

# DS 537 (A1): Data Science for Conservation Decisions, EE 508 (A1): Data Science for Conservation Decisions

18 | Students Enrolled  
14 | Students Responded  
77.78% | Response Rate

Fall 2022 | Christoph Nolte

## Quantitative

	(1) Low	(2)	(3)	(4)	(5) High	N	DNA	SD	M	
Relevance of assigned readings	7.14% (1)	7.14% (1)	14.29% (2)	35.71% (5)	35.71% (5)	14	0	1.19	3.86	
	Easy	Moderately Easy	Neither Easy nor Difficult	Moderately Difficult	Difficult	N	DNA	SD	M	
Difficulty of course	0% (0)	0% (0)	21.43% (3)	50% (7)	28.57% (4)	14	0	0.7	4.07	
	Light	Moderately Light	Neither Light nor Heavy	Moderately Heavy	Heavy	N	DNA	SD	M	
Workload in course	0% (0)	0% (0)	21.43% (3)	57.14% (8)	21.43% (3)	14	0	0.65	4	
<i>Course Evaluation</i>	Poor	Fair	Good	Very Good	Excellent	N/A	N	DNA	SD	M
Overall rating of discussion instructor (if applicable)	0% (0)	0% (0)	7.14% (1)	7.14% (1)	35.71% (5)	50% (7)	14	0	0.73	4.57
Overall rating of lab instructor (if applicable)	0% (0)	0% (0)	0% (0)	0% (0)	14.29% (2)	85.71% (12)	14	0	0	5
Usefulness of assignments and papers	0% (0)	0% (0)	21.43% (3)	21.43% (3)	50% (7)	7.14% (1)	14	0	0.82	4.31
Overall course rating	0% (0)	7.14% (1)	21.43% (3)	0% (0)	71.43% (10)	0% (0)	14	0	1.04	4.36
<i>Faculty Evaluation</i>	Poor	Fair	Good	Very Good	Excellent	N	DNA	SD	M	
Effectiveness in explaining concepts	0% (0)	7.14% (1)	21.43% (3)	35.71% (5)	35.71% (5)	14	0	0.93	4	
Ability to stimulate interest in subject	0% (0)	14.29% (2)	21.43% (3)	14.29% (2)	50% (7)	14	0	1.13	4	
Encouragement of class participation	0% (0)	7.14% (1)	50% (7)	14.29% (2)	28.57% (4)	14	0	0.97	3.64	
Fairness in grading	0% (0)	0% (0)	14.29% (2)	21.43% (3)	64.29% (9)	14	0	0.73	4.5	
Promptness in returning assignments	0% (0)	0% (0)	0% (0)	14.29% (2)	85.71% (12)	14	0	0.35	4.86	
Quality of feedback to students	0% (0)	7.14% (1)	0% (0)	42.86% (6)	50% (7)	14	0	0.81	4.36	
Availability outside of class	0% (0)	0% (0)	7.14% (1)	28.57% (4)	64.29% (9)	14	0	0.62	4.57	
Overall rating of instructor	0% (0)	0% (0)	28.57% (4)	7.14% (1)	64.29% (9)	14	0	0.89	4.36	

