



Report for CS 6456 - 001 Operating Systems Xiaozhu Lin

Project Title: **2020 Fall Course Evaluation**

Course Audience: **22**

Responses Received: **15**

Response Ratio: **68.18%**

Report Comments

Fall 2020 Individual Instructor Report by Section.

IMPORTANT NOTICE: Department, School and University comparison data will not be accurate until after the evaluation project closes in mid-December. Once the data gathering is complete, this report will be labeled as "Final Report".

Course Name: CS 6456 - 001 Operating Systems

Instructor Name: Xiaozhu Lin

Evaluation Start Date: Nov 21 2020 12:00AM

Evaluation End Date: Dec 1 2020 12:00AM

Creation Date: **Friday, December 11, 2020**

Fall 2020 Questionnaire

Course Preparation:

1. The average number of hours (per week) that I spent outside of class preparing for CS 6456 - 001 Operating Systems :
 - Less than 1
 - 1-3
 - 4-6
 - 7-9
 - 10 or more

Course Questions:

Answer the following questions based on your experience in CS 6456 - 001 Operating Systems.
(*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 Xiaozhu Lin. 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 Xiaozhu Lin 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 Xiaozhu Lin did not create an environment that respected difference and welcomed diverse perspectives.

Open Comment Question (Instructor):

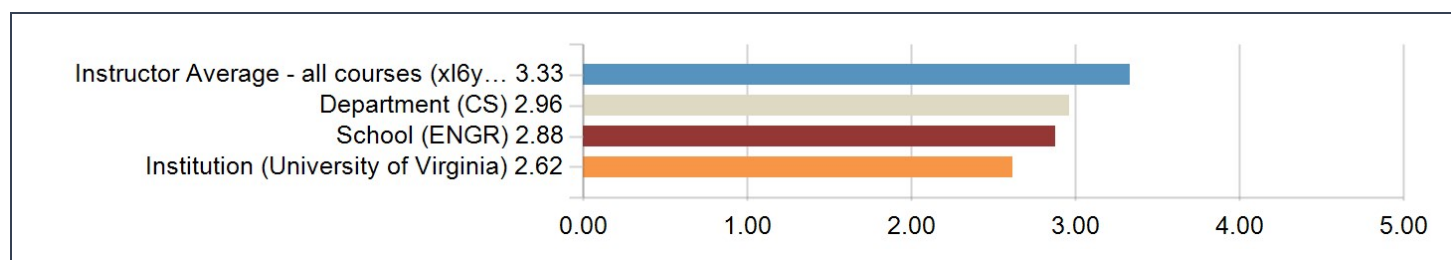
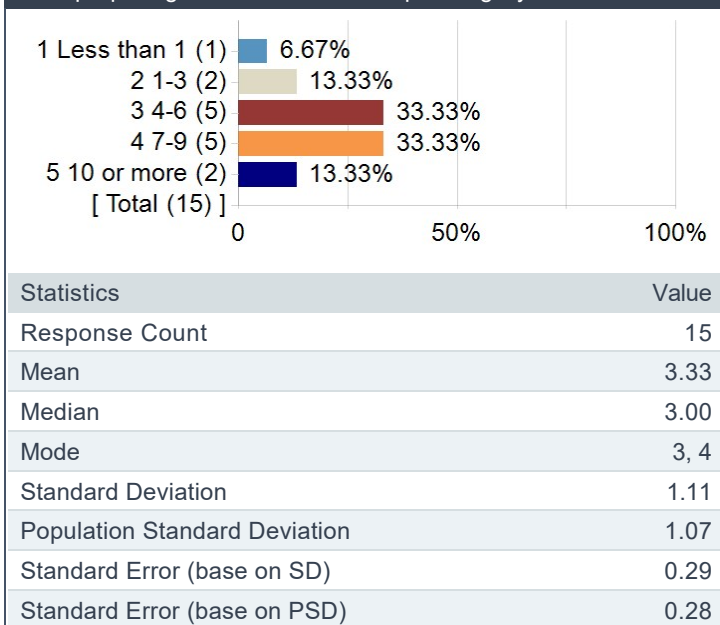
Your response to the open-ended question below will be shared only with Xiaozhu Lin. If this course was taught by multiple instructors, you will have the opportunity to provide feedback to each. Please avoid using instructors' names in your responses to ensure confidentiality.

