



Report for CS 2102 - 004 Discrete Mathematics Luther Tychonievich

Project Title: **2020 Fall Course Evaluation**

Course Audience: **104**

Responses Received: **52**

Response Ratio: **50.0%**

Report Comments

Fall 2020 Individual Instructor Report by Section.

Final Report

Course Name: CS 2102 - 004 Discrete Mathematics

Instructor Name: Luther Tychonievich

Evaluation Start Date: Nov 21 2020 12:00AM

Evaluation End Date: Dec 1 2020 12:00AM

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

Fall 2020 Questionnaire

Course Preparation:

1. The average number of hours (per week) that I spent outside of class preparing for CS 2102 - 004 Discrete Mathematics :
 - Less than 1
 - 1-3
 - 4-6
 - 7-9
 - 10 or more

Course Questions:

Answer the following questions based on your experience in CS 2102 - 004 Discrete Mathematics.
(*Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree*)

- 1)The course increased my enthusiasm for the topic.
- 2)Through this course I gained a deeper understanding of the subject matter.
- 3)I had access to the course materials I needed to learn, including access to required textbooks, course readings, technology tools, and other materials required for class assignments and projects.

*** If the above question generates a negative response, a branching question will be generated:**

3-A) You disagreed or strongly disagreed that you did not have access to the course materials you needed to learn. Please review the options below and select any of the reasons that may better describe what affected your access to course materials.

- Internet speed and reliability
- Internet connectivity
- It was difficult to obtain hand-on materials needed for the course
- I didn't have the funds to purchase the course materials
- The instructor didn't provide the course materials needed to learn
- Other: Please Specify

Learning Activities Question:

To what extent did the following learning activities contribute to your learning? (A Lot, A Moderate Amount, A Little, Not At All)

- Real-time lecture
- Recorded lectures
- Recorded video demonstrations
- Hands-on activities
- Real-time, whole-class discussion
- Real-time small-group discussion
- Online discussion boards
- Office hours

Open Comment Questions (Course):

- 1) Please tell us briefly how any of the above learning activities (or other activities not included above) contributed to your learning in this course.
- 2) What would you like the instructor and university administrators to know about your experience in this course?

Instructor Questions:

Answer the following questions based on your experience with Luther Tychonievich. Your constructive feedback will help your instructor identify what went well and ways to improve the course in the future.
(*Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree*)

- 1) The instructor clearly communicated the course schedule and expectations for participation (e.g., readings, discussions).

- 2) The instructor clearly communicated the course learning objectives.
- 3) The instructor implemented learning activities and assignments that allowed me to demonstrate understanding of the course material.
- 4) The instructor provided me prompt and useful feedback on my learning.
- 5) The instructor provided opportunities for my active participation.
- 6) The instructor was available to help support my learning.
- 7) The instructor fostered an environment where I felt valued as an individual and that I belonged in the class.
- 8) Overall, the instructor was an effective teacher.
- 9) The instructor created an environment that respected difference and welcomed diverse perspectives.

*** A positive or negative response to the above question will generate a follow-up comment question.**

9A) You selected "AGREE or STRONGLY AGREE" on the previous question: Please give specific examples as to how Luther Tychonievich created an environment that respected difference and welcomed diverse perspectives.

9B) You selected "DISAGREE or STRONGLY DISAGREE" on the previous question: Please give specific examples as to how Luther Tychonievich did not create an environment that respected difference and welcomed diverse perspectives.

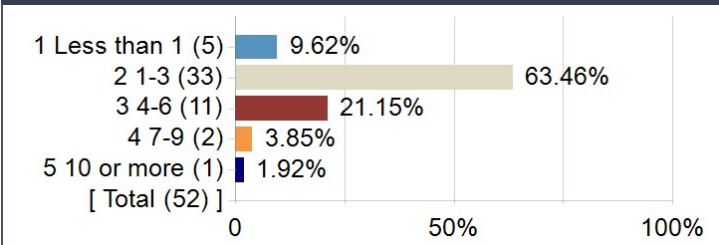
Open Comment Question (Instructor):

Your response to the open-ended question below will be shared only with Luther Tychonievich. If this course was taught by multiple instructors, you will have the opportunity to provide feedback to each. Please avoid using instructors' names in your responses to ensure confidentiality.

- 1) What constructive suggestions do you have to help Luther Tychonievich improve this course for future students?
-

Student Preparation

The average number of hours (per week) that I spent outside of class preparing for CS 2102 - 004 Discrete Mathematics:



Statistics	Value
Response Count	52
Mean	2.25
Median	2.00
Standard Deviation	0.76

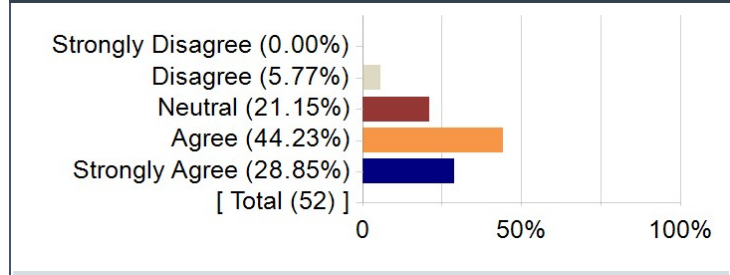
Course Questions

Mean values are displayed below.

Scale 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

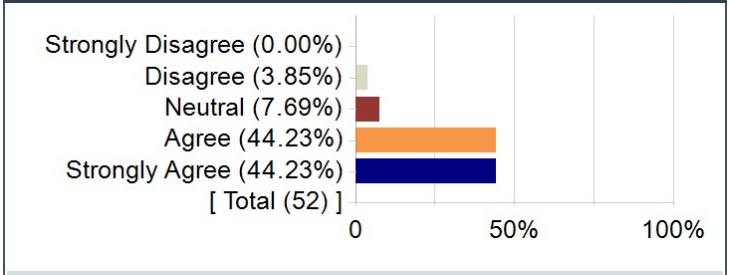
Question	Course (CS 2102 004)		Department (CS)		School (ENGR)		Institution (University of Virginia)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
The course increased my enthusiasm for the topic.	52	3.96	4370	3.88	10769	3.84	68880	3.99
Through this course I gained a deeper understanding of the subject matter.	52	4.29	4338	4.26	10694	4.22	68467	4.35
I had access to the course materials I needed to learn, including access to required textbooks, course readings, technology tools, and other materials required for class assignments and projects.	52	4.62	4365	4.38	10759	4.39	68848	4.53

1. The course increased my enthusiasm for the topic.



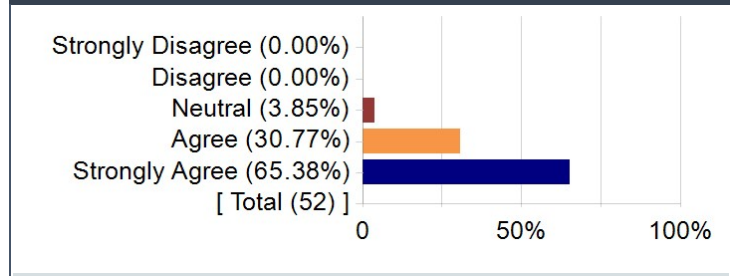
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	3	5.77%
Neutral	3	11	21.15%
Agree	4	23	44.23%
Strongly Agree	5	15	28.85%
Statistics			Value
Mean			3.96
Median			4.00
Standard Deviation			0.86

2. Through this course I gained a deeper understanding of the subject matter.



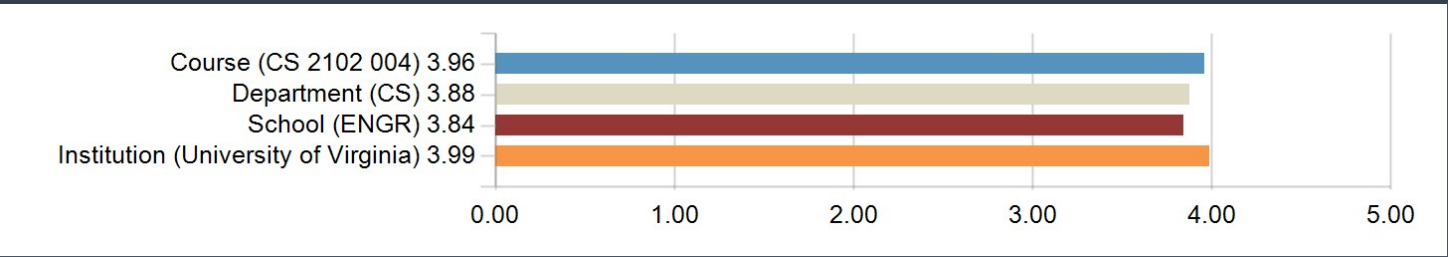
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	2	3.85%
Neutral	3	4	7.69%
Agree	4	23	44.23%
Strongly Agree	5	23	44.23%
Statistics			Value
Mean			4.29
Median			4.00
Standard Deviation			0.78

3. I had access to the course materials I needed to learn, including access to required textbooks, course readings, technology tools, and other materials required for class assignments and projects.

