Northwestern

Individual Report for STAT_301-1_21: Data Science 1 (Kathleen Coburn)

Project Title: **Course and Teacher Evaluations CTEC Fall 2020**

Courses Audience: **69**
Responses Received: **60**
Response Ratio: **87.0%**

Report Comments

For more information about CTEC Guidelines, please visit our website: https://www.northwestern.edu/ctec/guidelines

Creation Date: **Wednesday, December 16, 2020**

Northwestern University

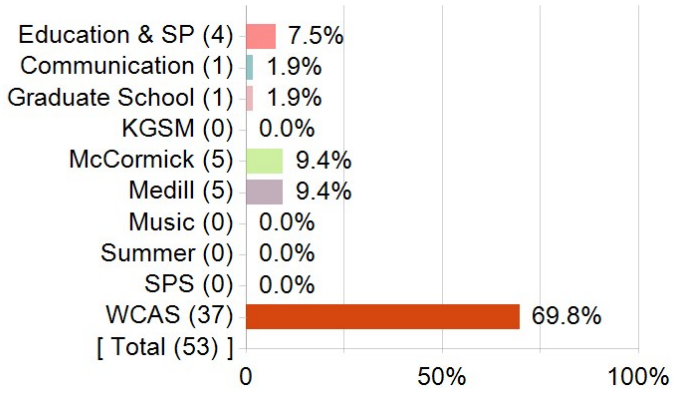
Course Evaluations

Instructor	Course
Kathleen Coburn	**STAT_301-1_21: Data Science 1**

DEMOGRAPHICS

Your School

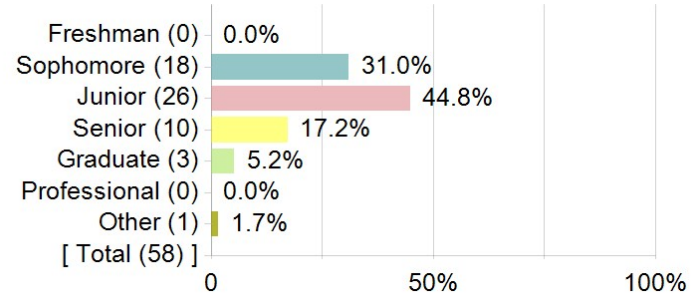
1. Your School



Options	Count	Percentage
Education & SP	4	7.5%
Communication	1	1.9%
Graduate School	1	1.9%
KGSM	0	0.0%
McCormick	5	9.4%
Medill	5	9.4%
Music	0	0.0%
Summer	0	0.0%
SPS	0	0.0%
WCAS	37	69.8%

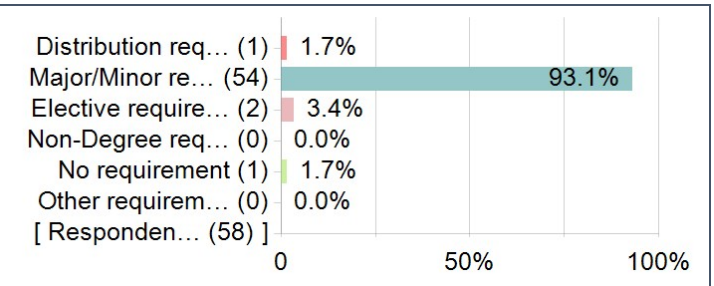
Your Class

1. Your Class



Options	Count	Percentage
Freshman	0	0.0%
Sophomore	18	31.0%
Junior	26	44.8%
Senior	10	17.2%
Graduate	3	5.2%
Professional	0	0.0%
Other	1	1.7%

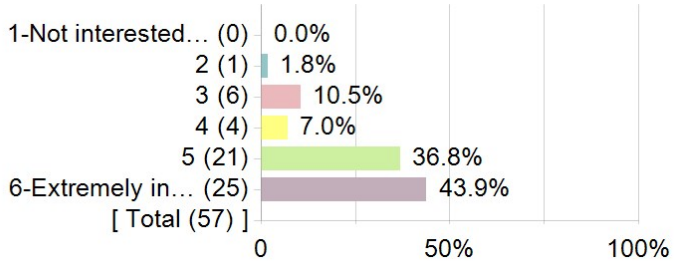
What is your reason for taking the course? (mark all that apply)



Options	Count	Percentage
Distribution requirement	1	1.7%
Major/Minor requirement	54	93.1%
Elective requirement	2	3.4%
Non-Degree requirement	0	0.0%
No requirement	1	1.7%
Other requirement	0	0.0%
Respondent(s)	58	

What was your Interest in this subject before taking the course?

1. What was your interest in this subject before taking the course?

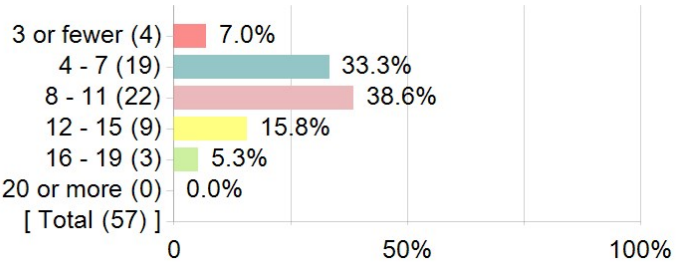


Options	Count	Percentage
1-Not interested at all	0	0.0%
2	1	1.8%
3	6	10.5%
4	4	7.0%
5	21	36.8%
6-Extremely interested	25	43.9%

TIME-SURVEY QUESTION

Estimate the average number of hours per week you spent on this course outside of class and lab time.