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

Student Preparation

Question	Instructor Average - all courses (xl6yq Xiaozhu Lin)		Department (CS)		School (ENGR)		Institution (University of Virginia)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
The average number of hours (per week) that I spent outside of class preparing for CS 6456 - 001 Operating Systems:	15	3.33	4343	2.96	10681	2.88	68272	2.62

The average number of hours (per week) that I spent outside of class preparing for CS 6456 - 001 Operating Systems:



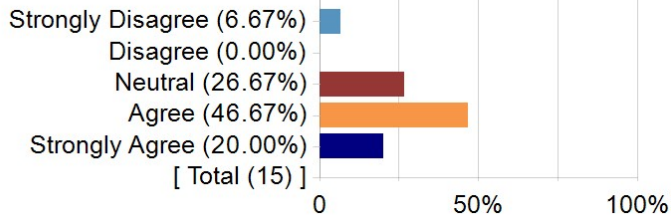
Course Questions

Mean values are displayed below.

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

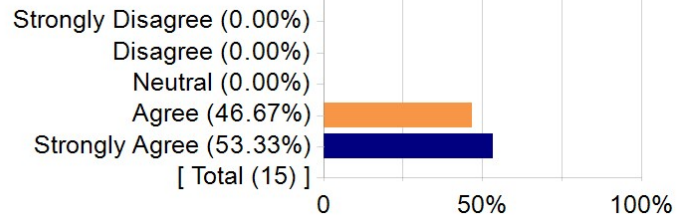
Question	Instructor Average - all courses (xl6yq Xiaozhu Lin)		Department (CS)		School (ENGR)		Institution (University of Virginia)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
The course increased my enthusiasm for the topic.	15	3.73	4370	3.88	10769	3.84	68712	3.99
Through this course I gained a deeper understanding of the subject matter.	15	4.53	4338	4.26	10694	4.22	68299	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.	15	4.33	4365	4.38	10759	4.39	68679	4.53

1. The course increased my enthusiasm for the topic.



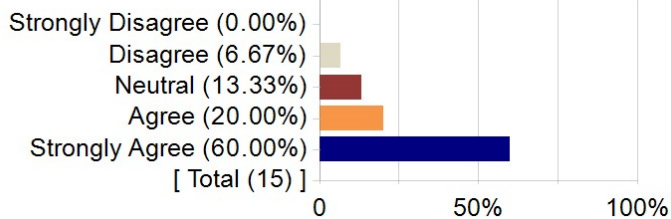
Options	Score	Count	Percentage
Strongly Disagree	1	1	6.67%
Disagree	2	0	0.00%
Neutral	3	4	26.67%
Agree	4	7	46.67%
Strongly Agree	5	3	20.00%
Statistics			Value
Mean			3.73
Median			4.00
Standard Deviation			1.03

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



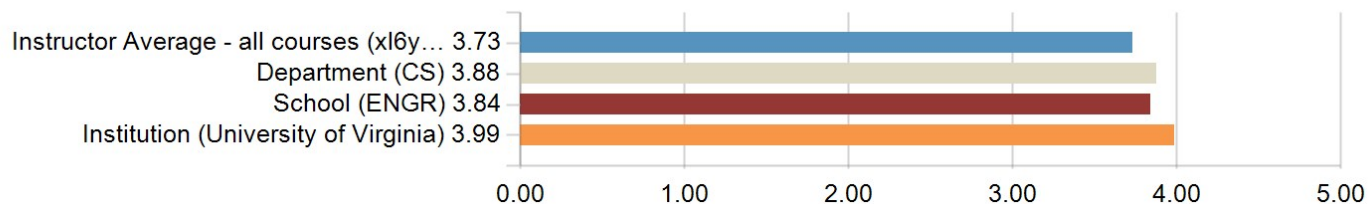
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	7	46.67%
Strongly Agree	5	8	53.33%
Statistics			Value
Mean			4.53
Median			5.00
Standard Deviation			0.52

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.