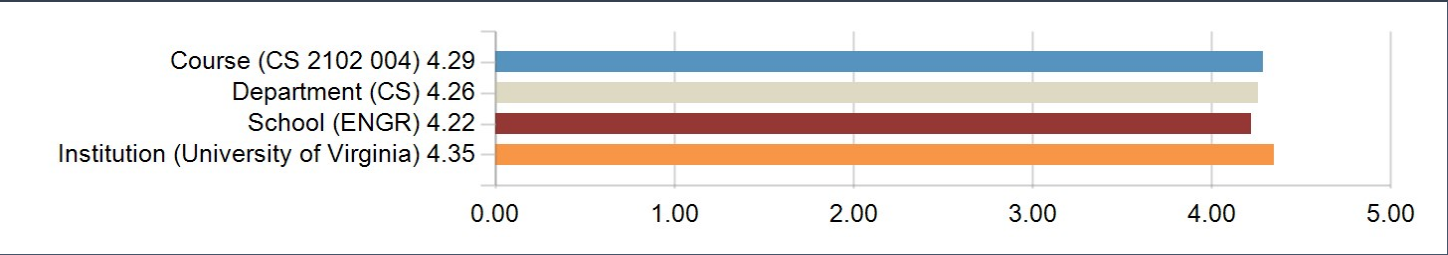


Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	2	3.85%
Agree	4	16	30.77%
Strongly Agree	5	34	65.38%
Statistics			Value
Mean			4.62
Median			5.00
Standard Deviation			0.57

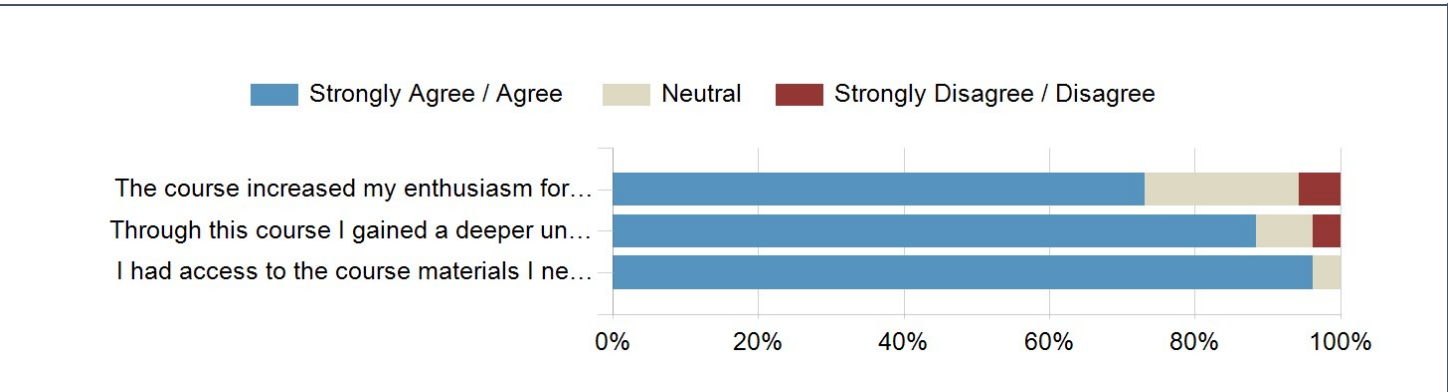
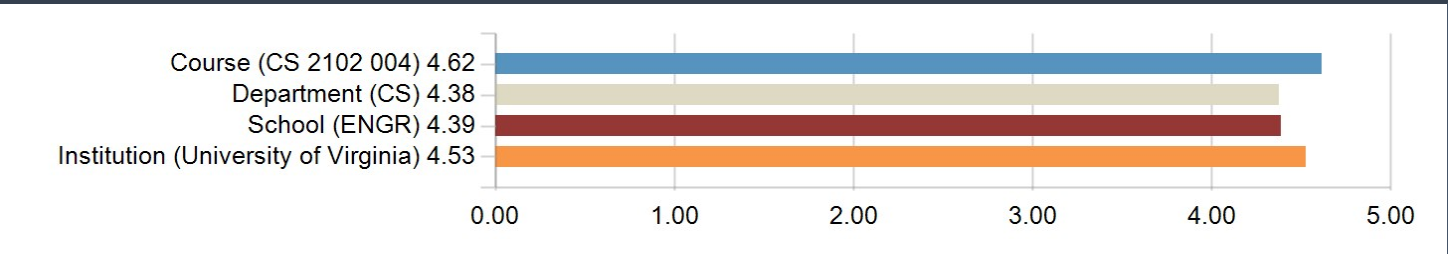
1. The course increased my enthusiasm for the topic.



2. Through this course I gained a deeper understanding of the subject matter.



3. I had access to the course materials I needed to learn, including access to required textbooks, course readings, technology tools, and other materials required for class assignments and projects.



Learning Activities

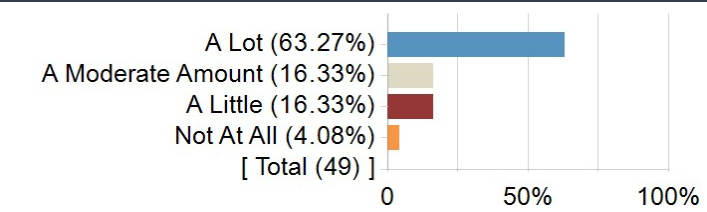
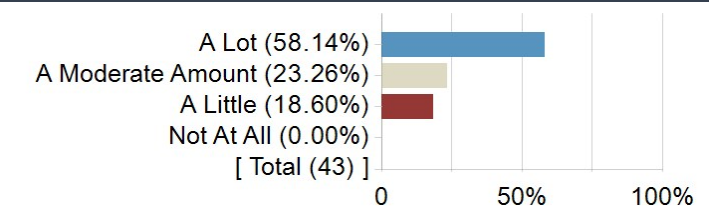
Mean values are displayed below.

