IDS 720 Practicing Data Science

Fall 2022 Course Evaluation

This report includes all responses to the survey received in the last 120 days.

Please indicate your level of agreement with the following statements regarding IDS 720.

Scale 1-5, where 1 = strongly disagree and 5 = strongly agree Note: items are sorted by mean (highest to lowest)

Field	Mean	SD	Min	Max	Ν
The course objectives were clear.	4.85	0.36	4.00	5.00	39
This course increased my knowledge in the subject.	4.62	0.58	3.00	5.00	39
The readings were clear and appropriate.	4.62	0.49	4.00	5.00	39
This course increased my interest in the subject.	4.54	0.59	3.00	5.00	39
Grading was fair, appropriate, and consistent.	4.53	0.55	3.00	5.00	38
The assignments were appropriate.	4.51	0.67	2.00	5.00	39
The assignments were appropriate for group work.	4.23	1.00	1.00	5.00	39

Field	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The course objectives were clear.	0%	0%	0%	15%	85%
This course increased my knowledge in the subject.	0%	0%	5%	28%	67%
The readings were clear and appropriate.	0%	0%	0%	38%	62%
This course increased my interest in the subject.	0%	0%	5%	36%	59%
The assignments were appropriate.	0%	3%	3%	36%	59%
Grading was fair, appropriate, and consistent.	0%	0%	3%	42%	55%
The assignments were appropriate for group work.	3%	3%	18%	23%	54%

Please provide any explanations for the responses about IDS 720, especially if you indicated disagree or strongly disagree.

Practical Data Science is a great complementary class to all of the other courses taken in the Fall semester. It is definitely a great way of introducing Python and all of the intricacies that come with it. However, there are parts of the class that make it somewhat less enjoyable at times. The first would be readings. Although the readings are extremely helpful, there are two parts to the readings that make the task displeasing. The first would be that the readings become increasingly long. The second would be the material is riddled with grammatical mistakes that make it very hard to read at times. I believe the complementary videos suggested throughout the semester were great so if there could be additional videos in the curriculum, it may make the learning of material easier. The other aspects that could be thought over are the group assignments and the grading. The group assignments (outside of the final project) are almost like playing Russian Roulette. It would be better if we could just pick our partners throughout the semester. If not, it would be great to do a pairing before the fall break and after the fall break rather than every class. In regards to the grading, it would be nice to understand how to get a 100% (rather than the normal 95%) on class assignments via examples. It allows one to gauge their material and make the necessary changes accordingly. Lastly, it would also be nice to get the answers to the assignments but not the code (and we need to figure out the code (which I think is the primary objective of this course)). While I can see a reason for not providing it, when we go to OH, we are looking for direction on the code and when we know the answer isn't right, we are looking to fix the code rather than just plug in the correct answers (and even if someone did that, since the notebooks need to be submitted, the grader can see the code has errors while the user just input the right answers).

The group assignments were the worst part of this course for several reasons. The pair system is terrible, and more akin to a random lightning strike of fate. The class knows who is and isn't prepared each day, and who just doesn't have a clue what they are doing. We fear getting one of those people as a partner and having to do all the work. The pair system is just penalizing prepared students by making them into free TAs for a few days. Needs to change.

The course assignment was very heavy but at the same time we learned a lot. One thing i did not like about the class is that it was a class where only assignments were given and not teaching,

since everyone in this course came from a different background, sometimes it was really hard to cope up in group work. Also, in this class since there were multiple assignments in which we had to work in pairs, sometimes the person who knew a lot ended up trumping the learning of the person who knew little.

IDS 720 increased my confidence in my data analysis skills. I got to improve my skills in using Github, VSCode and I was happy to learn about Dask. The class was very collaborative.

The assignments were difficult to do in group work and it was difficult and time-consuming to coordinate with different people every week. I believe as a whole the course load per week was a bit too much (2 assignments in pairs mostly, 2 readings, surprise quizzes, and project work). Overall, the course material and teaching was really helpful and I learnt a lot but there were times when I was not able to follow through because a lot of deadlines were on the same day and it was difficult to manage the deliverables every week while being able to do the readings.

The grading rubric of core concepts was not so transparent and varied a lot between exercises

super helpful on improving my knowledge in Python programming

It took us so much time doing in-class assignments which are not in-class at all. Group project shall start earlier, so that we have enough time to make it work. We were struggling in the past two weeks trying to get things together.