1. Estimate the average number of hours per week you spent on this course outside of class and lab time.

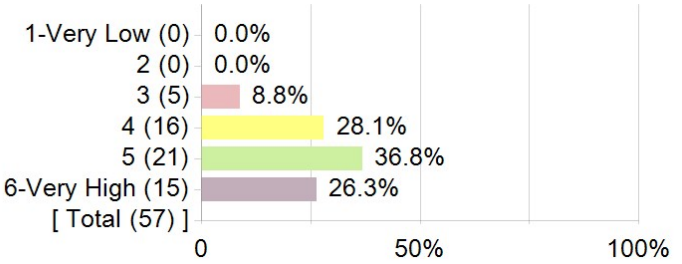


Options	Count	Percentage
3 or fewer	4	7.0%
4 - 7	19	33.3%
8 - 11	22	38.6%
12 - 15	9	15.8%
16 - 19	3	5.3%
20 or more	0	0.0%

COURSE QUESTIONS

Provide an overall rating of the course.

1. Provide an overall rating of the course.

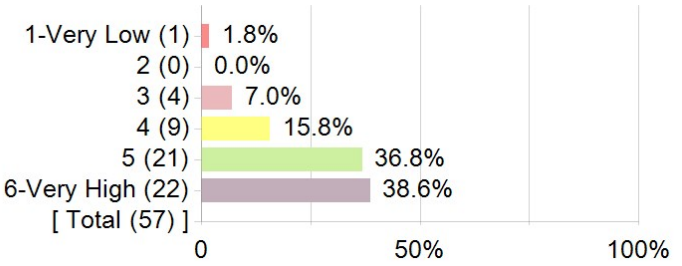


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	5	8.8%
4	4	16	28.1%
5	5	21	36.8%
6-Very High	6	15	26.3%

Statistics	Value
Response Count	57
Mean	4.81
Median	5.00
Standard Deviation	0.93

Estimate how much you learned in the course.

1. Estimate how much you learned in the course.

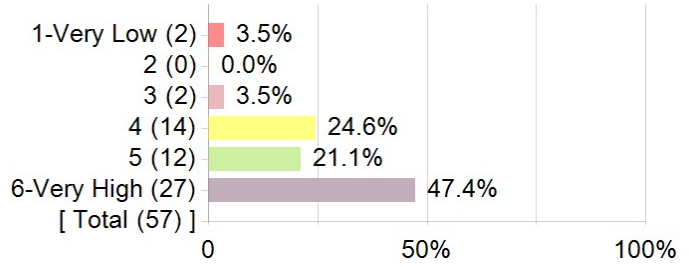


Options	Score	Count	Percentage
1-Very Low	1	1	1.8%
2	2	0	0.0%
3	3	4	7.0%
4	4	9	15.8%
5	5	21	36.8%
6-Very High	6	22	38.6%

Statistics	Value
Response Count	57
Mean	5.02
Median	5.00
Standard Deviation	1.06

Rate the effectiveness of the course in challenging you intellectually.

1. Rate the effectiveness of the course in challenging you intellectually.

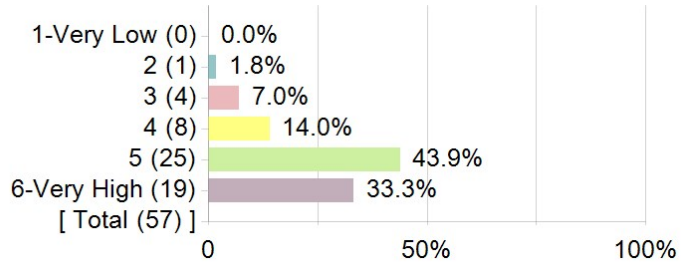


Options	Score	Count	Percentage
1-Very Low	1	2	3.5%
2	2	0	0.0%
3	3	2	3.5%
4	4	14	24.6%
5	5	12	21.1%
6-Very High	6	27	47.4%

Statistics	Value
Response Count	57
Mean	5.02
Median	5.00
Standard Deviation	1.20

Rate the instructional materials (texts, audiovisual materials, etc.) used in this course.

1. Rate the instructional materials (texts, audiovisual materials, etc.) used in this course.

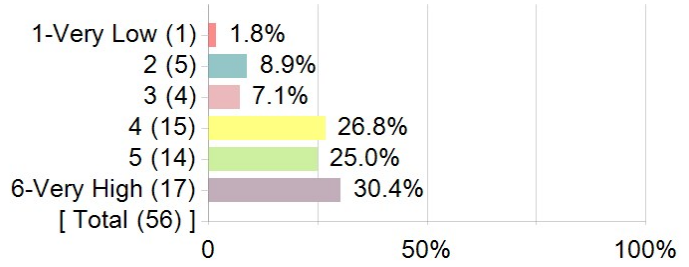


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	1	1.8%
3	3	4	7.0%
4	4	8	14.0%
5	5	25	43.9%
6-Very High	6	19	33.3%

Statistics	Value
Response Count	57
Mean	5.00
Median	5.00
Standard Deviation	0.96

Rate how well the organization of the course facilitated your learning.

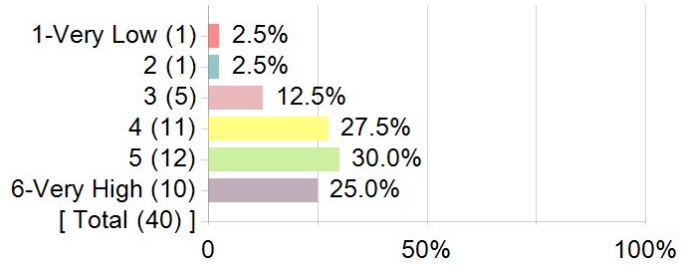
1. Rate how well the organization of the course facilitated your learning.



