

Michigan Technological University
Fall 2022 Main Evaluation Group

Course: BL27000AFall2022: BL2700 0A Fall 2022-Section 0A - Fall 2022 (84562)
Instructor: Lindsay Putman *
Response Rate: 11/19 (57.89 %)

1 - As you respond to the following items, remember that an effective teaching/learning environment is interactive and requires the cooperative efforts of the student and the instructor. For a course to foster student learning, students must have mastered the appropriate prerequisite knowledge and skills, purchase and read textbooks, complete course assignments, and actively contribute to the learning environment of the class. To be fair to your instructor, please consider these important factors as you complete this form. Many people have unconscious biases against other people that are related to race, religion, color, national origin, age, sex, sexual orientation, gender identity, height, weight, genetic information, marital status, disability, veteran status, or another characteristic. As you complete this survey, please try not to let any potential biases affect your responses. Your constructive suggestions are valued by instructors! According to Senate policy 43-21, student comments are shared with instructors AFTER all grades are finalized. Even then, the identity of the author of a specific comment is not revealed to instructors. But please keep it respectful! Comments perceived by instructors as threatening, harassing, or discriminatory will be reviewed by the Office of Academic and Community Conduct. Comments determined by that office to violate the student code of conduct will be addressed through normal conduct processes, including possible conduct sanctions.-----Student Reflection-----Questions 1-4 ask you to reflect honestly on your level of effort in the course. -----I understood the goals and objectives of this course.

Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%		4.50	
Disagree	(2)	0	0.00%			
Neutral	(3)	1	10.00%			
Agree	(4)	3	30.00%			
Strongly Agree	(5)	6	60.00%			
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.50	0.71	5.00

2 - The goals and objectives of this course were relevant to me.

Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%		4.30	
Disagree	(2)	1	10.00%			
Neutral	(3)	1	10.00%			
Agree	(4)	2	20.00%			
Strongly Agree	(5)	6	60.00%			
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.30	1.06	5.00

3 - My effort in this course was adequate to meet course objectives.

Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%		4.40	
Disagree	(2)	0	0.00%			
Neutral	(3)	2	20.00%			
Agree	(4)	2	20.00%			
Strongly Agree	(5)	6	60.00%			
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.40	0.84	5.00

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4 - I came prepared for each class session.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.40
Disagree	(2)	1	10.00%	█	
Neutral	(3)	1	10.00%	█	
Agree	(4)	1	10.00%	█	
Strongly Agree	(5)	7	70.00%	█████████	
				0 25 50 100	Question
Response Rate		Mean		STD	Median
10/19 (52.63%)		4.40		1.07	5.00

- Do not be afraid to ask questions or speak up about coding issues. It seems easy to fall behind or get confused about the material, but adding notes during class to the power points helps clarify concepts and helps on the homework assignments too. R Studio or the command line might seem overwhelming at first, but it will get easier.
- Make sure to attempt homework early, as the code can take hours to run and may not work the first time! Be ready for setbacks and have frequent communication with your professor when something goes wrong.
- I would tell them to make sure to really pay attention in class and to not be afraid to ask questions. I would say that this class is really what you make of it, if you are invested in learning about the material, you will get so much out of it. If you want to just go through the motions and copy/paste code into a random IDE, you definitely will not understand what's going on theoretically and will not do well in the exams. This class is very valuable if you want to understand the inner workings behind common uses of bioinformatics in daily life.
- Attending class or watching recordings if you miss is important to properly understanding the course content especially when coding is involved. Ask questions as needed, it's not an easy topic to learn totally independently and getting help and collaboration is key with coding or computer issues as well.
- Keep up with the lectures, there's lots to learn!

5 - -----University Questions-----Questions 5-14 appear on all student evaluations. Data gathered from the numerical questions (#5-12) is used by administration for faculty tenure and promotion decisions. Your written answers to questions 13 and 14 are seen only by the instructor.-----The instructor was enthusiastic about the subject matter of the course.

Lindsay Putman

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.40
Disagree	(2)	1	10.00%	█	
Neutral	(3)	0	0.00%		
Agree	(4)	3	30.00%	███	
Strongly Agree	(5)	6	60.00%	███████	
				0 25 50 100	Question
Response Rate		Mean		STD	Median
10/19 (52.63%)		4.40		0.97	5.00

6 - The instructor communicated the course material clearly.