Overall is good, but if we can have free ebook source for some required books, it will be better

Nick is great. So does the course.

The course was great. Sometimes the readings or questions weren't clear or easy to understand and readings were tooooo long!! but otherwise awesome.

Assignments were appropriate and very helpful but felt a bit heavy at the end in combination with the project.

The class is great!

Course set clear and consice expectations through the class schedule website and its expectations are consistently met, which I fully appreciate. Great class with very applicable and practical concepts useful in data science.

Please rate your level of agreement with the following statements regarding the professor of IDS 720.

Scale 1-5, where 1 = strongly disagree and 5 = strongly agree Note: items are sorted by mean (highest to lowest)

Field	Mean	SD	Min	Max	Ν
The professor demonstrated knowledge of the subject matter.	4.95	0.22	4.00	5.00	39
The professor was enthusiastic about the course.	4.92	0.27	4.00	5.00	39
The professor encouraged feedback from the class.	4.87	0.33	4.00	5.00	39
The professor showed genuine concern for me.	4.85	0.43	3.00	5.00	39
The professor was effective in communicating course content.	4.82	0.38	4.00	5.00	39
The professor was organized and well prepared.	4.79	0.46	3.00	5.00	39

Field	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The professor demonstrated knowledge of the subject matter.	0%	0%	0%	5%	95%

The professor was enthusiastic about the course.	0%	0%	0%	8%	92%
The professor showed genuine concern for me.	0%	0%	3%	10%	87%
The professor encouraged feedback from the class.	0%	0%	0%	13%	87%
The professor was organized and well prepared.	0%	0%	3%	15%	82%
The professor was effective in communicating course content.	0%	0%	0%	18%	82%

Please provide any explanations for the responses about IDS 720 and the professor for that course, especially if you indicated disagree or strongly disagree.

For the vast majority of the course, things moved very smoothly. However, a couple of times there were very scary auto-grader issues that I don't think should've been being tested in the live environment of a semester.

Nick is one of the best professors we had all semester. He is very organized and knows his material (and other associated areas) very well. Throughout the semester, he checks in with the class to understand how they are handling other courses as well what questions we have. In addition to this, he sends out surveys and asks for feedback on his class, which he reviews, aggregates, presents the results during a following lecture, and then discusses what changes will be made throughout the semester (if any). He is also very enthusiastic about the course and starts off each class adding to the readings/answering questions about the readings.

Described above

N/A

Nick is an excellent professor. He makes the class very interesting. He is very encouraging and extremely approachable. He seems genuinely interested in the course and wants to make all the other students the same. I especially liked the atmosphere in the class - it was fun and casual. It never got intimidating (minus the assignments, but that is the passage of life).

Nick is an amazing professor, who is genuinely dedicated to teaching us better and I learnt a lot from him not only about the course content for this course, but he also helped us with material from other classes.

Nick explains things very well and the course materials are presented in a consistent and logic matter.

the best professor to teach this

Overall is excellent

All good.

Nick is awesome!

The in-class assignments were A LOT more organized and structured than other classes (data eng, nlp). Grading was consistent and it was easy to know how points were calculated (straight forward rubric).

10/10

Only complaint was autograder issues. Other than that, fantastic professor and course

Please indicate your overall rating of IDS 720 components.

Scale 1-5, where 1 = poor and 5 = excellent

Note: items are sorted by mean (highest to lowest)

Field	Mean	SD	Min	Max	Ν
TAs and other teaching supports	4.87	0.34	4.00	5.00	38
Professor	4.79	0.41	4.00	5.00	38
Exams	4.45	0.84	3.00	5.00	22
My effort as a student	4.41	0.79	2.00	5.00	37
Overall course	4.39	0.78	2.00	5.00	38
Texts / Readings	4.34	0.87	2.00	5.00	38
Assignments	4.24	0.87	1.00	5.00	38
Group Work	3.54	1.20	1.00	5.00	37

Field	Poor	Fair	Good	Very Good	Excellent
TAs and other teaching supports	0%	0%	0%	13%	87%
Professor	0%	0%	0%	21%	79%
Exams	0%	0%	23%	9%	68%
Texts / Readings	0%	3%	18%	21%	58%
My effort as a student	0%	3%	11%	30%	57%
Overall course	0%	3%	11%	32%	55%
Assignments	3%	0%	13%	39%	45%
Group Work	5%	16%	24%	27%	27%

Please provide any explanations for the responses above, especially if you indicated poor or fair.