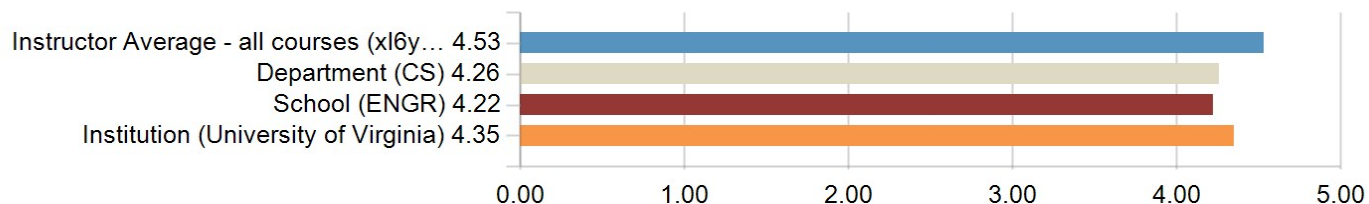


Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	1	6.67%
Neutral	3	2	13.33%
Agree	4	3	20.00%
Strongly Agree	5	9	60.00%
Statistics			Value
Mean			4.33
Median			5.00
Standard Deviation			0.98

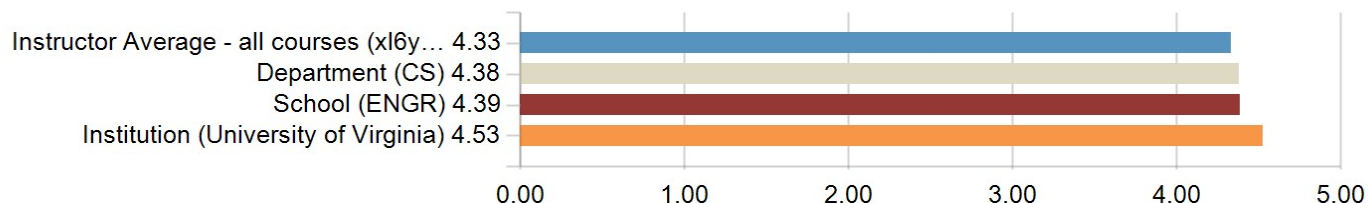
1. The course increased my enthusiasm for the topic.



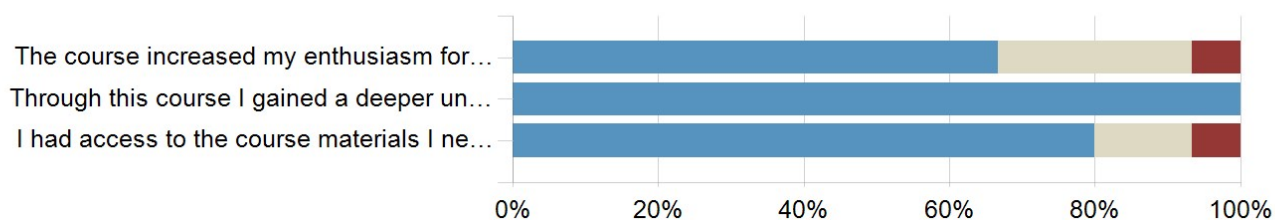
2. Through this course I gained a deeper understanding of the subject matter.



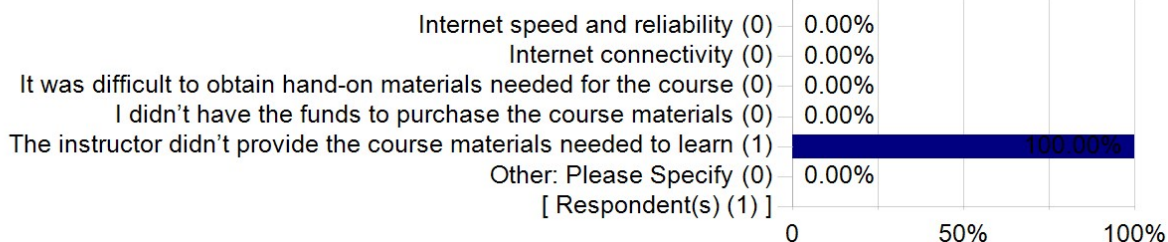
3. I had access to the course materials I needed to learn, including access to required textbooks, course readings, technology tools, and other materials required for class assignments and projects.