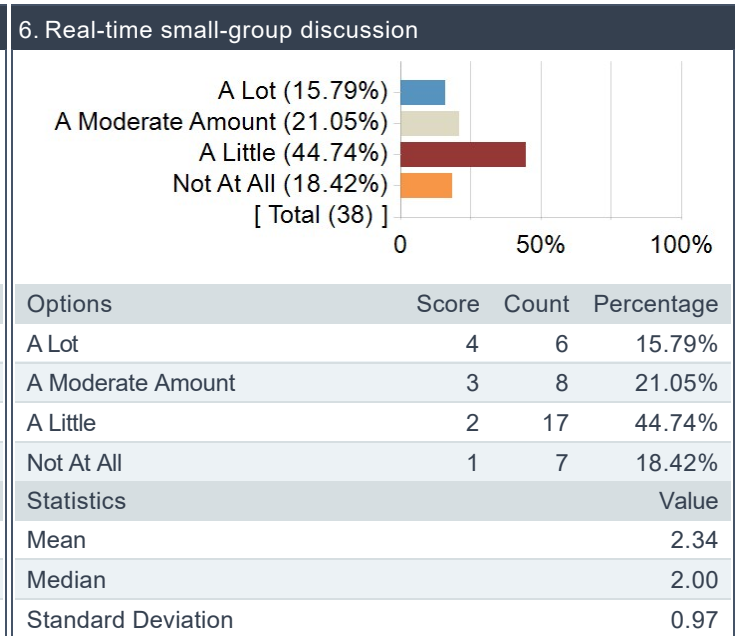
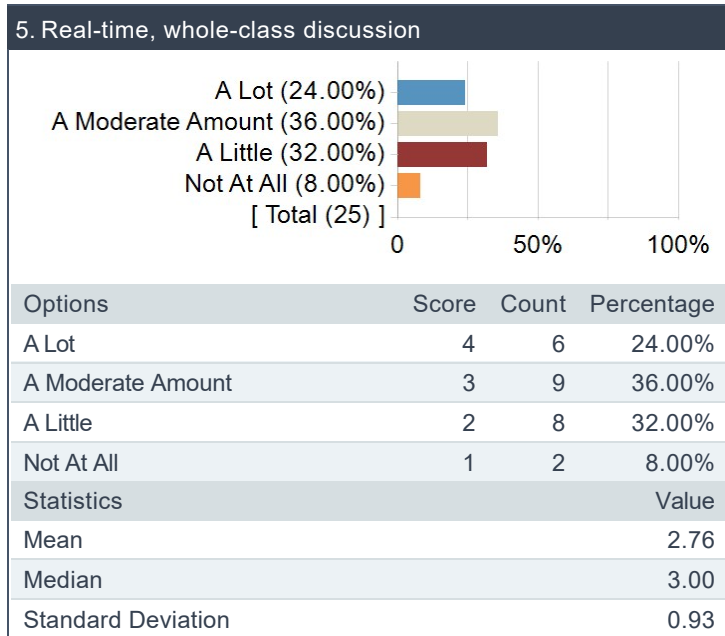
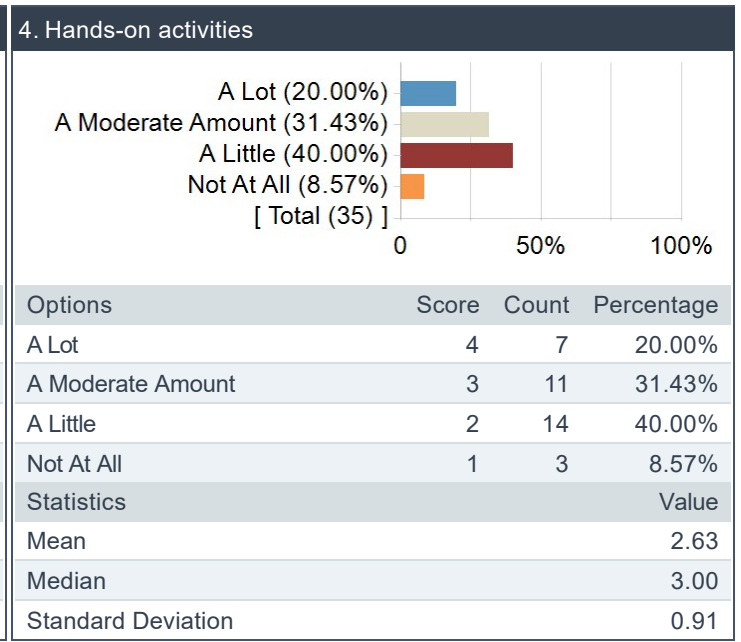
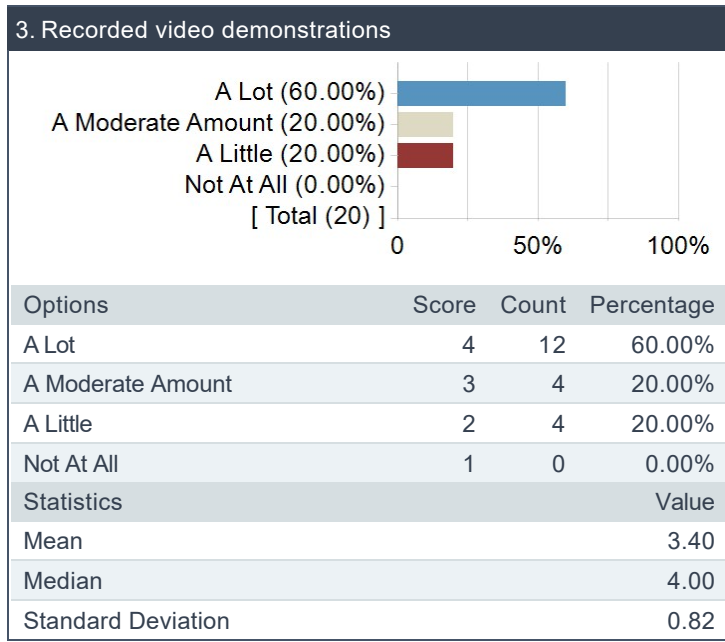
Scale: 1 = Not at All 2 = A Little 3 = A Moderate Amount 4 = A Lot

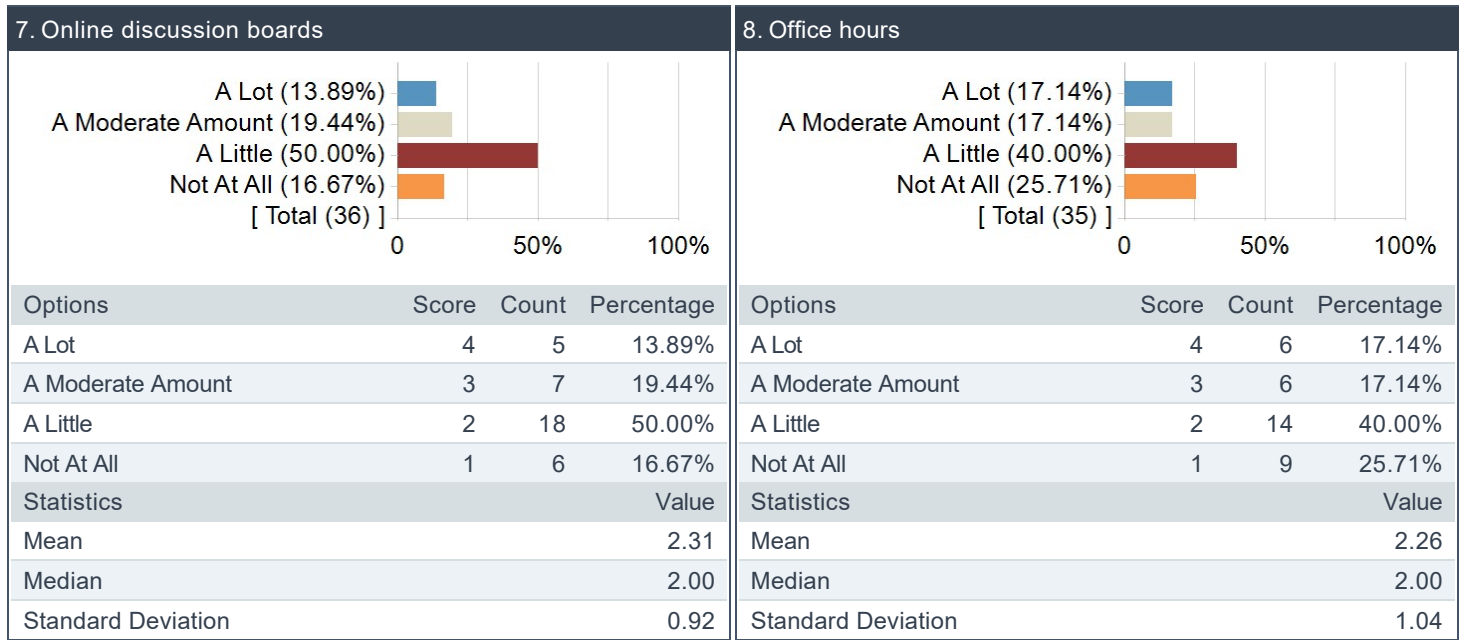
Learning Activities - To what extent did the following learning activities contribute to your learning?

Question	Course (CS 2102 004)		Department (CS)		School (ENGR)		Institution (University of Virginia)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
Real-time lecture	49	3.39	2772	2.93	7907	3.06	53264	3.34
Recorded lectures	43	3.40	3755	3.23	8443	3.16	42123	3.19
Recorded video demonstrations	20	3.40	2639	3.05	5445	3.00	27197	3.00
Hands-on activities	35	2.63	3229	3.27	6768	3.20	37978	3.19
Real-time, whole-class discussion	25	2.76	1903	2.46	6169	2.68	47373	3.11
Real-time small-group discussion	38	2.34	2335	2.54	6561	2.78	47174	3.12
Online discussion boards	36	2.31	3194	2.75	6299	2.66	30412	2.69
Office hours	35	2.26	3292	2.80	7720	2.77	41459	2.78

