45.31%
Statistics		Value
Response Count		256
Mean		6.13
Median		6.00
Standard Deviation		1.05

# The course developed my ability to think critically about the subject.



The course developed my ability to think critically about the subject.		
Options	Count	Percentage
1-Strongly disagree	1	0.39%
2	2	0.79%
3-Somewhat disagree	3	1.18%
4	18	7.09%
5-Somewhat agree	40	15.75%
6	78	30.71%
7-Strongly agree	112	44.09%
Statistics		Value
Response Count		254
Mean		6.06
Median		6.00
Standard Deviation		1.10

#### I would recommend this course to others.



I would recommend this course to others.		
Options	Count	Percentage
1-Strongly disagree	1	0.39%
2	4	1.57%
3-Somewhat disagree	2	0.78%
4	18	7.06%
5-Somewhat agree	24	9.41%
6	77	30.20%
7-Strongly agree	129	50.59%
Statistics		Value
Response Count		255
Mean		6.16
Median		7.00
Standard Deviation		1.13

### What did you like about the course?

#### Comments

The Pacing and applications of different data analysis techniques

Most of the material learned from this course, when combined with some domain knowledge, is directly applicable in jobs and careers

The course was well structured an encouraged and incentivized participation.

i liked the organization of videos and content that made it very easy to keep up with in a remote learning setting. I also liked the live sessions on Fridays for review. The piazza was an extremely helpful resource and I appreciated the encouragement of collaboration and asking questions in that forum.

real world application

Great topics & very reasonable grading, especially compared to some other courses I've taken.

It covers the basics of machine learning.

I liked how it was lighter than some other techs while still sharing a great deal about the subject. I had an internship going at the same time and found that many of the concepts learned in class I could directly apply to my position as a Data Engineer.

I liked how the course gradually built up the course material, it felt like everything taught was connected and reasonable.

It's a refreshing change from the Computer Science classes I'm used to. I've always been shaky in my data science and statistics fundamentals, but this course broke down concepts in a really easy way and made it engaging at the same time.

I liked how the videos were from the best instructors and sessions.

Course really developed my critical thinking and coding skills

Lots of interesting information that seems practical as well.

I liked the assignments, they were interesting and you could tell what concepts they wanted you to grasp. Very straightforward.

Variety of the course and the way it was designed.

The material

The applications of the material.

I really enjoyed the topics we covered all throughout the course! I feel like my skills were meticulously developed through time and I really appreciate that!

The course was easy to maintain during the summer.

The homework was tedious at times but really fun and applicable to the real world.

I liked the flexibility of the course, especially given that it was online.

Relatively low workload, interesting content

It was very organized. Instructors/GSI's were very accessible and helpful. The hw and labs were very interesting and were never just busy work.

I really enjoyed the PANDAS portion, along with some of the probability.

fun

We cover a ton of topics and there is a lot of application

I liked the topics and subject matter

More than the coding or the math, I loved learning about the principles of modelling. It put a lot of my previous engineering labs into context and filled one of the biggest gaps in my academic framework. I also appreciated the variety of lecturers. In the zoom–space, this really helps with retention, as lectures tend to blur together when you hear the same voices day in and day out.

I liked the course contents.

I LOVE instructors and TA/AI. They are so nice and very knowledgeable!!

Course gives a dip into real world data. My favorite assignment being performing analysis and housing prices and cook county and developing our regression model based on the features present in the following dataset. In addition, it teaches you many valuable skills rather than coding which is more aligned with CS courses. SQL and Pandas are good skillsets that are taught extremely well in the course; but its up to you to practice. You also gain experience with Seaborn, plotly, and insights into reading data, saving data, and branching into Machine Learning.

Learn many new things every day. Can apply the lesson to daily life.

The community, I made a friend.

There is no box for "were you satisfied with your effort" I think I put in a ton of effort with not much return. Yes I learned a lot but I think this class was asking for too much. I was pretty miserable for a good chunk.