Lindsay Putman

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.50
Disagree	(2)	0	0.00%		
Neutral	(3)	1	10.00%	█	
Agree	(4)	3	30.00%	███	
Strongly Agree	(5)	6	60.00%	███████	
				0 25 50 100	Question
Response Rate		Mean		STD	Median
10/19 (52.63%)		4.50		0.71	5.00

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7 - The instructor engaged students by encouraging participation during class.						
Lindsay Putman						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%			4.40
Disagree	(2)	1	10.00%	█		
Neutral	(3)	0	0.00%			
Agree	(4)	3	30.00%	█ █ █		
Strongly Agree	(5)	6	60.00%	█ █ █ █ █ █		
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.40	0.97	5.00

8 - The instructor engaged students by encouraging course preparation, reflection or other activities outside of class.						
Lindsay Putman						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%			4.40
Disagree	(2)	0	0.00%			
Neutral	(3)	2	20.00%	█ █		
Agree	(4)	2	20.00%	█ █		
Strongly Agree	(5)	6	60.00%	█ █ █ █ █ █		
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.40	0.84	5.00

9 - The instructor provided timely feedback on my work (homework, assignments, exams, etc.)						
Lindsay Putman						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%			4.60
Disagree	(2)	0	0.00%			
Neutral	(3)	1	10.00%	█		
Agree	(4)	2	20.00%	█ █		
Strongly Agree	(5)	7	70.00%	█ █ █ █ █ █ █		
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.60	0.70	5.00

10 - The instructor displayed a personal interest in students and their learning.						
Lindsay Putman						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%			4.70
Disagree	(2)	0	0.00%			
Neutral	(3)	1	10.00%	█		
Agree	(4)	1	10.00%	█		
Strongly Agree	(5)	8	80.00%	█ █ █ █ █ █ █ █		
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.70	0.67	5.00

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11 - The instructor used technology appropriately.

Lindsay Putman

Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%			
Disagree	(2)	0	0.00%			
Neutral	(3)	0	0.00%			
Agree	(4)	1	10.00%	■		
Strongly Agree	(5)	9	90.00%	■		
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.90	0.32	5.00

12 - As I, the instructor, prepare to teach this class again, what aspects of this course (teaching methods, assignments, areas of emphasis, etc.) should I preserve that effectively furthered your learning?

Lindsay Putman

Response Rate 5/19 (26.32%)

- Power points and recorded lectures provided to students, 2+ hours for online exams, open book exams
- I would keep the powerpoints and the work flow the same.
- I think that you should try to keep a lot of the technical aspects of the course. I really enjoyed going on the computer everyday and learning how to use different programs in a biological context and I can see myself using these skills in my education and career. I also liked the weekly homework setup although sometimes the directions were not explicit enough for me to complete it to the point of understanding that I wished. I did like how you made a troubleshooting google doc towards the end of the class for the Unix stuff. That helped a lot especially since I was completely new to Unix.
- Working through practice labs in class after going over the lecture was very important to my understanding of the course content. Having independent homework focused on coding was also helpful as it's relatively easy to review lecture concepts on my own, but the coding homework allowed me to know what I didn't understand as well and provides the practice. I also really enjoyed that we were able to do genuine work at the end of the semester for the genome assembly project. It's really engaging knowing that this is similar to what we would be doing with bioinformatics outside of classes and that we'll put out a resource announcement together.
- Totally thought the assignments were cool. The exams were difficult but made sense. Everything helped me learn well.

13 - What aspects of this course should I change to improve student learning? Specifically, what would you suggest?

Lindsay Putman

Response Rate 5/19 (26.32%)

- A more clear introduction at the start of the course- I had no idea what to expect. State more of the "obvious" when explaining the course, the project, and concepts.
- I would recommend more take-home points and cheat sheets regarding concepts of what program to use and when, or lists of helpful code with helpful graphics of what parts of the code mean.
- I think that there should be some diversification of the different programs that we use and learn. I enjoyed learning R, BLAST, Phylotrees, and Unix, but I want to learn more! I know that it's a lot for a normal class, but I want to get a lot out of the class and I want to learn more things!! I also think that there should be an incentive to participate in class more because I found that once I participated in class, I began to understand things a lot better.
- Offering extra optional practice problems for coding could be helpful to anyone struggling that improves best by practice.
- Maybe the lectures could be somewhat more interactive/engaging. Also obviously this isn't your fault but the linux thing should get sorted out before using it again. That was a hassle to say the least.

14 - My instructor creates an environment for mutual respect.

Lindsay Putman

Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Disagree	(1)	0	0.00%			
Disagree	(2)	0	0.00%			
Neutral	(3)	0	0.00%			
Agree	(4)	1	10.00%	■		
Strongly Agree	(5)	9	90.00%	■		
Response Rate				Mean	STD	Median
10/19 (52.63%)				4.90	0.32	5.00

Mean of Means Calculations

Mean

Average of 7 Dimensions

4.56