Options	Score	Count	Percentage
1-Very Low	1	1	1.8%
2	2	5	8.9%
3	3	4	7.1%
4	4	15	26.8%
5	5	14	25.0%
6-Very High	6	17	30.4%
Statistics			**Value**
Response Count			56
Mean			4.55
Median			5.00
Standard Deviation			1.33

Rate lab/discussion (if present) section's usefulness in learning and applying course material.

1. Rate lab/discussion (if present) section's usefulness in learning and applying course material.

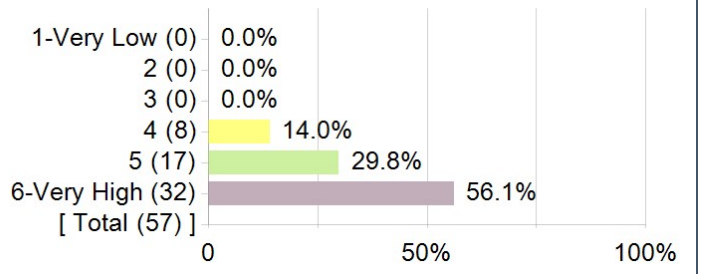


Options	Score	Count	Percentage
1-Very Low	1	1	2.5%
2	2	1	2.5%
3	3	5	12.5%
4	4	11	27.5%
5	5	12	30.0%
6-Very High	6	10	25.0%
Statistics			**Value**
Response Count			40
Mean			4.55
Median			5.00
Standard Deviation			1.22

INSTRUCTOR QUESTIONS

Provide an overall rating of the instruction.

1. Provide an overall rating of the instruction.

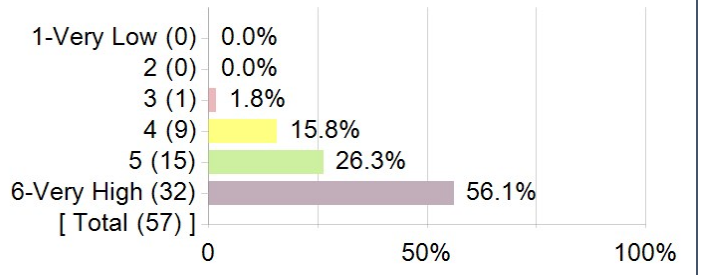


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	8	14.0%
5	5	17	29.8%
6-Very High	6	32	56.1%

Statistics	Value
Response Count	57
Mean	5.42
Median	6.00
Standard Deviation	0.73

Rate the effectiveness of the instructor in stimulating your interest in the subject.

1. Rate the effectiveness of the instructor in stimulating your interest in the subject.

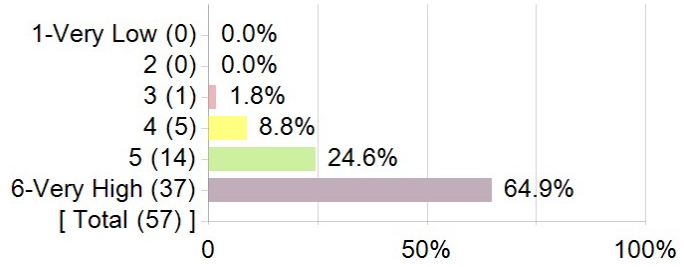


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	1	1.8%
4	4	9	15.8%
5	5	15	26.3%
6-Very High	6	32	56.1%

Statistics	Value
Response Count	57
Mean	5.37
Median	6.00
Standard Deviation	0.82

Rate how well prepared the instructor was for the class.

1. Rate how well prepared the instructor was for the class.

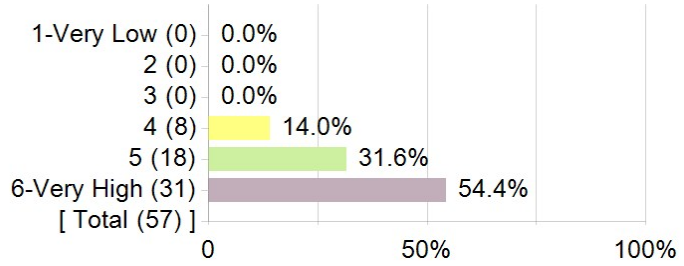


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	1	1.8%
4	4	5	8.8%
5	5	14	24.6%
6-Very High	6	37	64.9%

Statistics	Value
Response Count	57
Mean	5.53
Median	6.00
Standard Deviation	0.73

Rate the effectiveness with which the instructor communicated course content and ideas.

1. Rate the effectiveness with which the instructor communicated course content and ideas.

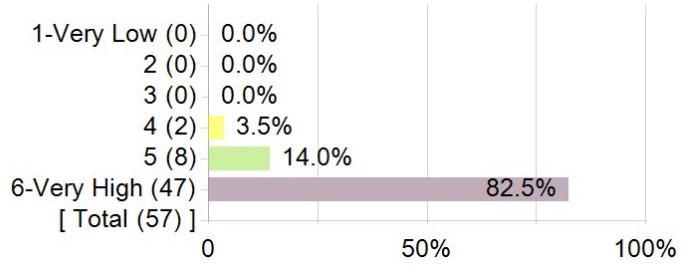


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	8	14.0%
5	5	18	31.6%
6-Very High	6	31	54.4%

Statistics	Value
Response Count	57
Mean	5.40
Median	6.00
Standard Deviation	0.73

Rate the instructor's enthusiasm in teaching this class.