## Qualitative

**Strengths of the course and of the instructor: -**

- The assignments were not "busy work" like some other classes; they helped to build skill sets of coding and statistical analyses. I also appreciated having the opportunity to revise and resubmit incorrect homework problems for partial credit. It decreased my stress levels regarding the assignments and encouraged me to learn from my mistakes.
- I really appreciated how the professor extended time for us to do the lab assignments since it was very challenging. I also appreciated how he changed the project to be worth less than originally due to lack of time.
- Great at explaining really difficult concepts and how to implement them in the code and really using the most cutting edge techniques. It is an exciting and super valuable course that can be used for research and also in professional applications
- Christoph did a great job of sparking interest in the topics, and explaining the ideas behind concepts. His enthusiasm for the topics is plain to see.
- I really enjoyed this class! The pace of the course made me feel comfortable with python and the balance in each lab between introducing code and implementing it ourselves towards the end was perfect! I feel like I learned a lot and the topics covered were very interesting. Clearly you are very passionate and knowledgeable about the topics covered in this course and it made the class interesting.
- Clearly very knowledgeable with lots of real-world experience. I appreciated his patience and willingness to match our pace/abilities. But I also enjoyed being challenged and encouraged to work through difficulties on my own. It definitely helped me become much more comfortable with the concepts and coding in Python in general.
- The amount of content presented in this course was ambitious. This course was meticulously organized which allowed us to cover a huge amount of content ranging from technical (coding) to methodological. The applied nature of this course made it very engaging. This is easily one of the most valuable courses I have taken. Christoph did an excellent job providing feedback and opportunities to work iteratively based on his comments. Lectures were engaging and he made a distinct effort to engage all students in class discussions.
- EE508 is one of my favorite classes that I have taken at BU and Professor Nolte is a fantastic instructor to be leading it. I enjoyed learning applicable data science and statistical analysis tools in the content of environmental conservation. Professor Nolte provides excellent guidance on how to successfully complete labs and offers attempts to retry problems that we get wrong. This emphasis on learning from mistakes takes the pressure off students and makes for an excellent class experience.
- This course introduced many concepts and skills in a relatively short amount of time. I felt that I attained a large toolset in coding that I previously did not have (especially in Python) and that the coursework could be used towards future research goals. The labs were extremely in depth and well conceived, and it felt like I was addressing real world problems and solutions. I especially appreciated the discussions regarding the realities of the implementation of these analyses, and examples of their usage in the realm of conservation management.
- The course is very good for developing the concepts of data science and conservation.
- Very complete course on data science applied to geospatial problems. Very useful to develop an effective and efficient workflow for problems with a key spatial component. Also very accessible for people with different backgrounds (but a bit of coding experience helps to get the most from the class).
- Makes extra time for students and provides extra help for struggling students; adjusts course to class (flexibility); concerned about students' wellbeing;

**Weaknesses of the course and of the instructor: -**

- As discussed in class, I think adding more collaborative element will help students. Creating coding groups in the beginning of the year might be beneficial
- More teamwork and collaborative activities like team exercises on solving the lab problem would be suggested to improve the overall quality of learning.
- Elements of the coding were very difficult, but I think this is unavoidable and a necessary hurdle to go through. The class would benefit from some more collaborative work whether it be in coding groups or in the drafting of a final group project. Overall, I think recurring check-ins would allow students to better keep track of their progress and troubleshoot issues.
- One area that I would like to see added to the course would be a lesson on how to obtain and prepare datasets from open sources or otherwise uncleaned data. This would fit nicely into the "public datasets" lecture. Most of the time during labs we are provided datasets that are only a few steps away from being perfectly usable for analysis; however, if I were to go off and try to replicate the analysis in a different context, I would likely not have the same tidy data. Some direction on how to handle imperfect data would go a long way when applying these methods to our own future research. Also, expanding on some more complex predictive models and causal inference methods would be welcome as these were the most interesting concepts for me.
- NA. Overall, this was an excellent class.
- Sometimes it felt like you were under the spotlight when asking a question. Since the class was often silence, having some sort of smaller discussions/conversations before asking general questions to the group could have inspired more participation and engagement.
- None that I can think of!
- The course is really helpful but a bit dense for the time and could be spanned over two semesters or in the spring semester which is a bit longer than the Fall semester.
- Explaining concepts and how to think of a solution for coding in our assignments.

**General Comments -**

- Overall, I found this class to be super challenging. It was very heavy in coding. I think the pacing for the class was good due to many of us being on the lower skill of coding. The topic was very interesting. I think allowing more time office hour or like a TA would be super helpful in reducing the amount of stress for this class. I like how we can redo our labs to get some points back too.
- Great course and instructor, I have recommended this course to many other students especially PhD students as I can think of it really and milestone in my program.
- Less class participation/collaboration than I would have liked. Challenges I had when coding and completing labs I often resolved before class and then didn't have questions to bring. But it was always useful to connect with other students and hear about their difficulties and solutions and work through challenges together. Having that sort of support and collaboration built into the class would be fantastic.
- Thank you!
- This type of class is in demand from different disciplines. Students come from very different backgrounds, so the selection of topics and the pace of progress felt unbalanced in some aspects for some and in different ones for others. I think the instructor did a great job at finding a good balance, but opinions may differ. The class felt a bit as composed by two modules: 1) GIS and 2) Data Science for Impact Evaluation. Maybe more integration between both may help to improve even more this balance.
- Thank you for a great semester, I learned a lot :)