Strongly Agree / Agree Neutral Strongly Disagree / Disagree



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.



Learning Activities

Mean values are displayed below.

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

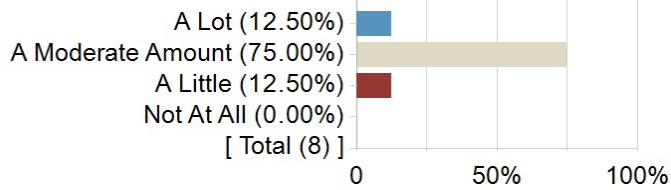
Learning Activities - To what extent did the following learning activities contribute to your learning?

Question	Instructor Average - this course		Department (CS)		School (ENGR)		Institution (University of Virginia)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
Real-time lecture	15	3.27	2772	2.93	7907	3.06	53199	3.34
Recorded lectures	13	2.92	3755	3.23	8443	3.16	42016	3.19
Recorded video demonstrations	8	3.00	2639	3.05	5445	3.00	27106	3.00
Hands-on activities	14	3.57	3229	3.27	6768	3.20	37864	3.19
Real-time, whole-class discussion	12	3.33	1903	2.46	6169	2.68	47296	3.11
Real-time small-group discussion	15	3.20	2335	2.54	6561	2.78	47086	3.12
Online discussion boards	15	3.47	3194	2.75	6299	2.66	30266	2.69
Office hours	13	2.92	3292	2.80	7720	2.77	41370	2.78

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

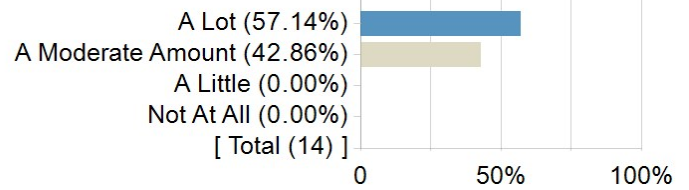
1. Real-time lecture					2. Recorded lectures				
Options	Score	Count	Percentage		Options	Score	Count	Percentage	
A Lot	4	6	40.00%		A Lot	4	2	15.38%	
A Moderate Amount	3	7	46.67%		A Moderate Amount	3	8	61.54%	
A Little	2	2	13.33%		A Little	2	3	23.08%	
Not At All	1	0	0.00%		Not At All	1	0	0.00%	
Statistics				Value	Statistics				Value
Mean				3.27	Mean				2.92
Median				3.00	Median				3.00
Standard Deviation				0.70	Standard Deviation				0.64

3. Recorded video demonstrations



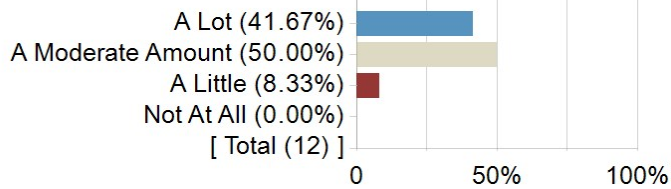
Options	Score	Count	Percentage
A Lot	4	1	12.50%
A Moderate Amount	3	6	75.00%
A Little	2	1	12.50%
Not At All	1	0	0.00%
Statistics	Value		
Mean	3.00		
Median	3.00		
Standard Deviation	0.53		

4. Hands-on activities



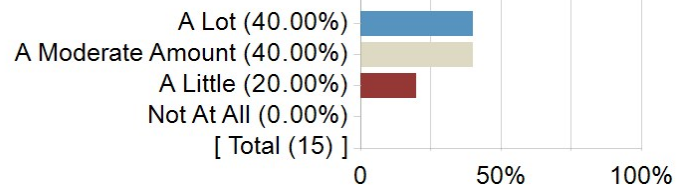
Options	Score	Count	Percentage
A Lot	4	8	57.14%
A Moderate Amount	3	6	42.86%
A Little	2	0	0.00%
Not At All	1	0	0.00%
Statistics	Value		
Mean	3.57		
Median	4.00		
Standard Deviation	0.51		