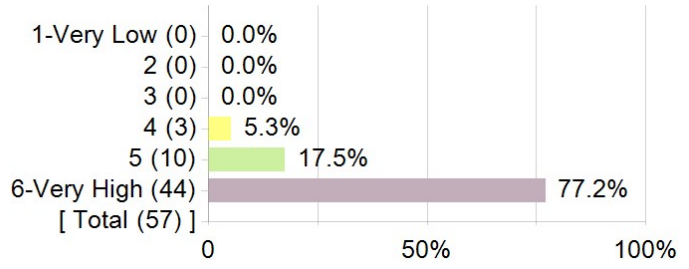
1. Rate the instructor's enthusiasm in teaching this class.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	2	3.5%
5	5	8	14.0%
6-Very High	6	47	82.5%
Statistics			Value
Response Count			57
Mean			5.79
Median			6.00
Standard Deviation			0.49

Rate how well the instructor answered students' questions inside and outside the classroom.

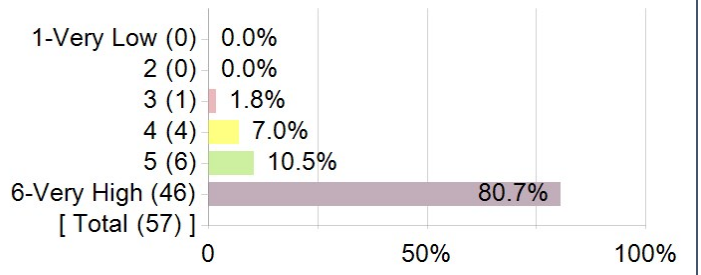
1. Rate how well the instructor answered students' questions inside and outside the classroom.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	0	0.0%
4	4	3	5.3%
5	5	10	17.5%
6-Very High	6	44	77.2%
Statistics			Value
Response Count			57
Mean			5.72
Median			6.00
Standard Deviation			0.56

Rate how well the instructor displayed interest in students' learning and needs.

1. Rate how well the instructor displayed interest in students' learning and needs.

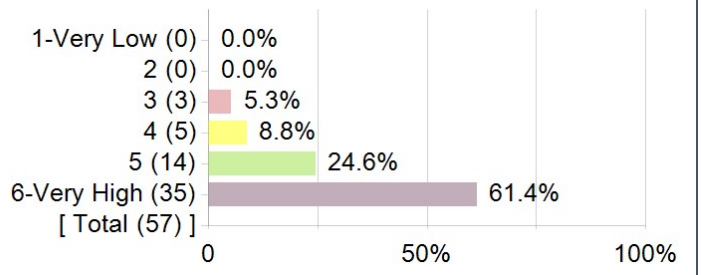


Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	1	1.8%
4	4	4	7.0%
5	5	6	10.5%
6-Very High	6	46	80.7%

Statistics	Value
Response Count	57
Mean	5.70
Median	6.00
Standard Deviation	0.68

The instructor was well organized for each class.

1. The instructor was well organized for each class.



Options	Score	Count	Percentage
1-Very Low	1	0	0.0%
2	2	0	0.0%
3	3	3	5.3%
4	4	5	8.8%
5	5	14	24.6%
6-Very High	6	35	61.4%

Statistics	Value
Response Count	57
Mean	5.42
Median	6.00
Standard Deviation	0.86

OPEN-ENDED QUESTIONS

Did the course help you learn? Why or why not?

Comments
Not really. I have already known most of the content, so it's not the problem with the class.
yes it did because the class was very thorough
I liked the course and learned a lot. I would prefer more instruction and lecture type guidance during class. The flipped classroom setup didn't seem as helpful to me as I tended to work through problems alone..
I'm not always the biggest fan of a flipped classroom model of teaching, and there were definitely a few concepts that I think might've made more sense/been easier to learn if we had more instruction time versus just reading about it in the textbook. However, overall, I really did learn a lot in this course and feel like I already have a good grasp of using R. And the labs were always really helpful and were a good place to practice the skills and concepts covered in the readings.
The pace was extremely fast and I did not like the style of the instruction.
I learned a lot– looking at what I've been able to do with my Final Project makes me feel proud considering I knew literally nothing about r before I took the course.
I was not a fan of the breakout rooms. My breakout room was always silent, and I would have much rather had the time to work on my labs or other school work during the time. If I had questions, I would post on campuswire or go to office hours.
This course did a pretty good job. I feel like the lectures were very helpful with gauging out our understanding and for allowing us to ask questions. However, sometimes the readings and labs were a bit tricky.
Yes, I liked the flipped classroom
The course was mainly focused on learning R. I did not feel that I really had a chance to develop an understanding of data science in general. The homework problems at times were a little repetitive.
Yes – the labs helped reinforce concepts even if the readings didn't.
Yes, I feel like I can do so much in R now
Yes, I learned the basics of R.
It provides me opportunities to learn the material myself.
Yes, I learned R for the first time and got do a cool EDA!
Yes. The weekly labs were well–designed to stimulate continuous learning.
The flipped classroom style did help me learn. The Campuswire platform was also incredibly useful for communicating and learning from classmates.
actual lecture part of lecture was great and helpful but breakout rooms were truly very useless and for the most part made it easier for me to just turn off my video/audio for the entire class and not pay attention what was most helpful were the reading quizzes and problem set working throughs during class
Yes, there was a lot of content and the professor really cared about our learning. However, it was challenging to learn with the flipped classroom structure because the textbook was difficult and also not always clear, and we did not have much space to go over that together since we had to self–teach everything. The class also went too fast and I could not keep up enough to fully learn but I'd rather just have to skip over and move on.
I learned a lot of R skills
Yes – combination of reading, labs, and attending office hours all helped me learn.
I learned a TON in this class, and I already came in with a good amount of statistics / R background. Hugely helpful. The textbook and assignments are excellent, which makes all the time they require worth it.
The course was alright. I didn't learn much in the latter part though because the labs became really challenging and went beyond the level of the book.
yes, I needed to learn R and this has helped me by forcing me to use R
Yes! I will say that with R there's a lot you have to figure out on your own, I think. But the course was definitely very helpful.
very helpful for learning R skills; not much data science modeling learning yet
Considering it was mostly teaching myself, I guess so.