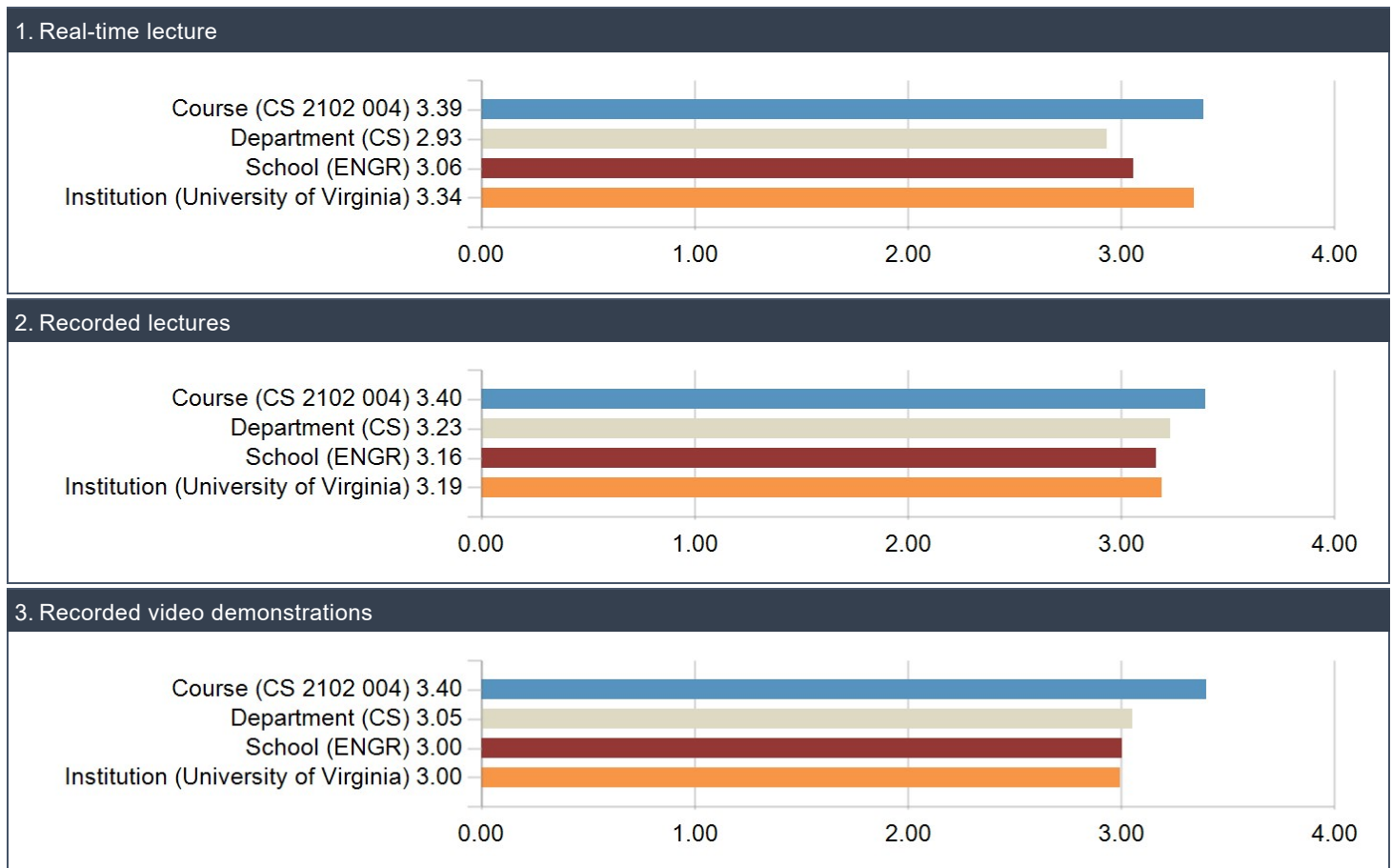
Learning Activities - To what extent did the following learning activities contribute to your learning?

1. Real-time lecture					2. Recorded lectures				
									
Options	Score	Count	Percentage		Options	Score	Count	Percentage	
A Lot	4	31	63.27%		A Lot	4	25	58.14%	
A Moderate Amount	3	8	16.33%		A Moderate Amount	3	10	23.26%	
A Little	2	8	16.33%		A Little	2	8	18.60%	
Not At All	1	2	4.08%		Not At All	1	0	0.00%	
Statistics				Value	Statistics				Value
Mean				3.39	Mean				3.40
Median				4.00	Median				4.00
Standard Deviation				0.91	Standard Deviation				0.79

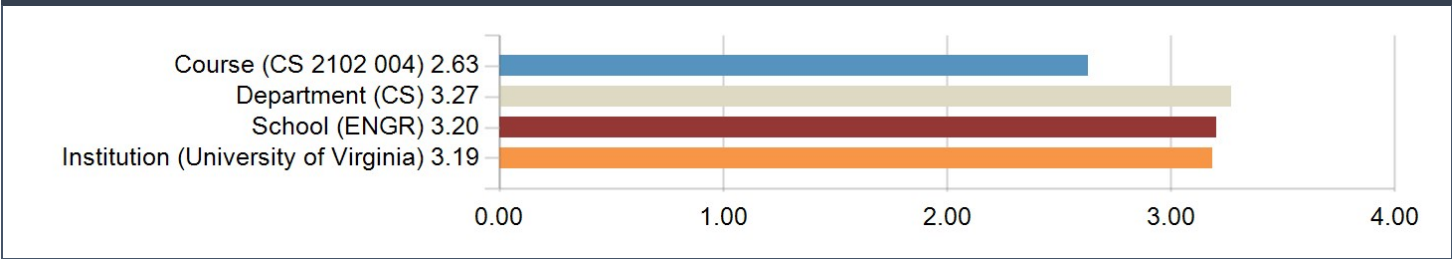




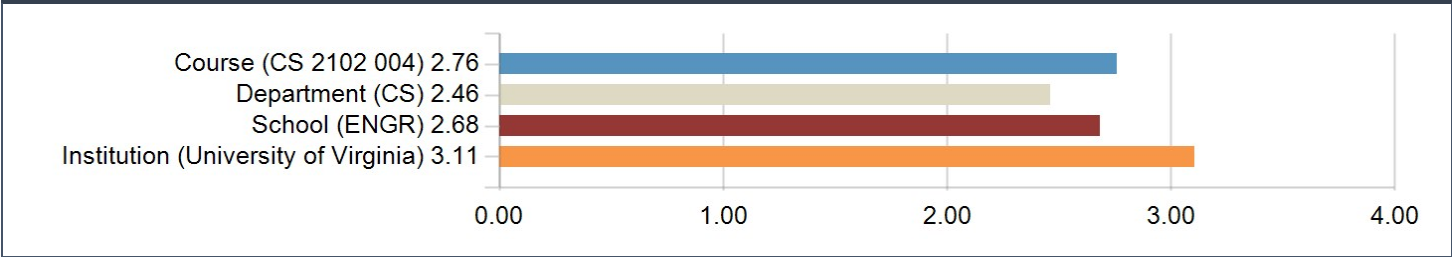
Learning Activities - To what extent did the following learning activities contribute to your learning?