Outside of the recommendations made above around the readings and group work, I really believe this course is a great course. In addition to Nick, the TAs for this courses were excellent, easy to talk to to discuss anything without getting judged (for even the stupidest questions/mistakes). I also invested a lot of time into this courses as I really want to learn Python (having never been exposed to it before).

The group work methodology of the group work structure is a mystery. If the teams were going to be the same as already established, why did we wait until a week before the strategy was due to tell people about them? Why did we even wait to the middle of the semester in the first place? There was not adequate time to team build, especially considering that teams were cross-cultural in almost every instance. This led to massive problems down the road, and a total lack of accountability for group members who contributed nothing.

Above

The course begins as for someone who need to be better acquainted with python and sql but ends up being the toughest of all the coursework. When nearing the end of the semester, there are too many assignments and projects to focus at, and two assignments every week makes it very hard to actually learn. People just end up doing assignments for the sake of it without learning much(only during the end) So maybe they can be relieved of the load of assignment work. A better approach will be to have more quizzes so that they come prepared with the reading and lesser assignments during the end.

The readings were generally very good, however sometimes they were super long and overlapped with days where there were also assignments due for the same class, causing less efficient reading. maybe assignments and readings could be designed better.

I honestly don't know how I would rate myself as a student. But I surely loved the class. The TAs - Raza and Marlyne, deserve a special mention. They were always ready to help me out and were very knowledgeable. I also had the good luck of knowing many of my amazing classmates and work with them. I think the randomization of pairs is a very good thing. Reduces bias and favoritism and promotes inclusion.

I did not enjoy group work as it made it more time consuming to complete the assignments.

there are two kinds of group work, first the inclass that ends up as homework, sometimes we just end up doing it by ourself or even not doing it at all because the other person either doing the opposite. With the current load as a first year, I think doing it alone makes more sense in the end. As for the end of semester group project, I think it's quite complicated in terms of understanding the objective, but that probably just because the case of opioid is not really a global case so I'm just new to this case.

If the instructions of our assignments can be clearer (eg: show which columns/rows/variable names), it will be better for us to understand what do we need to analyze

All good.

The opioids research teams should have been announced at the beginning of the semester. The pairs should have been announced at the beginning of the week as well as have pairs with our opioids team members. A lot of the time, I felt like a piece in a social experiment.

Some of the textbook texts were not as helpful as the other readings/videos

Raza and Marlyne were EXCELLENT

Pair work was a bit tiring at times and I think I would've learned more doing some of these assignments alone.

Hope to have more individual work

Practicing Data Science - On average, how many hours per week did you spend on IDS 720 out of class?



Would you recommend this course to other students?



Based on your experience in IDS 720, how much do you feel that you have improved in the following areas?

Scale 1-4, where 1 = not at all and 5 = a great deal Note: items are sorted by mean (highest to lowest)

Field	Mean	SD	Min	Max	Ν
Technical skills (e.g., coding in Python)	3.82	0.50	2.00	4.00	39
Collaborative problem solving	3.62	0.58	2.00	4.00	39
Working in teams of people with a variety of skills and backgrounds	3.54	0.63	2.00	4.00	39
Applying technical, mathematical, statistical, and domain knowledge to real analysis problems	3.51	0.64	2.00	4.00	39
Giving and receiving feedback	3.47	0.64	2.00	4.00	38
Domain knowledge (e.g., economics, medical studies, engineering)	3.18	0.81	2.00	4.00	39
Mathematical / statistical skills and knowledge	3.11	0.77	2.00	4.00	36

Field	Not at all	A little	Some	A great deal
Technical skills (e.g., coding in Python)	0%	5%	8%	87%
Collaborative problem solving	0%	5%	28%	67%
Working in teams of people with a variety of skills and backgrounds	0%	8%	31%	62%
Applying technical, mathematical, statistical, and domain knowledge to real analysis problems	0%	8%	33%	59%
Giving and receiving feedback	0%	8%	37%	55%
Domain knowledge (e.g., economics, medical studies, engineering)	0%	26%	31%	44%
Mathematical / statistical skills and knowledge	0%	25%	39%	36%

What was the most important thing you learned or most important area of growth for you this semester? Why was this important to you?