Useful overview of data science concepts,

- 1. This course opened a new world for me. From this course, I know what's prediction and machine learning.
- 2. Homework mimic feature job.
- 3. The bunch of online discussion sessions, can found help almost every time.
- 4. On live sessions show some fun projects opens a path of how to use the skills to develop project.

Both introducing commonly—used libraries (pandas, Matplotlib, seaborn) and using real—world datasets gave me an opportunity to glean experience that I can draw from and expand on as I continue learning about Data Science.

I like the development of the course material and how it bridges lower division data science in preparation for future upper division electives

It was interesting and applicable

The course was extremely structured and I really enjoyed learning the contents. Some of the contents we learned would make intuitive sense and I really enjoyed putting formal definitions on these. What we learn are very applicable to the real world and our own fields outside of just Data Science since data is everywhere.

I really enjoyed the vast landscape of material we covered in the course. I appreciated learning the mathematical background of some of the course materials because it allowed me to get a deeper understanding of what I was learning and why it made sense.

The course allowed for significant independent interactions with data, which was the first time I'd experienced this; it felt like I was actually learning how to analyze on my own.

Also, the course did not shy away from teaching many real—world tools and modeling processes, to the point where it actually feels like I can do something meaningful with the skills I've learned.

Able to learn seemingly complex topics in small parts.

the coding in homeworks

I liked that it covered many topics on data analysis for preparation for other classes in ML and AI.

This course formalized and clarified things that I have taught myself or vaguely learned in other coursework and personal projects, but I never truly understood them until taking this course. I loved the balance of critically thinking and mathematical reasoning and I think that more courses should be taught in this style.

I think this course has great concepts and really advanced my data science abilities.

I loved the real life data sets and applications in the assignments.

GSIs and TAs absolutely went out of their way to make sure questions and confusions were cleared up (shout out to my discussion section TA, Kanu, for being super great!) and the course itself was meticulously organized — information about the course was easy to find and follow, which was especially helpful for me, as I had to consume most of the course content asynchronously. As someone who had minimal experience with Python (and statistics) coming into the course, I was definitely nervous going in, but even considering that this is an accelerated summer course, I learned SO much, and I am so grateful for the efforts of all the course staff.

I liked how COVID was taken into consideration participation—wise and how active piazza was. The labs were guite fun as well.

I like the application side of this course. It has taught many useful skills along with important theoretical ideas.

The course taught me so much about machine learning that I never thought I needed to know but now opened my eyes to realize how important this information really is to have. The techniques taught in this course has allowed me to feel confident moving forward in my ability to deal with python as well as dealing with general data sets.

Even though this was a summer course, the workload felt extremely manageable. I was on vacation for the duration of the course, and I rarely felt stressed about deadlines. I enjoyed the mathematical rigor of the course, as I felt that I was finally able to apply my math education towards solving actual problems. I liked the scaffolding of course concepts, as each of the lectures felt as though they built on—top of one another.

The knowledge is very applicable and relatively well explained without going into too much detail. Good for learning how to use common packages.

The applications of the course via His and labs are very useful.

Perfect for a summer course, doesn't feel like a condensed semester course.

Very practical, lots of work with real-world tools, good intuitive introduction to machine learning.

The asynchronous lectures and labs

organized well

I thought it was really cool to see what you can do with data.

I really liked the formatting for the course, with bite sized videos. I also really liked the labs and the walkthrough that were provided. I felt like it really helped when it was time to do the homework.

I loved all the material. Most practical course I have taken.

I really enjoyed the structure of the course and the order in which the lessons were taught. It made sense and it felt like it all built on each other. There was a lot of cohesiveness with everything taught.

The course was very understanding of the pandemic, and gave a variety of resources that allowed students to absorb the content.

I like the pace of it given that it is summer

The hands—on experience with actual data sets and a mix of theory + practical applications.

Really fun and interactive homeworks.

it taught me stuff relevant to the real world

I like that everything is very organized and homework and labs are always on schedule. I also like the use of piazza and that lectures are split up into smaller videos.

n

I like the course incorporates real-world applications.