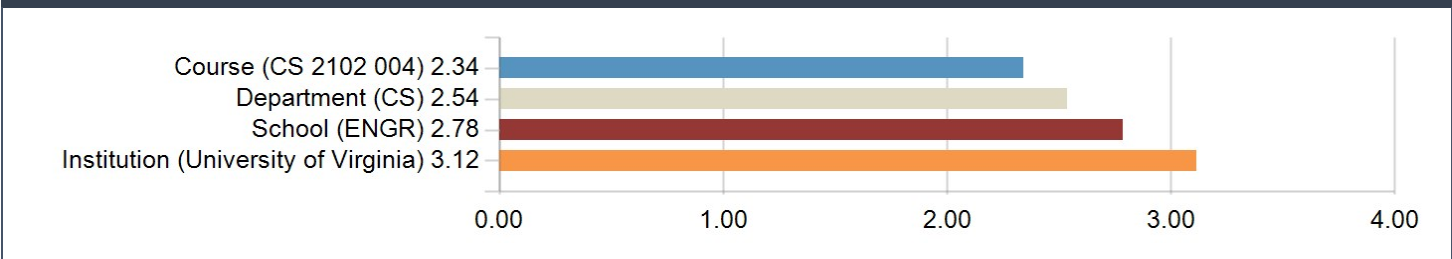
4. Hands-on activities



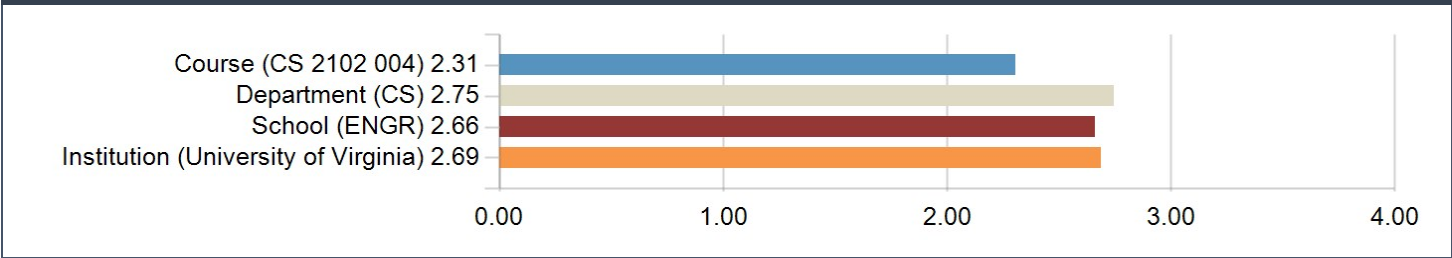
5. Real-time, whole-class discussion



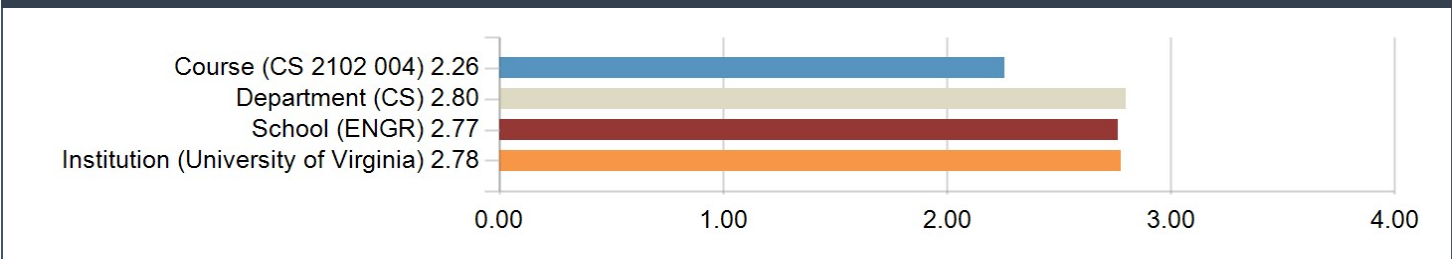
6. Real-time small-group discussion



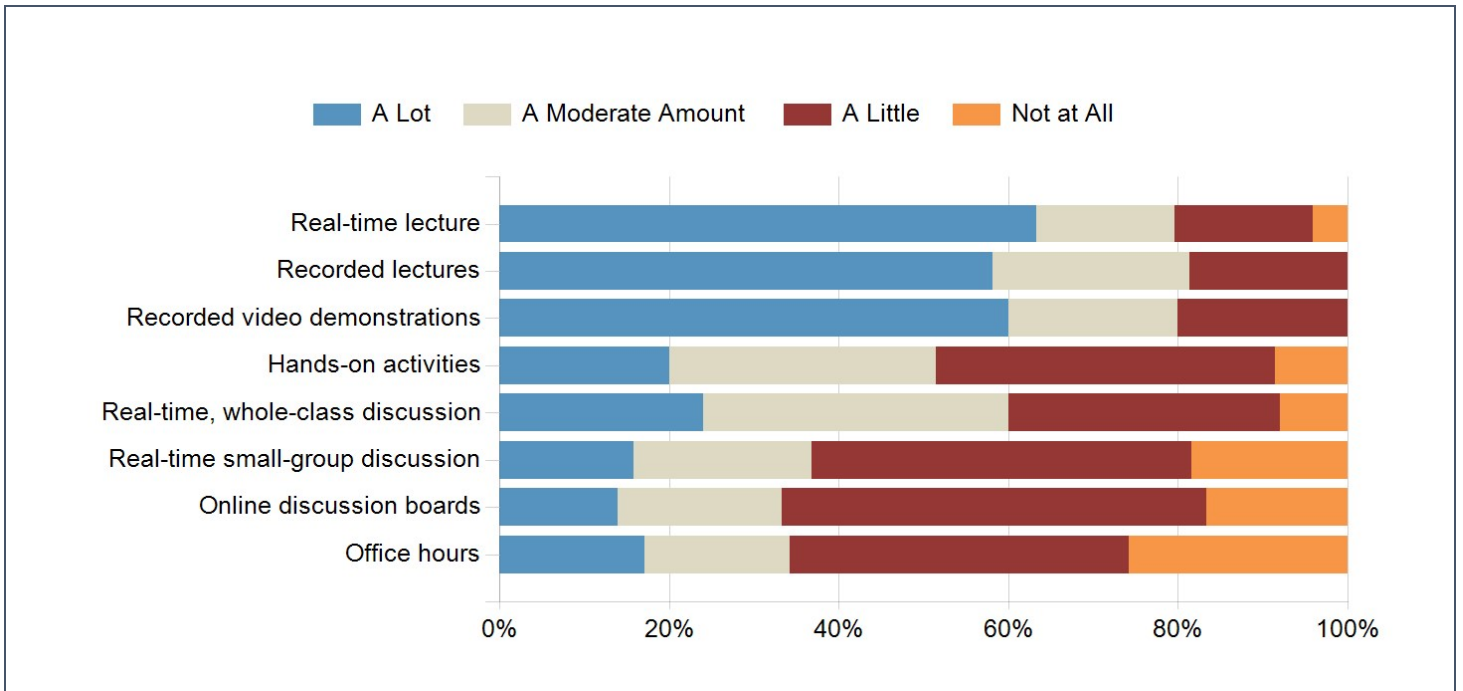
7. Online discussion boards



8. Office hours



Learning Activities - To what extent did the following learning activities contribute to your learning?



Please tell us briefly how any of the above learning activities (or other activities not included above) contributed to your learning in this course.

Comments
The professor walking through examples was extremely helpful
The real-time problem solving demonstrations were effective.
I learned everything in this class from the great virtual textbook readings and recorded lectures. Lectures were recorded well. I was grateful that I was able to learn all of the content of this class asynchronously.
There're a lot of practice questions for weekly quizzes.
The professor always puts enthusiasm into his teaching style, which increases my motivation to learn the course.
The writeup is helpful in explicating the kernel of discrete maths and provides for insights into computation theory as well.
The prof's great at lecturing
The amount of practice material that was given helped a lot, however, I wish there were more explanations for the questions.
Readings went the most in depth, but I learned the most from a live lecture.
Prof. Tycho's lectures are amazing. He explains everything so well.
All materials were effectively taught in lectures.
The group projects are very interesting as we can meet with different people working on the same problem for 50 mins.
I was able to rewatch the lectures to understand material I did not the first time around, and office hours were accessible.
Office hours were crucial to my understanding of the course material. The real-time lectures were also helpful, but I believe sometimes a bit rushed.
Weekly quizzes helped me stay on the right track and keep up with the pace.
I liked how the professor encouraged asking questions during the lecture, even though it was a large class. Hearing my classmates ask questions and being able to ask my own really helped me gain a better understanding of the material.
He was good at explaining things in lecture.
Daily lectures were fantastic, but the periodic breakout rooms and group projects weren't especially helpful
recorded lectures helped very much, can go back and review points if don't understand
The TAs were really helpful!! They were also super accessible because there were so many TAs, and the office hour waiting room was never very busy. This is something that is not true of all CS classes at UVA. So good job, and keep it up! :)
Online discussion boards such as piazza helped solve doubts effectively
The lab sessions were very effective.
Lectures were good. I wouldn't bother with the group projects again tho
The lectures were more than enough to get a good understanding of the material. If I needed more material, all i needed to do was look through the textbook material a bit.
The lectures were very informative and the professor was good at addressing any of the questions that came up about the lecture topic.
Lectures and recordings were very useful as they were interactive. For discussions and office hours, I rarely checked them and did not require much help for the class.
Group projects were cool because we could interact with each other.
The in person lectures were very useful! I appreciated that I could go back to watch them. The group projects were nice to get to know some people in the class!

Course Comments

What would you like the instructor and university administrators to know about your experience in this course?

Comments
Great instructor, great course. Just wish piazza was more active.
The instructor was great.
It was great. This class is really easy and I did well. The professor would unintentionally creepy illustrations before class sometimes.
I had a great experience
Detailed lectures are helpful for understanding. I developed a profound interest in the inner workings of computation, and the logical clarity the course has to offer is enlightening. Plus, the sketches before the lectures are impressive:)
Good course
Prof. Tycho is amazing at teaching this course. Also, the format of grading with makeups really encourages learning the material really well while simultaneously taking a bit of stress off of our shoulders.
This was a well taught class. I feel I have learned a lot.
Pretty good, except that some regrade request is not responded effectively. But it is compensated by multiple make-up quizzes.
This course was planned out well.
This course was amazing and the professor was extremely knowledgeable. I believe I learned a lot during my time in this course, and the various resources available were also crucial to my increased understanding.
Overall, the workload is reasonable and professor is very helpful
I liked how the professor encouraged asking questions during the lecture, even though it was a large class. Hearing my classmates ask questions and being able to ask my own really helped me gain a better understanding of the material.
Some of the questions were too tricky.
N/A
very good, love the professor and his energy
The professor did an awesome job keeping everything organized!
Professor Tychonievich is great at his job and he provided several opportunities to succeed in this course.
The course break-up into modules was very effective in learning as we could concentrate on a wide range of topics
I learned a lot more than I thought I would, so I'm glad. Overall, pretty happy with the course, the structure, and the instructor.
It was a pleasant and informative course.
This course was overall pretty good.
The lectures were very informative, and I liked that the lectures were recorded in case something caused me to miss the real-time meeting. I did prefer coming to the live lectures because then I had the opportunity to ask any questions that I had about the material
Overall experience was good, but having exclusively online sessions made navigating the course and the website a little more difficult
I enjoyed the group projects because we could interact with our classmates for once. The organization of the quizzes was really beneficial for my own learning.
I enjoyed this course! Synchronous class was very useful.

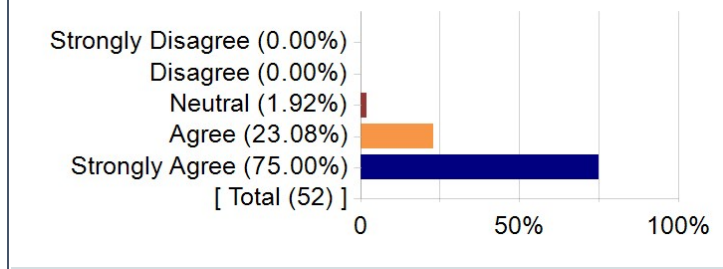
Instructor Questions

Mean values are displayed below.