5. Real-time, whole-class discussion

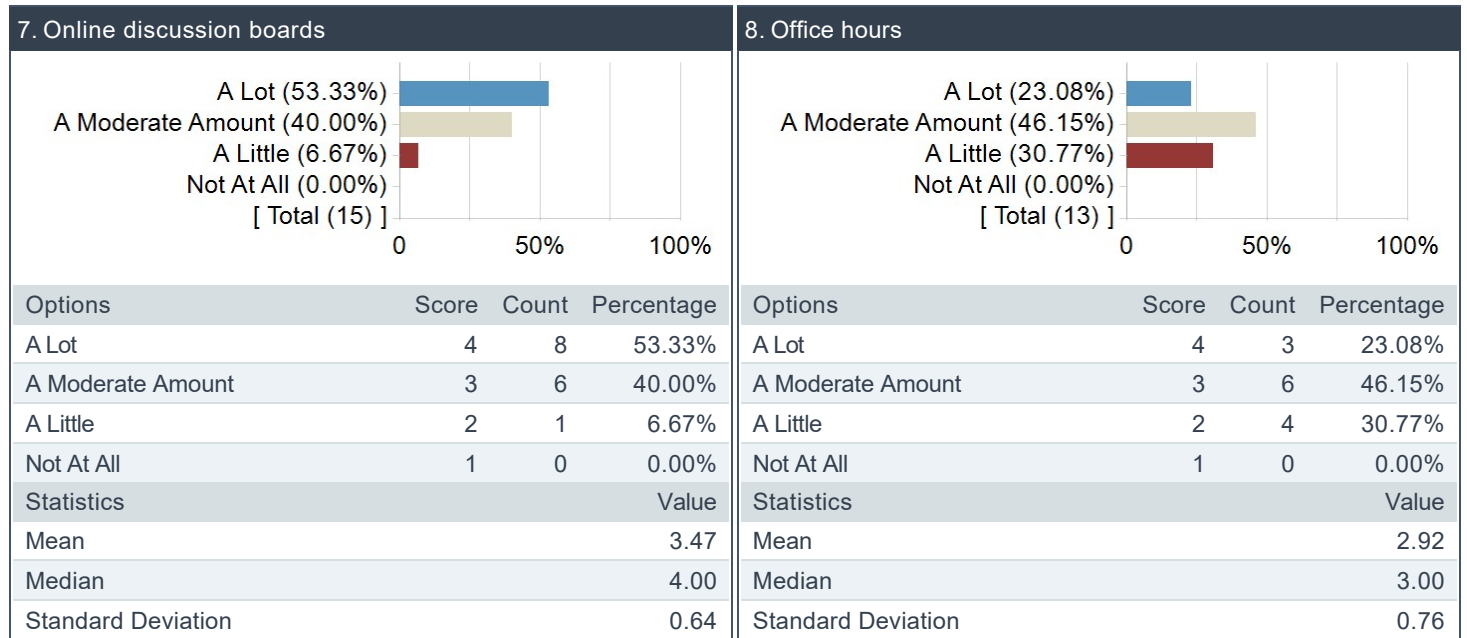


Options	Score	Count	Percentage
A Lot	4	5	41.67%
A Moderate Amount	3	6	50.00%
A Little	2	1	8.33%
Not At All	1	0	0.00%
Statistics	Value		
Mean	3.33		
Median	3.00		
Standard Deviation	0.65		