The most important thing I learned the entire semester were the fundamentals of Python. I was able to not only learn this material through readings, but the assignments/in-class exercises were excellent reinforcement material. The in-class exercises and project were also associated to analysis of real-world situations. I think it is critical for this aspect of the course because it definitely allows us to take this material outside of the classroom and from a theoretical setting to an actual applicable setting.

I thought this class would teach me much more about python programming. I felt disappointed in this area. I learned a fair amount about computers, but little about programming. The threshold to be recommended for this class is probably too loose, and it could use some tweaking. Also, a bunch of this class material should be the BootCamp, not that emacs thing we did.

I learned python more

Python and Statistics. This is important to me as it will help me gear up for the course on ML next semester as that is something I am interested in.

I definitely improved on my understanding of Python and python packages. Nick provided a really good overview on programming and computer and programming languages interact with each other. I found it really useful coming from a non-CS background. I have taken programming classes before where professors expect you to dive into the subject matter without really understanding the content well. However, Nick's approach was different and more useful. He was willing to provide a more high level overview of all the programming questions and those knowledge were really useful.

Also, there were days where Nick would open up a pole for us to ask any questions related to other MIDS courses, and I think that was really helpful. Both the TAs and Nick did a great job at explaining contents that I felt confused after those classes(for instance, Docker, Docker image and NLP understanding)

I gained confidence in my coding and analysis skills. Since I intend to get jobs related to the field of Data Analysis and Data Science, this is very important to me.

Learning python and technical terms, improving skills for internship applications

I get to expose to a variety of needed skills a data scientist should be equipped with, such as git, big data wrangling skills.

I learnt working with data at a large scale with all sorts of problems that came with that

python for data analysis

I am now familiar with how to deal with data using panda, numpy, and so on in Python.

I learned quite a lot about coding, which I believe it's a very useful skill in working for any industry. I also learned to communicate with other people and collaborated on projects a little bit (though not always). Both technical and communication skills are important for me to increase my competitiveness in DS jobs.

learning python and its practical use, working with big data.

Real life datasets can be a mess.

increase my python coding skills under the real dataset and self organize the solving-problem pathway.

I learned how to use pandas and NumPy to filter/clean/merge data frame

The application of technical skills, and the useful data science tools in future work. This helps me improve my understanding of data science, and also helps me find whether I would like to do things related in this area in the future. The skills and tools do benefit to my major research in economics and data analysis.

Refresh my knowledge about python and as a data scientist.

Everything introductory to practical data science. Working on the project not only got me understanding diff-diff but also made me learn github so quick!!!

How much I still want to learn. I'm still hungry to learn so much more. I want to work on big research projects now because Nick gave us a type of demo experience.

Dealing with Big Data

The ability to practice the field of data science in a meaningful way to inform decision makers in various sectors

learning GitHub and how to deal with big data, when I did academic research before there were always collaboration problems using Dropbox and I had some issues with large data sets and I had no idea how to solve them

How to deal with raw and big data more efficiently by using python and how to use github for teamwork purpose

I think the most important thing I learned was how to wrangle data and how persistence is key for data wrangling.

I learned how to start a data science project from data wrangling to data visualization. It will be helpful for me to move forward with my career and beyond.

This class did a great job of teaching us the data science tools we needed to deal with real world data while putting it in a social science scope so you had to interpret it. Definetly not something I got a lot of during undergrad where you were just taught how to code and not really how to interpret results.

Basic python skills.

pandas and numpy

groupby and merge

Skills applicable to internships/ future jobs

pandas and political science lol

What aspect of the class most critically contributed to your learning?

Readings were substantive enough to give me a very solid understanding, while not being so long and timeconsuming that I felt the need to skim/half-ass it. When we learn about especially important concepts, like vectorization for example, it sometimes comes up in future readings or assignments as well.

The aspect of the class that most critically contributed to my learning were the in-class assignments. While some were at times difficult, they definitely made for great reinforcement tools of the material.

The instructor. Nick is excellent.

Above

Assignments again!!

Getting an overall understanding of how programming works behind the scene and learning about various Python packages.

The readings surely helped me a great deal. Plus the support of Nick, Raza and Marlyne.

The readings were really useful and it helped me learn a lot of new things. Since, it is all uploaded on a website, it is good that I can always go back to it. Also, it was really helpful that the Nick addressed questions we had from other classes.

weekly assignments

the exercises and Marlyne's office hours were very helpful

readings and in-class exercise

I love the exercises in the class, they are super useful and give perfect steps-by-steps instructions for practicing what we learned from class.