Scale 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

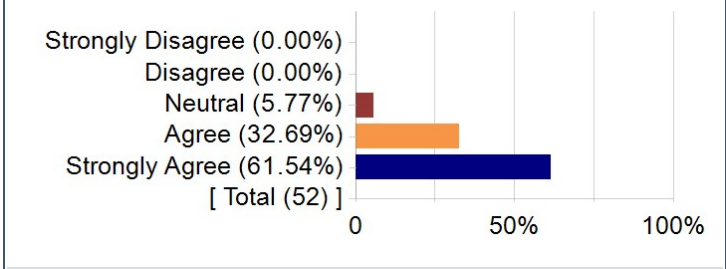
Question	Instructor Average - this course		Instructor Average - all courses (lat7h Luther Tychonievich)		Department (CS)		School (ENGR)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
The instructor clearly communicated the course schedule and expectations for participation (e.g., readings, discussions).	52	4.73	132	4.60	4511	4.36	12427	4.37
The instructor clearly communicated the course learning objectives.	52	4.56	132	4.61	4514	4.36	12422	4.37
The instructor implemented learning activities and assignments that allowed me to demonstrate understanding of the course material.	51	4.37	132	4.46	4525	4.31	12458	4.31
The instructor provided me prompt and useful feedback on my learning.	50	4.36	131	4.31	4530	3.96	12476	3.99
The instructor provided opportunities for my active participation.	51	4.06	132	4.12	4520	4.01	12459	4.12
The instructor was available to help support my learning.	52	4.27	133	4.34	4505	4.18	12424	4.26
The instructor fostered an environment where I felt valued as an individual and that I belonged in the class.	51	4.18	131	4.29	4517	4.13	12458	4.20
Overall, the instructor was an effective teacher.	50	4.44	130	4.52	4515	4.21	12430	4.23
The instructor created an environment that respected difference and welcomed diverse perspectives.	51	4.18	132	4.27	4528	4.03	12472	4.11

1. The instructor clearly communicated the course schedule and expectations for participation (e.g., readings, discussions).



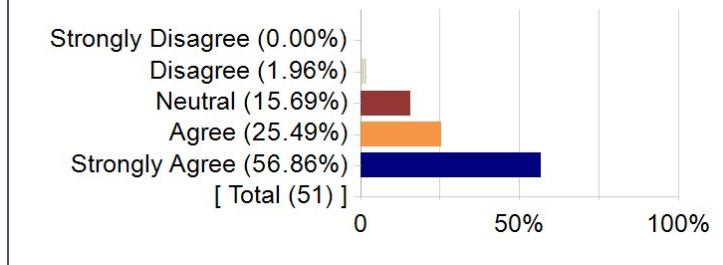
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	1	1.92%
Agree	4	12	23.08%
Strongly Agree	5	39	75.00%
Statistics			Value
Mean			4.73
Median			5.00
Standard Deviation			0.49

2. The instructor clearly communicated the course learning objectives.



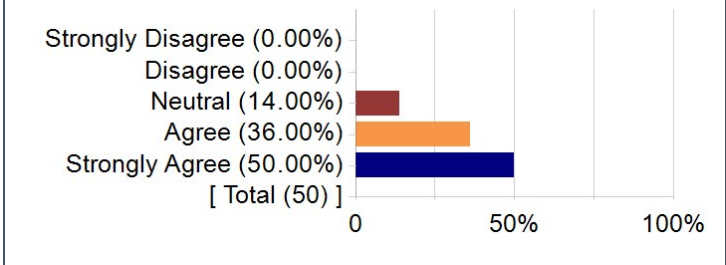
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	3	5.77%
Agree	4	17	32.69%
Strongly Agree	5	32	61.54%
Statistics			Value
Mean			4.56
Median			5.00
Standard Deviation			0.61

3. The instructor implemented learning activities and assignments that allowed me to demonstrate understanding of the course material.

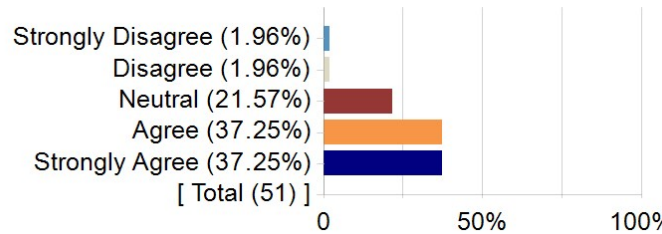
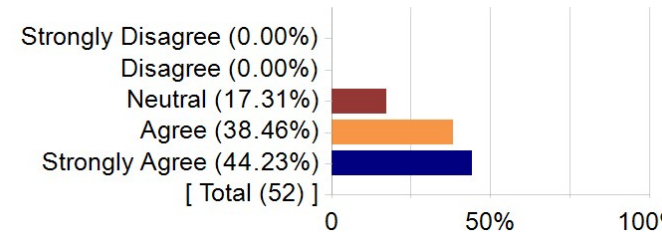
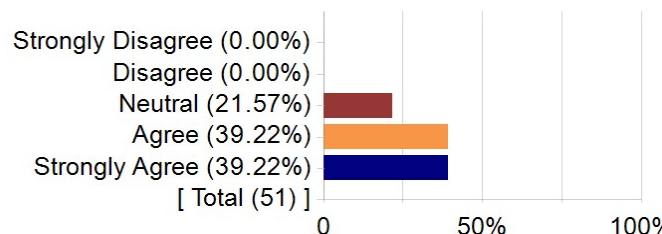
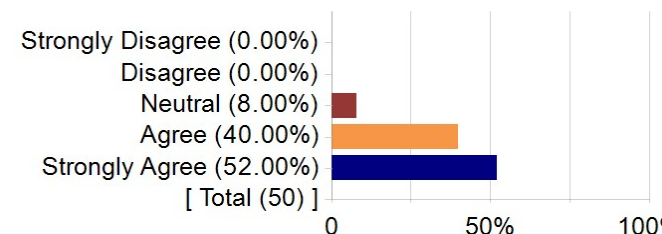


Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	1	1.96%
Neutral	3	8	15.69%
Agree	4	13	25.49%
Strongly Agree	5	29	56.86%
Statistics			Value
Mean			4.37
Median			5.00
Standard Deviation			0.82

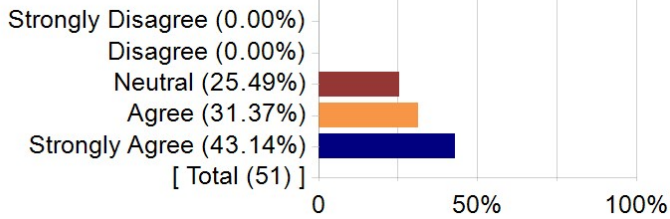
4. The instructor provided me prompt and useful feedback on my learning.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	7	14.00%
Agree	4	18	36.00%
Strongly Agree	5	25	50.00%
Statistics			Value
Mean			4.36
Median			4.50
Standard Deviation			0.72

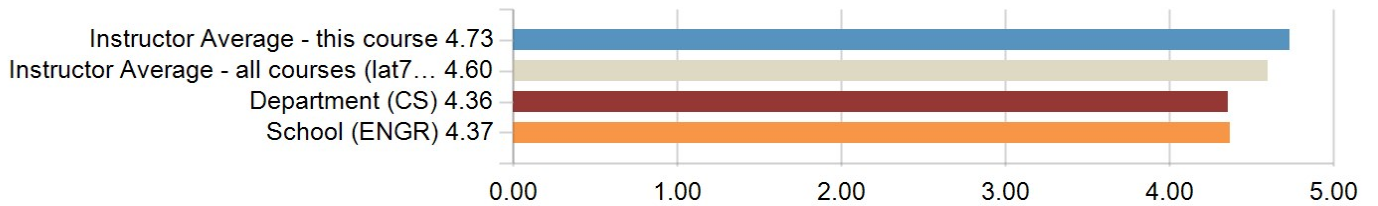
5. The instructor provided opportunities for my active participation.					6. The instructor was available to help support my learning.				
									
Options	Score	Count	Percentage		Options	Score	Count	Percentage	
Strongly Disagree	1	1	1.96%		Strongly Disagree	1	0	0.00%	
Disagree	2	1	1.96%		Disagree	2	0	0.00%	
Neutral	3	11	21.57%		Neutral	3	9	17.31%	
Agree	4	19	37.25%		Agree	4	20	38.46%	
Strongly Agree	5	19	37.25%		Strongly Agree	5	23	44.23%	
Statistics				Value	Statistics				Value
Mean				4.06	Mean				4.27
Median				4.00	Median				4.00
Standard Deviation				0.93	Standard Deviation				0.74
7. The instructor fostered an environment where I felt valued as an individual and that I belonged in the class.					8. Overall, the instructor was an effective teacher.				
									