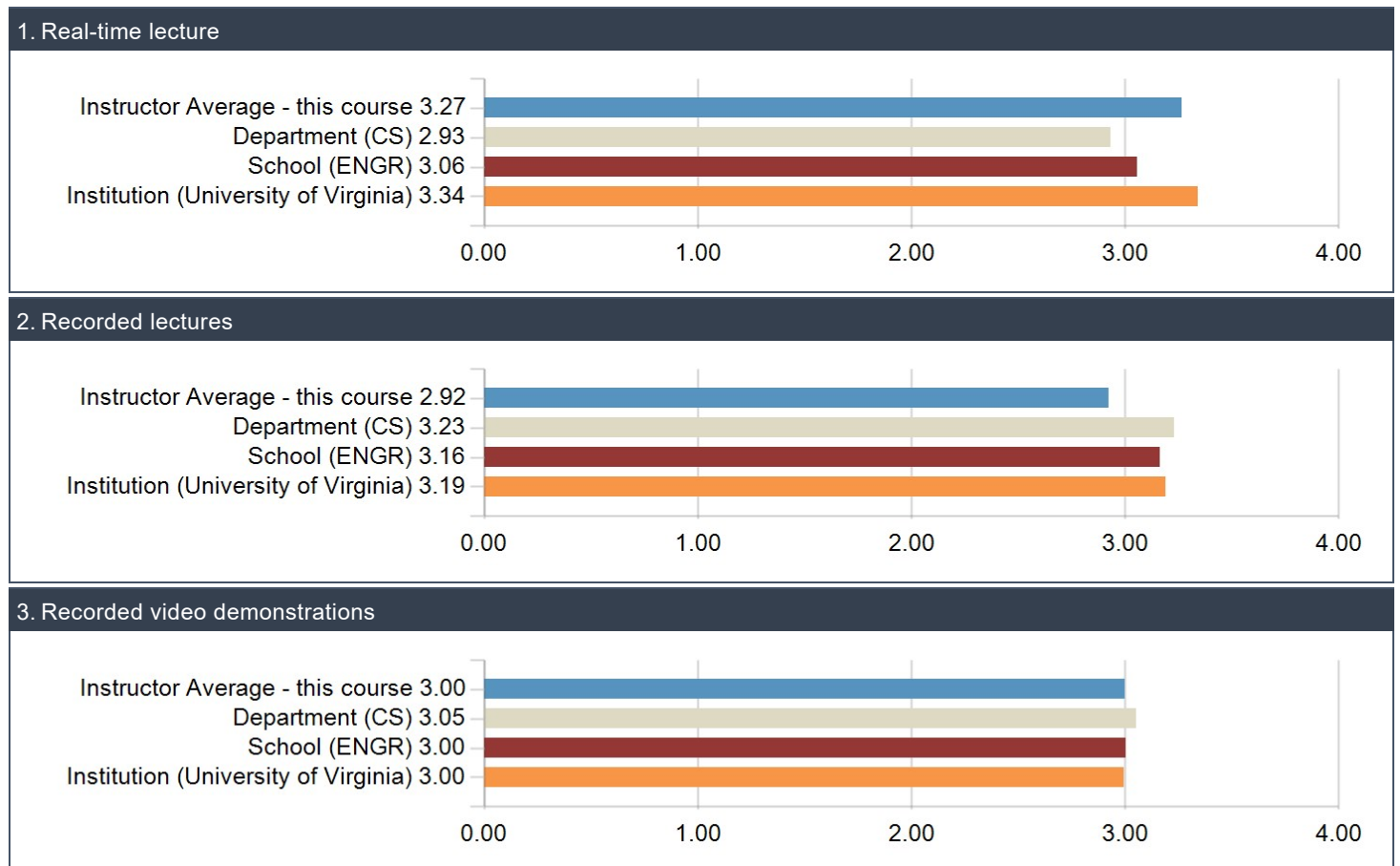
6. Real-time small-group discussion



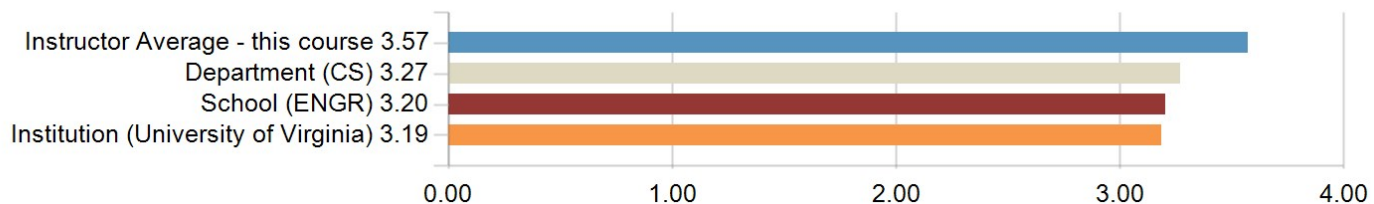
Options	Score	Count	Percentage
A Lot	4	6	40.00%
A Moderate Amount	3	6	40.00%
A Little	2	3	20.00%
Not At All	1	0	0.00%
Statistics	Value		
Mean	3.20		
Median	3.00		
Standard Deviation	0.77		