Please summarize your reaction to this course focusing on the aspects that were most important to you.

Comments

Comments
just what you would expect out of a 3–quarter sequence to learn R. very very very time intensive class if you don't have any background in R and aren't entirely confident with your coding abilities. labs take a long time so get started on them early instead of saving them for the weekend. final project is an independent exploratory data analysis that was definitely daunting. i ended up pushing it off until the end of the quarter but was able to complete it within a week (though very stressfully, i recommend starting a lot earlier). final project actually helped me to be a lot more confident in R than i was throughout the quarter
A class on tidyverse with so many moving parts for grades. I wish the class was more flipped (i.e. make more of the lecture/Q&A time optional with breakout rooms open), especially since there are reading checks to make sure that we have all read the chapter. Reiteration can be helpful, but I believe the hands–on work serves that purpose better.
I really like this class and I think its really helpful. Both of the professors and the TA's are really helpful and want to see everyone succeed. It can be hard at times because there are a lot of labs but I liked this class a lot.
This class teaches you the tidyverse in R. But it doesn’t teach statistics.
this class is pretty challenging but it is manageable. also interesting
This was such an awesome class!! It really is an comprehensive introduction to using R that will help you feel confident in using this coding language and in exploring and analyzing data. Also the whole instructional team is so supportive and helpful, and it really feels more like entering a data science community rather than just taking a course.
It was a lot of work and the questions for the lab were extremely difficult and weren't discussed very clearly.
Office hours were super helpful and so was having time in class to ask questions.
Interesting class. I learned a lot about R. The amount of work is fair in order for you to learn, and even then it's not that much work.
This course was a good introduction to R and the tidyverse. I thought the lectures were good and the pace of learning wasn't too fast. However, some of the textbook chapters and corresponding labs were a bit difficult, and I would have appreciated less of a flipped classroom structure with more in–class teaching of the new material.
Great class, I love the liberal aspect of it: it's up to you to learn and build up skills to show off in your final project and all the material to learn is online in a book, teachers and TAs are there to help you as you go. You can cheat your way through the year but you'll pay at the end.
Great way to learn a challenging course
This class was super interesting. It's a flipped classroom style, which scared me at first, but it really helped me learn. Both Coburn and Kuyper and all the TAs were super helpful answering questions and I felt like I learned a lot.
This class really felt like a course that was solely dedicated to learning R. R is a useful language and does require some time getting used to. I would have liked to see more creative problems with data cleaning and EDA. The problems provided from the textbook were sometimes boring and repetitive. The professors are pretty lenient when it comes to submission deadlines, and as long as you complete all of the assignments you will most likely end up with an A in the class. The help channel on campus wire was very active, and so it was nice to get what were almost instantaneous responses to questions.
The labs can be a lot of work, but Professor Coburn is super chill and will help break down concepts and questions really well.
I really liked the structure of the course, in terms of the labs and getting to do them every week and then build on lessons from there. I'm able to work on my own data sets for fun.
Obviously required for the Data Sci Major. This class teaches you the basics of tidyverse R, and does a pretty successful job at doing so. It's definitely a weird start, I feel like the first lab was really hard because we really didn't know anything at that point in time. But it's not bad, just do your work and you'll do fine.
STAT 301–1 is a class that can help you learn how to code with R, but you didn't learn any statistical method in this class. The format of this class is flipped classroom which means you basically teach yourself about the material and can ask some questions with your group or faculties. Prof. Coburn is not a teacher with great organization since she basically just repeats the book content again during class, but she is friendly and easy to go along.
This class is fine. Good intro to using R and the final project is just coding with a dataset you choose, so you can do something that actually interests you
I really liked this class. Professor Coburn is amazing and very patient in answering questions, and the class is structured so you are more focused on learning than on grades.
On the one hand, the course requires consistent and significant weekly effort. On the other, what you learn and what grade you get are strongly correlated with how much effort you put in. No exams.
This class is GREAT. Professor Coburn is kind and understanding. She is incredibly knowledgeable about the subject matter, and was open and willing to answer questions. This course can be incredibly difficult if you've never coded before, but put in the work and it can be done.
really interesting content and professor coburn was so genuine and wholesome, really made going to lecture easier but the second half of lecture where we go into breakout rooms was extremely useless. everyone just kept their audio and visual off in the breakout rooms and were probably napping.