Options	Score	Count	Percentage		Options	Score	Count	Percentage	
Strongly Disagree	1	0	0.00%		Strongly Disagree	1	0	0.00%	
Disagree	2	0	0.00%		Disagree	2	0	0.00%	
Neutral	3	11	21.57%		Neutral	3	4	8.00%	
Agree	4	20	39.22%		Agree	4	20	40.00%	
Strongly Agree	5	20	39.22%		Strongly Agree	5	26	52.00%	
Statistics				Value	Statistics				Value
Mean				4.18	Mean				4.44
Median				4.00	Median				5.00
Standard Deviation				0.77	Standard Deviation				0.64

9. The instructor created an environment that respected difference and welcomed diverse perspectives.

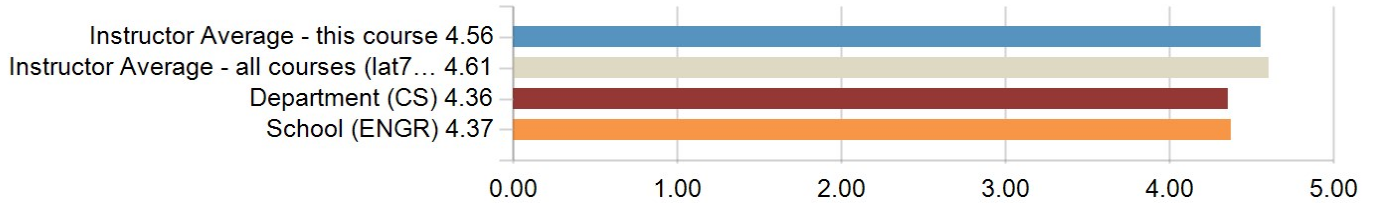


Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	13	25.49%
Agree	4	16	31.37%
Strongly Agree	5	22	43.14%
Statistics			Value
Mean			4.18
Median			4.00
Standard Deviation			0.82

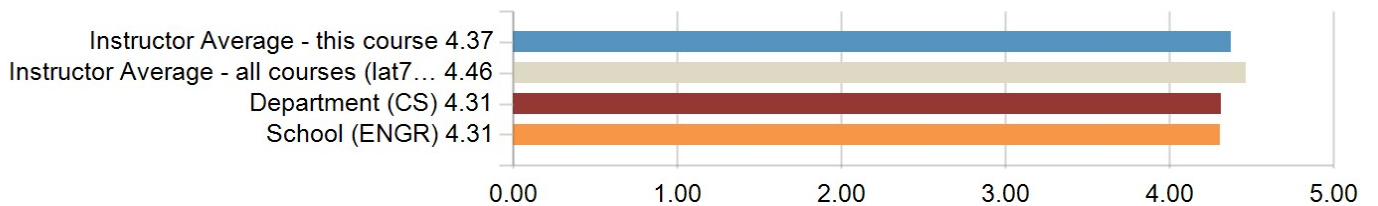
1. The instructor clearly communicated the course schedule and expectations for participation (e.g., readings, discussions).



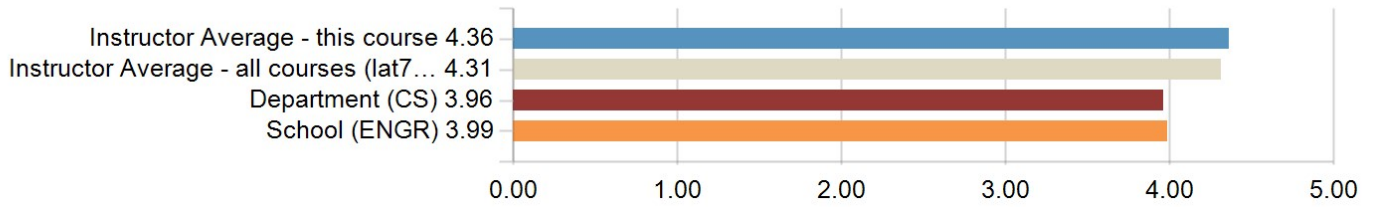
2. The instructor clearly communicated the course learning objectives.



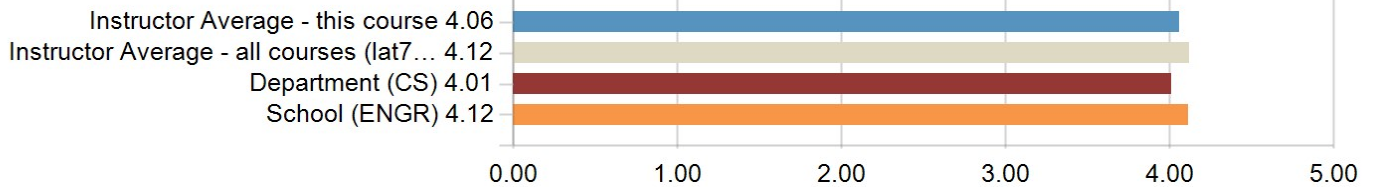
3. The instructor implemented learning activities and assignments that allowed me to demonstrate understanding of the course material.



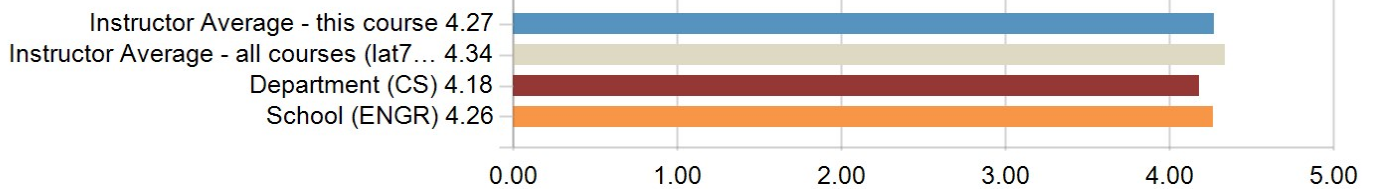
4. The instructor provided me prompt and useful feedback on my learning.



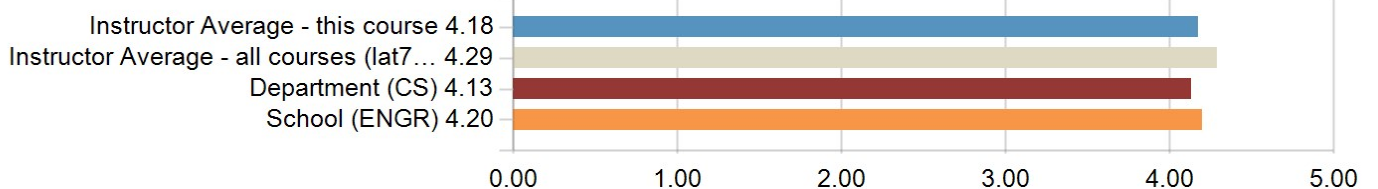
5. The instructor provided opportunities for my active participation.



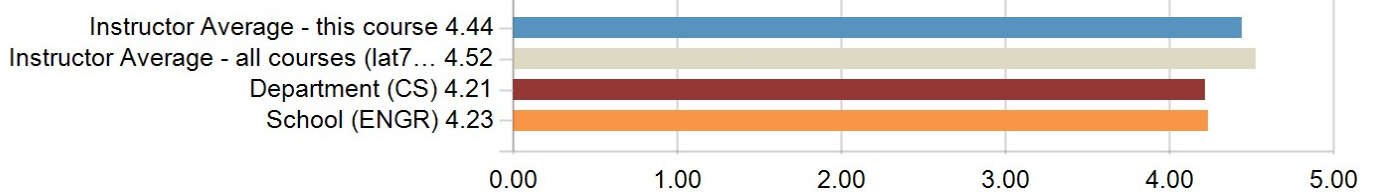
6. The instructor was available to help support my learning.



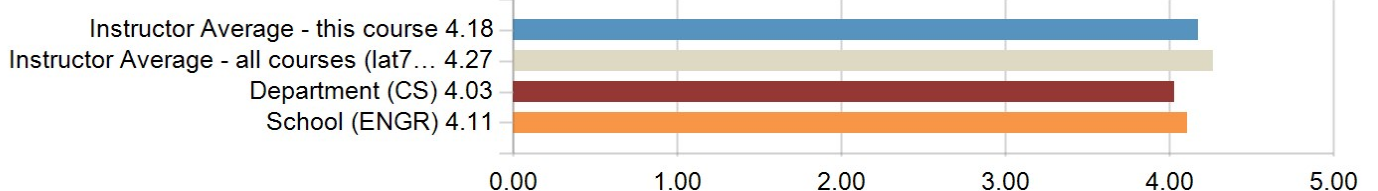
7. The instructor fostered an environment where I felt valued as an individual and that I belonged in the class.