The assignment is helpful in clarifying concepts and building up my coding skills.

the reading is very vast and detailed, the resource linked in the reading really help me understand deeply about the subject

Readings assigned prior to each class

readings

I learned new skills to analyze data via new library such as Dask and Spark

The explanation in class and the pre-course readings.

Readings and In class exercises.

The weekly assignments and collaborating, but sometimes got toooo hectic.

Doing work in class with the TAs and Nick, hands-on learning. No zoom.

Assignments

Hads on exercises

exercises

The in-class exercise every week which enable me to practise

The aspect that was most critical to my learning was the time in class we had to practice the skills outlined in the readings.

I liked the teamwork component of this course so I can also learn from my partner.

The assignments were great.

Working in pairs in class.

pair exercise

learn how to deal with dataframe and get a sense of big data

Assignments, working in pairs was great.

Readings and Exercises. I liked the occasional Q&A sessions.

assignments

What could be improved in this class?

I think the project was a little bit of a mess. I understand we were meant to struggle with some things to learn, but it seemed difficult to get feedback on very basic logistical things. It seemed like, even after getting the rough draft feedback back, we were told things were wrong but given almost nothing further to work with, which was quite a stressful experience to try to decode. I will add, however, that this was the only real negative experience for me in this class.

As mentioned, there are two areas that can be improved: 1) the readings (in terms of correcting for the mistakes throughout the readings as well as providing more visual material rather than solely just reading - similar to the Dask links) and 2) the in-class group assignment as I think there are too many assignments done in pairs (especially some that can be done sole (i.e. Dask)).

The methods are questionable. It feels like a big social science experiment at times with the group and pair work. Not enjoyable, at all. And the reason I would think twice before recommending this course to others outside the program.

Above

Lesser assignments during the end of the semester. It becomes stressful and unproductive specially for people with non background.

The course has been well designed catering to most student needs and I don't think there's much that needs to be improved, besides maybe reducing a few assignments and covering one or two additional topics. Nick's explanations definitely helped improve my understanding in other course contents.

Grading is fair, but if the grading rubric could be released before the assignments, we would make less mistakes in the assignments.

I think the organisation of the deadlines and assignments can be improved.

It would be good if group project can start ealier in order to not confront with other courses group project and have more time to plan for data wrangling.

I think the reading material is a boy vague some times and had typos.

less in-class assignments as they are very time consuming

Maybe balancing the amount of group works and individual works would be better. Sometimes too many group works can make exercises harder.

Maybe have more quizzes to help us reflect on important content we are missing.

probably the group project, also the timing of exercise so it doesn't end up to be a homework. Also, I think it will be helpful if we get access to a recording from the class session, because there are some powerful insight from the Q&A with nick.

Assignment Arrangement and Project Starting Days

I think it covered a lot in class so maybe we will not do well in every aspect

I hope that we can have clearer instructions of homework, and more personal work assignments.

Nothing.

Readings were tooo much to take in sometimes

The opioids research teams should have been announced at the beginning of the semester. The pairs should have been announced at the beginning of the week as well as have pairs with our opioids team members. A lot of the time, I felt like a piece in a social experiment. As the pair assignments become more difficult, it is good to strategize ahead of time.

Understanding how to deal with installing packages and dealing with environments. Often the hardest part of getting assignments done was ensuring packages were properly installed and working.

I like the teaching methodology and love to be like as it is

schedule is communicated at the beginning of the semester, no unexpected changes one week or shorter ahead

More taught contents instead of self reading

A little less pair work, especially towards the end of the semester when we had so much group work across all classes.

Everything is great!

less reading, more lecture

Autograder! If it worked well it would have been less of a headache.

I wish the exercises were designed to be finished in class. Towards the end, the assignments were taking a great deal of our time. I suggest we either dedicate more time for exercises in class, or we lessen the exercise load.

I don't like partners but that's important in data science

reduce course load (a lot)

Is there anything else you would like the professor of IDS 720 to know?

Assignments are helpful - they make you work, but there was never a sense that I was doing "busy work". Everything seemed to have a purpose and help was always available (although the willingness to help seemed to wane towards the end of the semester).