Comments
really feel like i learned a lot though overall
This class is a lot of work, but you learn a lot. Both professors work really hard to be available for questions and there are a lot of resources to help you solve problems on the labs.
Katie is a GREAT professor who really cares about her students learning and is so so kind. Even when we have endless questions, she never got impatient and always answered them all. She is one of the best professors I have ever had. I also appreciate that the data science minor is structured in a way where we can focus more on learning than the grades – we only get tiny increments off of our assignments for errors because the emphasis is on just knowing what our errors are rather than punishing us for them, so everyone's grades in this class are high! I do feel that it was challenging to learn with the flipped classroom structure because the textbook was difficult and also not always clear, and we did not have much space to go over that together since we had to self–teach everything. The class also went too fast and I could not keep up enough to fully learn but I'd rather just have to skip over and move on – I felt that I would've been able to learn a lot more if we just went a bit slower. It is a time consuming class especially if you're trying to understand everything which I've realized is just impossible for me.
This class is kind of frustrating because you basically learn everything on your own, but I have to admit I did learn A LOT in a quarter. I had zero coding experience before I started and I was really proud of my final project at the end. The instructors and TAs were really helpful, and people help each other on campuswire so there's always opportunity to learn. It is EXTREMELY time consuming, though, I spend like 10 hours on labs every week and several days on the final project.
This course is great for learning and practicing all the components of the tidyverse and for conducting your own project.
Good to learn R and Data Science but it does take a lot of time to work on the labs and read!
Professor Coburn is the nicest person in the world. I'm not a huge fan of flipped classroom style, but the class isn't too hard and not very time–consuming and she is great at explaining things and answering questions. I also really appreciate that she never makes people feel like they're asking a stupid question/being clueless no matter what we ask or how obvious the answer is. The grading is very lenient (although the final project hasn't been graded yet so I can't speak to that) and I feel like I learned a lot about data science and using R in general.
This class is an easy A if you put in the work. The hard part is that the labs won't make a lot of sense, and because it is a flipped class structure with reading outside of class and work during class, it's a lot of self–studying. But, again, if you try on the labs, do all the reading checks, and start the final project early so that you can get help, you'll do well. Katie is a great professor and is always willing to help!
I learned so much through this course and the final project was very exciting since you get to choose your topic.
Campuswire was a good choice and allows communal pooling of resources. Getting to Lvl 3 is tricky because you require so many upvotes just as it would be to be a top 3 rank (it would not be difficult to show with a game theory model how this might conflict self–interests). The textbook is useful and the professors and TAs are happy to help. There are plenty of online resources available.
The flipped classroom model was not always flipped. Professor Coburn would take up a large chunk (sometimes 25 – 30 minutes of the 80 minutes) explaining the material, which negated the purpose of the model. Additionally, each person is placed in groups of 5 – 6 members. In an online environment, it was awkward and hardly anyone talked. Overall, the course follows content from the R textbook and did not really expand upon it. For people with coding experience, this first class in the Data Science sequence may not be anything new, as the majority of this course taught coding in R.
pretty good course! very laid back and nice to learn R coding skills in a low stress environment
Alright class, didn't disappoint but didn't make me feel super passionate either. I liked the fact that we can work on something we're interested in for the final project.
If you put in the work, you'll get an A, but it's pretty standard in terms of workload. You can find solutions online and get a good grade or you can try to learn so you aren't scrambling for your final project. Prof Coburn is so nice and genuinely wants you to learn and succeed.

What are the primary teaching strengths of the instructor?

Comments
really kind and accomodating professor, honestly great for a virtual class
Engaging
she explains things well
Very helpful and supportive
I honestly can't express enough how wonderful of a professor Dr. Coburn is. I was kind of nervous going into this quarter because it's been a year since I first took intro to stats and started working with R, but Dr. Coburn created such a relaxed and fun environment during our classes and I always felt welcome and supported. She was always very comprehensive with going over material and explaining things that were confusing, and very thorough and patient with any and all questions students had. She was always happy and willing to meet via Zoom to go over a lab problem or chat about questions, even outside of official office hours (and even

Comments
on the weekend). The whole data science instructional team is really fabulous, including Dr. Kuyper and all the graduate and undergraduate TAs, and I'm so thankful for all the help they gave us students this quarter and all the time they put in to making this a really engaging class.
Very kind and approachable
Answering questions, giving overviews of the book chapters, offering good suggestions for things to look into, and having a cute dog.
Professor Coburn is great! She is enthusiastic and very kind/helpful.
Professor Coburn's strength was answering any questions we had and making sure that we felt good about the material before moving forward. She really cared about how we were doing and listened to our concerns.
Enthusiastic, helpful, communicative
Katie did such a great job explaining concepts and answering questions. She also had such a positive attitude and I was always happy to be in her classes.
very friendly, knowledgable, and flexible; always helpful and answered students' questions; emphasized that we understood what was going on
Katie is very nice and approachable. She is very understanding of the students situation and is willing to help.
Super chill, helpful and sweet – a great professor!
Being excited about the topic, willing to meet with students before, after, and outside class on CampusWire.
Good at explaning things
Prof. Coburn is fairly accessible and friendly.
Literally everything! I really enjoyed having you as a Professor.
Understanding, open, enthusiastic.
Coburn is incredibly enthusiastic. She is so willing to help any and all students at every chance she gets, and she works well answering the questions of students with many different levels of experience. This class features a wide range of coding ability, and Professor Coburn really did an excellent job of understanding that.
made data science and herself approachable, broke down complex/confusing topics into really clear bite sized pieces
Katie is such a great professor! She was always enthusiastic and kind, and she always answered our questions and never put us down. She is also very knowledgeable and always willing to help even when we stayed after class hours for questions.
Professor Coburn was very kind and patient with questions
Prof. Coburn is a great communicator, always willing to help, and reminds us to be kind to ourselves when we can't come up with the right answer right away. She is encouraging and passionate about the subject. She absolutely knows her stuff and doesn't back away from a challenge. She also is sure to keep things light and fun during a stressful time. I think she's a great instructor.
Incredibly enthusiastic and excited to teach us! Always cared about how her students were doing.
Katie is super nice, enthusiastic, well prepared, and knowledgeable. Class time was always fun and enjoyable! I also felt like she really cared about how we did as students!
Professor Coburn is so nice, knowledgeable, and understanding.
always having office hours and actually staying for the entire 4 hours and being willing to help in any way she can
enthusiasm, knowledge, willingness to discuss pop culture/video games, approachable, Maggie
She takes every student's questions super seriously! I asked dumb questions sometimes, DUMB I tell you, and so did some classmates... but every single time she responded the same way as if it were a sophisticated question posed by a data scientist colleague. I've never felt so comfortable asking questions in a college setting in my life, and I think that encouraged everyone to be OK asking questions. I also would be remiss to not mention how significant it was that Prof Coburn was perfectly flexible, accommodating and warm in regards to student issues. This was a very challenging quarter due to the pandemic, but also other personal factors. I have had to ask for a lot of extensions and such throughout my college career, and have experienced a WIDE range of professor responses. Prof Coburn absolutely is at the top of the list for responding with grace and empathy every single time. I don't know if I could have made it through this class with a different prof. I do not mean to imply at all that she is an "easy" teacher or anything like that, people respected her a lot. Just that she gives students the benefit of the doubt and seems to see her role as a prof as to encourage students and empower them to succeed, instead of making it harder for them to succeed. And that is not only very helpful for me as a student, but also excellent pedagogy in general.
Katie is a queen! She is so helpful and nice and she makes the classroom environment very low–stress and comfortable
Super approachable and cares about everyone's progress.