I like how for this course they provided OH almost every single day during the week.

It was nice given the limitations.

The lectures

It was nice to be able to deal with real data. Also nice to can see the result as my own code.

It was very fun applying our skills and knowledge that we gained throughout the course to real life problems, and I felt inspired and encouraged knowing that the things I was learning had real life applications.

The instructors were very reasonable about the workload and genuinely cared for students overall wellness while not compromising on material.

I love how the class design labs/homework to help us practice the knowledge we learned.

engaged professors and super interesting assignments! great discussion leader too

This course is wonderful.

good

I liked how the course was structured and the material that was presented in the class. I found it very interesting.

it was very structured which was really nice

Interesting topic

The course was organized well and structured fairly clearly.

I really enjoyed the material and what we did in the course. It was really imformative and I feel like I learned a lot of really solid skills.

Labs have walkthrough videos and no projects, only homeworks (even though they put old projects into the homeworks but mentally feels like it was less work/assignments)

It's the only upper division course that teaches Pandas. I also like the data-oriented approach to intuition-building for concepts like OLS, Lasso, and SVD. By contrast, courses like CS189 try to reach the intuition by mathematical proof, and I hate that.

I really enjoyed some of the open ended projects given to us like the housing model and the spam vs ham contest.

This course gave me a good understanding of what working as a data scientist consists of in industry.

How useful it is

I learned about how to use pandas and some of the various packages for plotting and visualizing data sets.

I liked that this course taught me many concepts about data that I didn't know before.

I felt it was well organized and generally speaking respected students time.

I liked how labs focused on learning and there was a good balance regarding timing between the homework and labs.

## What, if anything, do you think would improve the course?

#### Comments

Maybe have an independent project as an assignment. Students can get a bunch of datasets to play with and come up with something

I do wish that the material would have gone a little bit deeper into subjects considering that is an upper–divsion course.

The prerecorded lecture format made it very difficult to keep up with lectures. If the class is online again, a live zoom lecture format would be more engaging and encourage more class participation via the zoom chatbox

give feedback on homework a bit faster...

More live sessions!

It would be better to have videos that overview the past exams.

It is kinda cool how it is a "sampling platter" of different data science concepts. However, at some points it seems a little unnecessary. In my opinion, taking the time to lightly skim the surface of a topic without learning anything super applicable is the equivalent of siphoning class time in an unproductive direction. So, I would slightly shave some of the breadth of course material and instead go more in depth on some of the other more widely used topics.

Raguvir's audio quality could have been better

I believe there are too much lectures, maybe decreasing the amount of lectures would be better

More active staff members to answer clarification questions on Piazza will be nice.

The office hours for students. Some students had to wait 2-3 hours to get help from one question.

I think the course is perfect the way it is.

Show more practical job usages

I think I would make more solution videos for the practice exams. There are only like 2 solution videos for the tests of all the previous years.

I think given the nature of summer courses and online courses. Data 100 did a fabulous job!

Spreading out the assignments more. I personally would have liked having shorter homeworks that were due more often.

Make homework instructions more clear.

I would want to have more review videos that weren't live (or recorded discussion walkthroughs). I often had to catch up on discussions so it would be nice to be able to review a walkthrough on my own time (given that the lectures were also pretty self–paced).

Nothing; I really liked the course.

I think the jump in difficulty from proof based homeworks and some of the feature engineering homeworks could have been streamlined.

Too much work

The pacing is so fast it can be hard to keep up

The lectures were difficult to keep up with asynchronously. If lectures were live and recorded instead of just recorded, it would have helped me learn and keep up with the subject matter.

The homework workload fluctuated a bit, which made it harder to predict how many hours it would take in a given week. I think the "build your own model" assignments should be separated into "projects" where students can anticipate spending a handful of hours.

Some materials could have been explained more clear. Especially, there were some lack of explanations about codes in general.