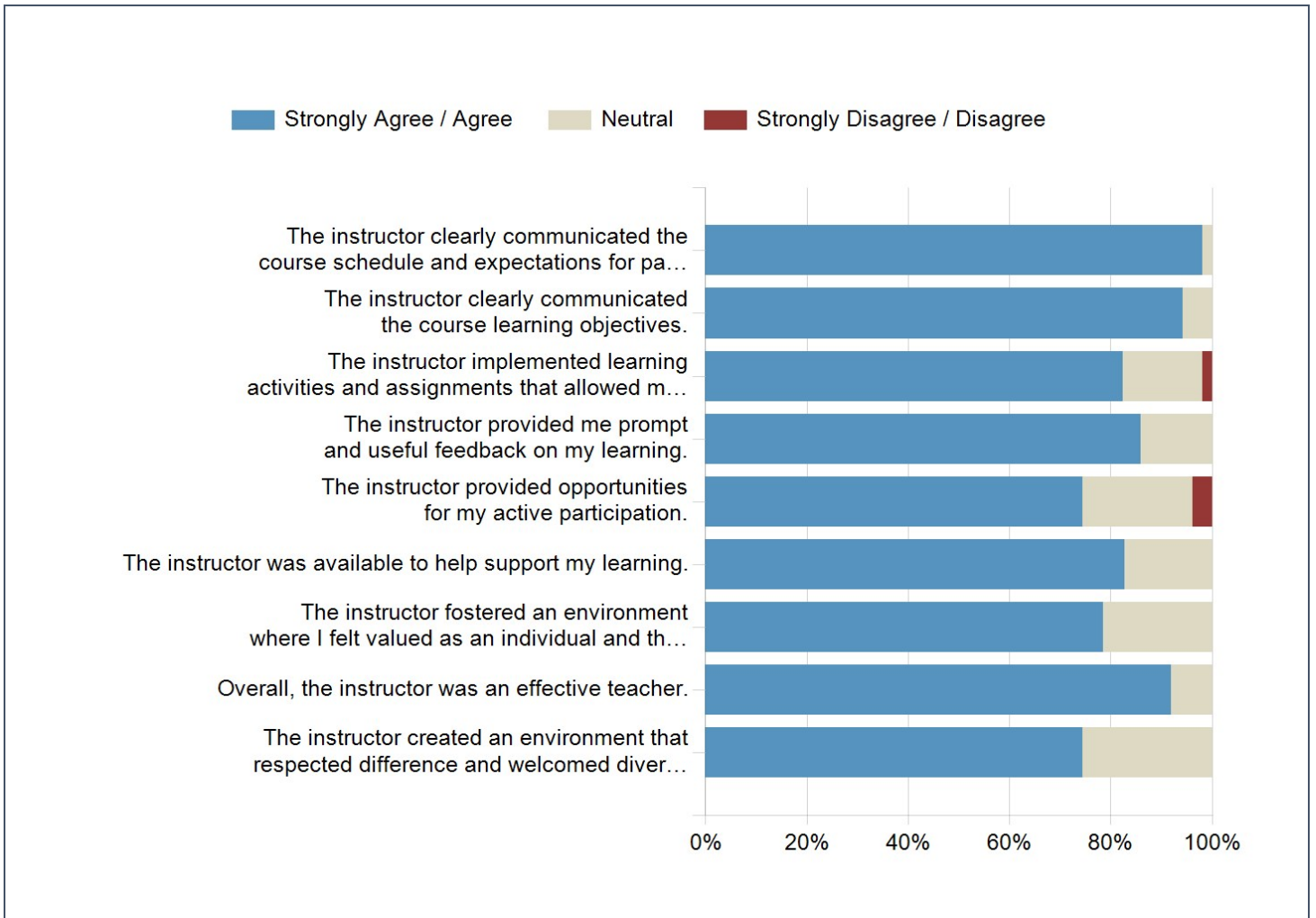


8. Overall, the instructor was an effective teacher.



9. The instructor created an environment that respected difference and welcomed diverse perspectives.





You selected "AGREE or STRONGLY AGREE" on the previous question: Please give specific examples as to how Luther Tychonievich created an environment that respected difference and welcomed diverse perspectives.

Comments
Professor Tychonievich is an amazing professor. He regularly made sure we were clear with the material and was always very helpful. With respect to creating an environment that respects difference and welcomes diverse perspectives, it goes without saying that he did the very best. Professor Tychonievich has been so helpful and I am extremely thankful to have taken this course with him.
He didn't say anything offensive. I can't imagine how someone would find him unwelcoming, this was a super objective math/CS class and Luther is really nice.
allowed open questions during lecture
Always asked if we had any questions on any subject. He took the time to answer each and every question even if they were a little bit off topic.
When doing a proof, he listened carefully about different opinions from another student and help him analyze the method.
The professor provides for refreshing interactions with free expression and enjoyable conversations. The sketches that pertain to the subject matter is wonderful.
Open, welcoming personality
On the unit from translating English to logic, he explicitly acknowledged that there were people in the class for whom English might not be their first language and tried to accommodate their difficulties on the topic.
Professor Tychonievich did nothing to make me feel unwelcome, and I did not see him do anything that I feel would make others feel unwelcome.
The professor is very enthusiastic and open to different ideas in class
This class has students from all over the world.
Prof. Tychonievich was receptive to questions during the live-lectures and I did not feel discouraged to ask questions.
As long as anyone has questions during class, professor would stop and explain it in several different ways for clearer illustration.
He seemed open to everyone.
It was implicit
very energetic, positive energy explains problems and questions very well simplified complex languages for students
He always helped out with any questions from any background of knowledge.
He was engaging and answered everyone's questions.
The instructor encouraged a diverse range of questions during real time lectures
He was very respectful and accepting.
He would frequently ask for questions and provide very thorough answers to questions that anyone had. He was also very open to different ways to solve problems.
The course staff in general was very open to reevaluating course material/assignments if those assignments were interpreted differently.

Instructor Comments

What constructive suggestions do you have to help Luther Tychonievich improve this course for future students?

Comments
Please continue being awesome! You were so kind and helpful. You are truly a legend and UVA needs more professors like you! <3 <3 <3
Piazza wasn't very useful because TAs were not active on there. Discussion boards, especially with online classes, are really necessary.
Allow more time on the makeups.
Maintain this style of teaching and the way the course has been constructed for as long as possible. Many times I needed more time to grasp certain concepts so when I didn't do well on the quizzes the first time, the makeups allowed me to redeem myself and even further my understanding of the material.
I would suggest going through more examples in class especially on the later topics because often the quiz questions were a lot more complex than the few examples we did in class.
A mandatory final would improve this class by requiring me to actually use information more than one time on one quiz.
Maybe have a little more explanation on some of the practice quizz questions
Wholesome course with thought provoking logical know-hows :) Could use some more resources and writeup to bring the discrete math closes with cods :)! Perhaps some code that implements proof by induction?
No suggestions
Maybe include more explanations in the answer keys for the practice? I had a hard time looking through the readings and recorded lectures to figure out some concepts on the practice quizzes.
There were times where I felt that the lectures and materials prepared were a bit disorganized. There was much back and forth that happened during some lectures that made them hard to get through. I like the format where you write on the board, however, it can be messy and hard to interpret what is being written.
Maybe slightly better correspondence between the readings and the lectures? Overall, the course was good and effective.
The group projects were a little awkward but somewhat helpful. I really loved your lectures and the way stuff is graded, so thank you!
This class was very well taught. While it is a small critique, I would recommend that published lecture slides be slightly more organized.
Maybe to increase the difficulty and teach more contents during class.
Slow down a little in the lectures.
less messiness with the quizzes each week—constant questions being dropped, etc created a situation of high stress quiz scores. in addition, the entire second module was too confusing to be useful at times—in class and what was on the quiz was simply too different
Prof. Tychonievich was overall a very effective teacher. The only suggestion I would give is to have more conspicuous office hours. I noticed that Prof. Tychonievich had office hours, but like the undergraduate teaching assistants, I would never actually see him available on the Discord (where the office hours were conducted). This may have been to the fault of my own, but I believe it was not clear whether he actually held office hours or not.
It might be better if questions in the group project can be posted ahead of time for students to look over before class. I could save the class time used to understand the project.
I think that if a mistake is made on a key for a quiz, the students should all get credit for the corresponding question, rather than just dropping the point entirely.
Make the quizzes less tricky.
none he was great
My only complaint is that I didn't find the breakout rooms and group projects to be especially helpful, but other than that, an overall fantastic course! Thanks for a great semester!
n/a
Honestly, this course was really organized and I appreciate you keeping the website up to date. Thank you for doing an awesome job!
Providing even more practice questions would always be helpful, as these helped me understand the course concepts the most
I really liked the project days and I really liked the format of the class, with the 4 module quizzes and the optional makeups! I wouldn't change anything; keep it up!

Comments
The introduction of a discussion section to review the content from the week's learning before the friday test
Thank you Prof. Tychonievich.
No I really enjoyed this course.
I don't really have any suggestions because I believe that the course is very well-structured
The group projects were an easy way to get points but also felt very awkward as oftentimes some students would never talk and get full credit for an assignment when they contributed nothing.
I thought it was very organized.
More breakout rooms to discuss an example during class? Overall it was very good!