What are the primary weaknesses, if any, of the instruction?

Comments
none
None!
None
I sometimes felt that she talked for a bit too long which cut into our work time, but this was rare and not a big deal because she was always reiterating material that is good to hear again.
none
The lecture would sometimes drag on longer than it needed to.
N/A
Class structure had some disorganization because of the willingness to accept questions all the time (so some pros, some cons!), but overall it worked and I learned a lot !
Lectures felt a bit unorganized and it felt like "I'm just going to look at what the book says and type it in and show you what it does" at times
The class material is sometimes repetitive with the book content.
Not opening breakout rooms sooner?
I cannot think of any
pace of lecture part of class can be a little slow sometimes
None!
Katie was not very good at answering emails, which was a little frustrating because some questions could not be addressed on CampusWire
class time is kind of useless for me personally. She usually talks about a few things from the chapter for almost the entire time and then sends us to breakout rooms for the last 20–30 mins. I would prefer either breakout rooms the entire time or organized lectures of the reading material and then all of the work outside of class.
the class reminded her daily to record, but this was no hardship
No weaknesses
none
Kind of disorganized sometimes, but again, flipped classroom so maybe that's just the way it is.

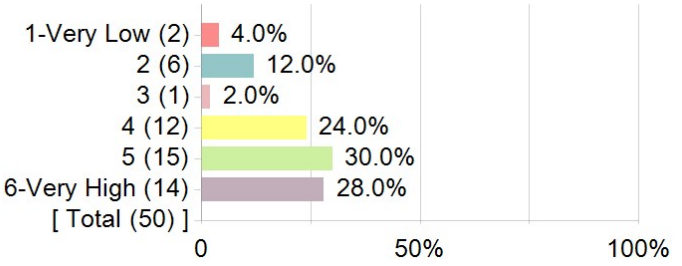
Can you offer suggestions for improvement?

Comments
none
Nothing major I think of off the top of my head. Maybe going over one or two coding examples/exercises at the beginning of class along with going through the textbook chapter.
None
I would just reconsider the flipped classroom structure because I feel that we could learn better if more class time was dedicated to going over some of the more difficult topics.
none
Nah
Prepared lectures if possible i guess.
Possibly, teach the material into more depths and explain more outside the scope of the book.
Open Breakout rooms sooner?
Not really
giving more of a roadmap for what we'll be doing in each class right as it starts
n/a
My only advice is to keep book review briefer. This might be my bias because I had taken STAT 302 with Arend in the spring, and his style was to keep things more brief so we could move to our lab groups more quickly. I got used to that format and found a good rhythm with working with the lab group. We spent so much time as a whole class that most of the time we only had 30–45 minutes in the lab groups. I don't think I used my lab group as well this quarter because we didn't have as much time and I also didn't start the labs before class as I had in STAT 302. Sometimes I learned new things from the time spent with the whole class, so I am a little hesitant to give this advice, but I still think some time can be shaved off in the whole class setting for Data Science I in the future. I understand the desire to answer every question, and sometimes I also found it helpful. I think it was helpful near the end of the quarter when Prof. Coburn opened up the breakout rooms sooner so we could choose whether to go to our groups or stay in the whole class setting.
I really enjoyed the class and learned a ton! My only suggestion would be to focus the class time discussion more, rather than it being an open Q&A. Often I would sorta tune out for that and just work on the lab until we were put in breakout rooms. But that's it. Thanks for a great class! Looking forward to next quarter.
basically what I said in the previous question.
It often took *wayyyy* too long to get into breakout rooms when students would keep asking individual questions.
n/a
Show more bulldog please
no
Keep up the awesome work, really appreciate the understanding and flexibility during these *unprecedented* times.

REMOTE LEARNING

Rate how well the approaches used in this course for remote instruction during Fall 2020 contributed to your learning.

1. Rate how well the approaches used in this course for remote instruction during Fall 2020 contributed to your learning.