Assignments are very long for 2 labs/2 homeworks a week but I appreciate how the course took the advice and made later assignments shorter.

maybe more prerequisites since the course moves SO fast

Add a project where we can explore our own dataset

The overall structure is very good. Probably more course staff during office hours to reduce long queue

Staff that are better prepared to help with homework. The really challenging housing II homework took me a lot longer than it should have in big part due to course staff repeatedly giving me contradicting information. I kept restarting and then a few TAs later they would have me do it all again and go back to how I had been doing it the time before. I think Als and TAs really need a prep meeting for some of the harder homeworks.

Could have some summary pages to help out – like a cheat sheet created with a summary of all the topics would be very nice.

It was difficult because it was an online semester, but maybe more student-instructor interaction

Send pandas review before the beginning of the course

I think it was a bit too fast–paced, it was difficult to keep up with course material and lectures. I know this is probably less of a case during a regular semester, but perhaps the number of assignments could have been adjusted for a summer semester (6 HWs instead of 12, etc.).

Some of the math behind the models was explained well, but most of it was brushed over or ignored entirely. I suppose those are topics for other courses, and maybe we can only do so much in one semester, but from a math major's perspective, I think we could have been a bit more rigorous in defining the probabilistic assumptions of each model.

I would have walkthroughs of the homeworks released soon after the due date.

have extra credit for turning in homework early, and have an exam clobber policy since exams are hard and have shorter lectures. also more/bigger projects in addition to homework where we can explore and do something unique. Also grade faster and be more organized (don't leak homework solutions as done on homework 10). Be less about ethics and more about ML. Require eecs16b not eecs16a for linalg.

It would help if there were written notes or a textbook that covers the material in written form, since the lectures cover many topics and some are not as detailed. Also the topics should be explained in a bit more detail on how much we should understand in them.

The later homework assignments gave us good opportunities to practice the entire data science process, but maybe an even better way to gain these skills would be a project, either in groups or individually.

Piazza organization of information is messy, but the best it could be. If the website had links to the piazza posts that would be better.

I wish it was live and not pre recorded. It was very hard to engage virtually without live lecture.

Shorter homeworks would be nice and honestly this course was pretty good for being online; I wish we had more organized OH though

The homework questions can be crafted more carefully, try to reduce confusing languages.

This course could be improved by having it run at a bit of a slower pace. Possibly, at least for summer sessions, having lectures and more office hours provided on Fridays could help spread out the information in the course so that there is less cramming at the beginning of the weeks.

Lecture 15 (Modeling in Context: Fairness in Housing Appraisal) felt a little out of place in terms of lecture order. I understand that we work with the data discussed in this lecture for 2 homework assignments, but I thought that the content of this lecture would fit better towards either the beginning or end of the course.

Nothing I can think of.

more review sessions for exams

When I watched lectures from previous semesters, it just felt so hard to pay attention. When Raguriv did the lectures I felt like I understood it a lot clearer. I just wish there were less of past semester lectures.

Nothing specific. I think it's hard to judge since its still a covid semester.

While I do enjoy all the material, it feels a bit overwhelming to handle this many different topics.

I don't think so.

I would probably give a little more time in completing the homework, but given the time constraints of summer I could understand why deadlines were so tight.

I would want this course to be acceible to everyone. Although it is linear math heavy, I think that it deters many people from taking this course. This course can really help individuals progresss in their skils.

Grade homeworks a little faster.

maybe more live lectures:) real stuff to make me feel like i'm actually doing something for a purpose and not wasting away watching youtube!!

I think one thing I would like to see are more catch-up or week review sessions for students who are having trouble.

The grading is so harsh for assignments, even though I got answers I thought were correct, my regrades were denied because I didn't use specific wording and explained it another way.

n

N/A

Bring back the dude from UC San Diego.

N/A

The discussions could be polished a bit more, as 1 hour makes the discussion topics really tight.

Although I definitely could have made a greater effort on my end to make discussions more productive, I felt like that part of the course wasn't as supportive as others. I also attribute this to the pace of the summer session making it difficult for me to always be exactly up to date on lectures at multiple points in the week, so I feel like this is just the unfortunate reality of having a compressed version of the course.