While this is a great course, I think there should be a better assessment given to students to see if this class should be taken by students. The assessment taken at the end of the summer was an ok measure, but having seen and hearing students throughout the semester, some really believed that they wished they didn't take the course because they didn't take as much from it as was initially promised.

We should as well be learning in class

The structure of the class is on point. Maybe dask and parallel computing can be taught before the project so that we can actually apply them in the project.

I am not sure if this applies, but maybe gear the course towards a few coding or data science online assessment problems that frequently appear.

I want to express my gratitude - Thank You So Much Nick.

This is an organized and well-structured course! I learn many useful skills from the course, thanks Nick!!

they did an amazing job

I wish a coursera version of this class can be available for MISDters during the summer in place of the summer review python portion. It would help students with less technical background to get caught up on speed.

I really enjoy this course and the exercises perfectly help me to improve.

Maybe recording more videos and asking us to watch before class (similar to Michael's class).

great material and teaching style!

I think flipped class is good, but I think sometimes professor can provide some supplementary hands-on teaching videos, such as how to write code in important parts. In fact, there are so many things in the reading that I think we need spend much time to digest it, but we are not sure if we really master the knowledge.

I also prefer that our final project can be graded based on personal performance instead of as a group of whole numbers, it will push each individual to contribute work and join team assignments actively.

Nick is dope!!!!

IT WAS AWESOME!

The opioids research teams should have been announced at the beginning of the semester. The pairs should have been announced at the beginning of the week as well as have pairs with our opioids team members. A lot of the time, I felt like a piece in a social experiment. As the pair assignments become more difficult, it is good to strategize ahead of time.

The class glosses over a number of the underlying technical aspects of python and computer software, to focus on software for data science, but this creates large gaps in understanding how to deal with environments, use effective data structures in vanilla python, and implement strategies of non-tabular data.

Thank you for the consistent high energy in handling the course throughout the semester.

loved the class and your enthusiasm. Thanks!

Could record some pre-class videos instead of readings

Thank you!!!!!

Loved your class, look forward to taking your class next semester.

My favourite class this semester!

Thank you Nick! You are a really wonderful professor!

Excellent teaching skills and the readings were very helpful!

N/A

Is there anything else you would like the MIDS program to know about this course?

I truly believe mini-versions of this course and the stats course should be the summer bootcamp (rather than 3 weeks of learning Emacs...). These two classes are the fundamental to our time here at MIDS and it is unfortunate we, in my opinion, start in August and waste 3 great weeks of time to learn some concepts/material without the stress of the semester actually starting. I believe, had these courses been at provided at the beginning, courses like NLP would still have been a struggle but less so as we would have had a better foundation of Python (rather than learning many aspects of Python that can be used at the same time as NLP).

I think a fair amount of the early portion of this material should be in the BootCamp. It would allow a little more time in the later part of the course to spread things out. Additionally, the way teams are handled in this program needs improvement across the board. This class brought out a lot of resentment in the cohort, and it was very avoidable. Introduce teams earlier. Force team-building exercises. And use the workshop for things like: "how to give feedback to team members" instead of whatever that confident speaking workshop was. And then, if we did some of those things, we could do pair work in this class with the members of our groups so we could get to know them. Instead of waiting on them to get back from the club or escape room to finish their part of a project. Of the classes this fall, this was the biggest missed opportunity to me.

Data engineering actually is the class where we have to Implement the knowledge that we are taught here so both can go in sync with each other For that we need to revamp the course for both. For example, GitHub readings before can help Data engineering and PDS go hand in hand.

N/A

No, I think I have mentioned it all.

This is the one course that is not in the mandatory courses in the first semester. I think in addition to the course plus all the other core courses, the workload is not trivial. Probably it is a good idea to let students expose to the materials during the summer boot camp, and so we have more time when the semester begins;)

For MIDS students, offer Nick's class in coursera during the summer and then either offer the class again in fall or move machine learning to fall semester

No, overall good!

I think this class should be collaborated with data engineering, because we can possibly take advantage of cloud when storing big data and get hands-on experience of data engineering + data analysis in the cloud. It should be mutualism relationship and both course would really complement each other.

No

You have all done a great job, and I really want to see this course improve a lot, it's the cornerstone foundation of the MIDS program

More coordination should be done between the courses. Dask is introduced early in Data Engineering and touched upon with Spark, but the context is difficult to understand at this point.

None

The class is great!!!

Best course this semester

N/A