Options	Score	Count	Percentage
1-Very Low	1	2	4.0%
2	2	6	12.0%
3	3	1	2.0%
4	4	12	24.0%
5	5	15	30.0%
6-Very High	6	14	28.0%
Statistics			**Value**
Response Count			50
Mean			4.48
Median			5.00
Standard Deviation			1.45

Which aspects of the remote instruction helped contribute to your success in this course? Please explain.

Comments
breakout rooms for working on labs and plenty of office hours
posted lectures
Loved that we had synchronous class time, with full–class lecture portions as well as time in breakout rooms to work on labs. And Campuswire is such a helpful platform for asking questions and getting answers. Also I really appreciate how much office hours time the professors and TAs provided!
Having the option to stay in the main room or going to break out rooms was helpful. Being able to share screens in zoom came in handy when comparing code and/or outputs.
The textbook was mainly how I learned.
The support was the best out of all of my classes. Lectures were completely dedicated to getting our questions answered and helping us with our labs and final project. Furthermore, Campuswire and office hours were extremely helpful.
Flipped class
I thought zoom actually made this class easier because of screensharing abilities and recorded lectures.
Breakout rooms were useful.
The "lecture" (just going over reading and lab concepts and allowing work time) were my favorite – a great, chill space to rant and have help given.
I think a flipped classroom works with online learning because a lot of the learning is online already. However, it did suck to not have a professor in person that I could talk to whenever I wanted, even though the professor was always there.
The book quiz.
I thought CampusWire and office hours and breakout rooms helped.
The subject is computer–based. Campuswire made asking questions and getting help easy.
Being able to rewatch the lectures was helpful. The material covered in class moved quickly.
campuswire
I liked the office hours we had – it's easy to share screen on Zoom and work together.
Class time, campuswire
This course is well–suited for remote instruction, I think. We can easily share screens and work together. Pretty much all the aspects of remote learning in this course helped me in this class.
The fact that most of the material could be learned remotely via textbook and assignments rather than via zoom lecture. So it was great that the class was structured flipped–style
Campuswire was used really well
the reading checks and final project because the reading checks ensured that I kept up with the reading, and the final project involved application of many different skills from the quarter, which really tested my knowledge of the various topics
Campuswire
It was easier to learn by seeing the screenshare than straining to see a giant projector from across the room honestly. Also digital office hours were more convenient and comfortable.
professors and TAs were extremely accessible for questions; campuswire was very helpful
I think the flipped classroom element is not so great virtually, as it feels more that you are on your own than if you actually went to a physical classroom.

Which aspects of the remote instruction could be improved? Please explain.

Comments
lecture feels unengaging but learning about code can only be so interesting, especially when 90% of cameras are turned off
none
None
Breakout rooms are not productive.
I did not really like the flipped classroom structure. I feel like it would work better in person, but online it is hard to make use of in–class time effectively.
none
the flipped model was kind of hard to do over zoom I think. I feel like it meant a lot of work was just being done alone and I feel like that wasn't the goal
Less time in lecture and more time in breakout rooms.
I didn't really use Campuswire that much :(
One suggestion I have for the class set up is that it's really hard when the professor answers a bunch of individual questions, because I'm not sure if I'm supposed to pay attention or be working on my own lab. This is one of the downsides of remote learning though, the professor certainly would have just walked over and helped that student while I worked with another group, but I cant really do that now.
This was my first flipped class at NU. I don't really know.
How the breakout room is structured and organized.
I just couldn't really work with my lab group during class. Not really anyone's fault, that part of the class just doesn't translate well.
Opening breakout rooms sooner.
Breakout rooms can be improved. I was rarely in the mindset of doing the labs during class, and so I could not use the breakout rooms much.
breakout rooms – maybe requiree that we have to turn video and audio on, it seems harsh but the classes where the professor requires that have been the most engaging and educational
The flipped classroom model made it really hard for me to learn virtually. When I would normally have no problem working on an assignment, raising my hand, and asking for help, it feels different over zoom and it's a lot harder to ask for feedback and really learn.
I really wish that we had done more live lecturing rather than the flipped classroom structure because this content is too difficult to self–teach through the textbook. I also never really used the zoom breakout rooms to work with classmates because it was too awkward and I did my labs all on my own with the help of the textbook and Campuswire.
I actually think it would be more useful to encourage students to start the labs as they do the reading. A lot of the questions from the book are repeated. At one point I was doing the book problems and then doing the labs, which were repeated questions. I actually think this wasn't a great use of my time because I'd have to reformat/repeat the code two more times (in the lab R file and the rmd file). If we start the labs as we do the reading, then we'll be a few steps ahead and can ask questions during our small group meetings.
More focused discussions during class / lab time would be helpful — i.e., a quick review of difficult concepts. It often ended up just being kind of an open Q&A for random students. Doing that while we're all in breakout rooms instead would probably be better.
I think a traditional classroom style would work better.
maybe more help on the labs. I think the flipped class structure wasn't working for me. I would prefer lectures of the reading during class and to do the labs outside of class as hw.
The inverted classroom does *not* work in the remote setting. While I can understand the reasoning behind it under normal circumstances, in the virtual setting, it simply does not function because the inverted classroom relies on the organic interactions within a physical classroom, which does not translate at all into a Zoom call.
we need faster grading on the labs. by the time we got them back, it was usually too late.
The breakout rooms were a little awkward.... Maybe it would have been better to have bigger groups?
I thought this class was organized pretty optimally
I think it's at a decent point and I'm not sure what can be done to improve it. It just isn't as nice.