Make it less fast paced

Maybe add more exam style questions during regular homework.

good

I only hoped that we received our scores for the homework before the grade change deadline.

I wish there was more office hours help towards the beginning, but that improved greatly at the end with the switch to gather.town interactive group projects

I think there could be more clarity on what material is essential and what is a bit less critical. There could also be more examples included in lecture.

A lot of content so the course moves really fast. Would like if there could be more time to digest content and material.

spend more lectures on PCA because it went through kind of fast.

Some units are taught too briefly to be of any lasting worth, such as SQL. Other units, like linear regression, do not rely enough on the prerequisities and seem to re—teach the basics, which leaves less time for more advanced concepts.

While I enjoyed the conceptual aspect of this class, I think in all practically it at best teaches you had to a very small amount of features of popular libraries. The skeleton code that we are given helps with speeding up assignments and getting to the meat of the concepts, but you completely miss getting familiar with the tedious, which is a lot of what I believe data science is.

Perhaps a course textbook would help this course, but the slides are just fine as well.

TEACH THE CLASS LIVE. I don't understand why we are paying the same price for tuition for lectures from previous semesters...

I think that I would release the hw a little earlier so students could work ahead of time. Make them due on the same days but allow students more time to work ahead if they want to.

It would be nice to have comprehensive explanations to questions in past exam solutions.

No suggestions at this time.

I would reduce the length of homeworks and also make it more conceptual so it can better prepare us for the exam. The exam content is a lot more difficult than the homework or lab content, and lectures briefly touch on the content within exams that are necessary.

#### What advice would you give to another student who is considering taking this course?

#### Comments

Go over lecture/lab code before doing the HWs.

Go through each lecture notebook after lectures. Practice as many past papers as you can as the pattern of questions remains the same.

Start homeworks earlier and regularly attend officer hours.

It's fast paced so don't get behind, but it's very straightforward and interesting.

watch lecture

Nothing in particular beyond taking advantage of office hours & piazza!

Attend discussion.

Start HWs early. They have a lot of office hours, but in general they are a little understaffed, so go early because you won't always get help.

keep up with the material!

do all the labs, they are so much more useful than you'd think!

Watch the lectures early

Take it

Start the homework early, so if you have questions, you can ask on Piazza and hopefully it gets answered before the homework is due.

It would be a good idea to review linear algebra concepts because it would make it easier to comprehend. However, it is not necessary. It is a course that will most likely teach you most of the necessary concepts on the way.

Have a strong foundation of data methods (like data8 should be fully done and understood for sure)

Stay on top of work

Stay on top of things, don't get behind, and start homework early.

Definitely keep up with the course, it's easy to get behind.

Make sure to keep up with lectures.

Stay up to date on lecture and \*really\* do the homework. You should be fine.

Stay on top of assignments and lectures so you're not overwhelmed by the end!

Stay up to date with the work and watch the lectures and you will be fine.

The second half of the course is much more challenging, definitely keep up

Study previous data courses first

If you take it over the summer don't take other classes as well

Stay on top of the lectures, it's really easy to fall behind and become overwhelmed.

I personally didn't make any contact with peers, so I would encourage future students to reach out and take advantage of the collaborative nature of the course.

make sure to take cs61A before taking data 100

If you are at all interested in the field of data science, I would recommend this practical course for anyone. This class is more oriented towards statistics and data collection than coding and data structures.

dont fall behind and go to office hours when you need help

Be ready to learn new things and experiment. The course is fun.

Be prepared to spend a ton of time on this class, some of the homeworks are really disproportionate to what should be expected in a 4 unit course including labs and lectures.

Start homeworks early and don't be afraid to use office hours.

Don't fall behind — it's hard to catch up!

Make sure that you are keeping yourself accountable and that you are not slacking off. Have a well–organized schedule and try your best to stick to it, or else it will be very difficult to catch up.

Keep up in lecture.

take data8+cs189 instead

I would recommend to watch more of the lectures before the schedule has them up to understand them before the class reaches that topic.

Take all the opportunities you can to study material outside of the curriculum, like common functions in the libraries that we use that we do not learn in class.

Really focus on the homework and practice your skills

Go to office hours! Work with other students

Start the homework early as it can be really long. Stay on top of lectures and watch them ASAP

I would tell another student who is considering taking this course to go ahead and take it; to not let the first 1-2 weeks of instruction

scare them away. The beginning of the course could seem a bit intimidating, especially to someone whose only background in data science is a beginner course such as Data8, so I would tell them that this course proves to actually be incredibly useful as well as interesting if you just power through the potentially confusing beginning.

Stay on top of lecture and start homeworks early.

Definitely take it, amazing and very useful class.

Make sure to watch lectures on time in order to avoid falling behind on material

start assignments early

I would say to do all the labs and watch the walkthoughs even if you understand how to do it. There are some small details that get explained or just a different way that gets shown in these lab walkthoughs.

Complete quick checks

Take it, you will learn a lot and get tons of practice!

Stay on top of lectures, it's easy to fall behind since the homework is a week behind the lectures to give students time to absorb the material.

Take hte pre-reqd

Keep up to date with work and lectures.

don't take it over the summer

I would try and stay on top of lectures. Even though its an asynchronous course, you need the lecture content for the hw.

n

I would definitely recommend them to take this class.

Take Data 8 first.

Do not get behind on the lectures because it is hard to catch up.

Attend lectures and discussions, and work on assignments early as they often vary in length and difficulty.

Don't fall behind! Make sure you understand basic Python and Pandas at the beginning of the course as you'll need it for the rest of the term. If I could take the class again, I would also brush up on calculus and basic linear algebra beforehand so I'd have a better grip on the mathematical foundations of some of the topics we went over, though I don't think it's super integral to success in the class.

don't take it in the summer

Prepare more on stats and linalg knowledge

review linear algebra concepts

good

enjoy it!

very useful course

Keep up with the coursework and go to office hours.

Make sure you know how to code and know some probability. It will help in the long run.

Stay on top of things.

The prerequisites are kind of a joke. But the coding assignments will require a potentially surprising amount of time regardless of how many prerequisites one takes.

If your goal is to just learn a few data science tools, your best bet is to do your own projects rather than take this class as it much more conceptual than you might think.

I would advise them to stay on task, and ask questions.

Stay on top of things, don't let yourself fall behind

Try to critically think and always attempt the problems yourself first!

Stay on top of the work and lectures.

Really think twice about taking the course over the summer and staying committed.

## **DEPARTMENT PROVIDED STUDENT INFORMATION QUESTIONS**

# Items in this section were selected by DATA for inclusion on this evaluation.

On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers, and any other course-related work?

On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers, and any other course-related work?			
Options	Count	Percentage	
3 or fewer	4	1.57%	
4-6	16	6.27%	
7-9	37	14.51%	
10-12	61	23.92%	
13-15	67	26.27%	
16-18	36	14.12%	
More than 18	34	13.33%	
Statistics		Value	
Response Count		255	
Mean		1.00	
Median		1.00	
Standard Deviation		0.00	

## How many class (or section) sessions did you attend?

How many class (or section) sessions did you attend?			
Options	Count	Percentage	
None	8	3.21%	
Fewer than half	18	7.23%	
About half	30	12.05%	
More than half	95	38.15%	
All	98	39.36%	
Statistics		Value	
Response Count		249	
Mean		1.00	
Median		1.00	
Standard Deviation		0.00	

# How satisfied were you with your effort in this course (or section)?

How satisfied were you with your effort in this course (or section)?			
Options	Count	Percentage	
1-Not at all	7	2.79%	
2	4	1.59%	
3	12	4.78%	
4-Somewhat	30	11.95%	
5	60	23.90%	
6	83	33.07%	
7-Very	55	21.91%	
Statistics		Value	
Response Count		251	
Mean		5.39	
Median		6.00	
Standard Deviation		1.40	