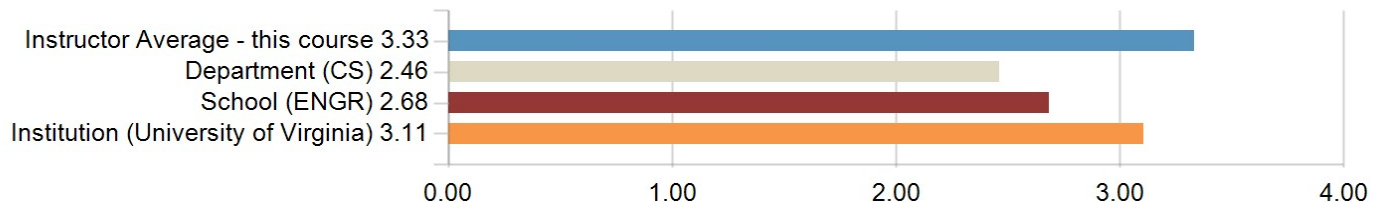
Learning Activities - To what extent did the following learning activities contribute to your learning?



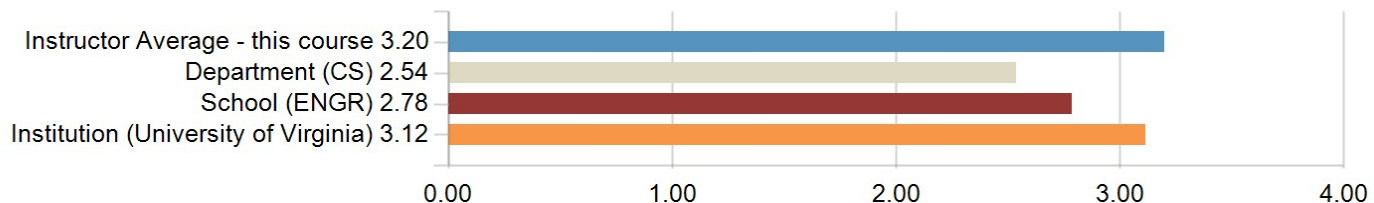
4. Hands-on activities



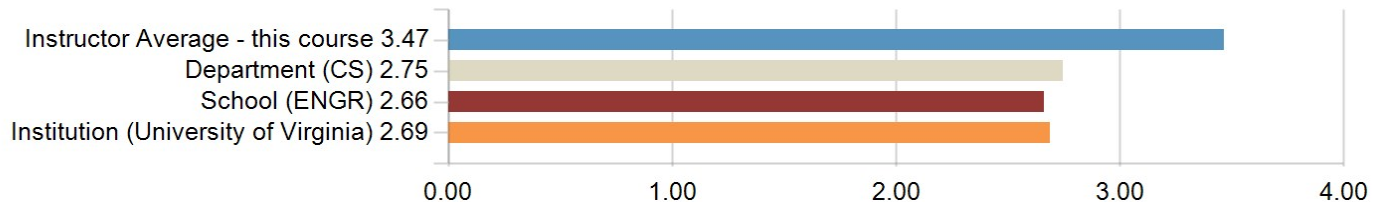
5. Real-time, whole-class discussion



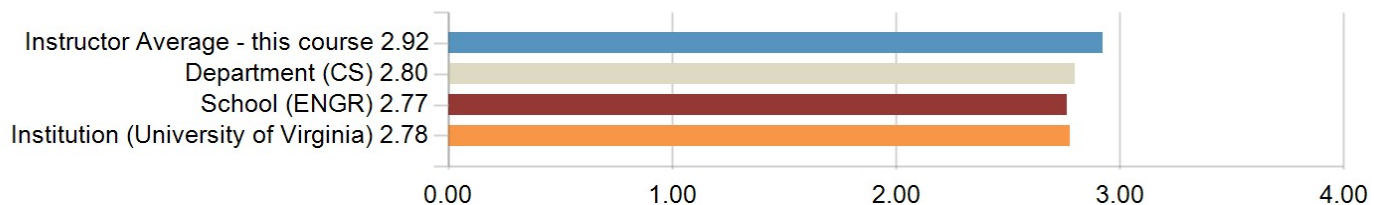
6. Real-time small-group discussion

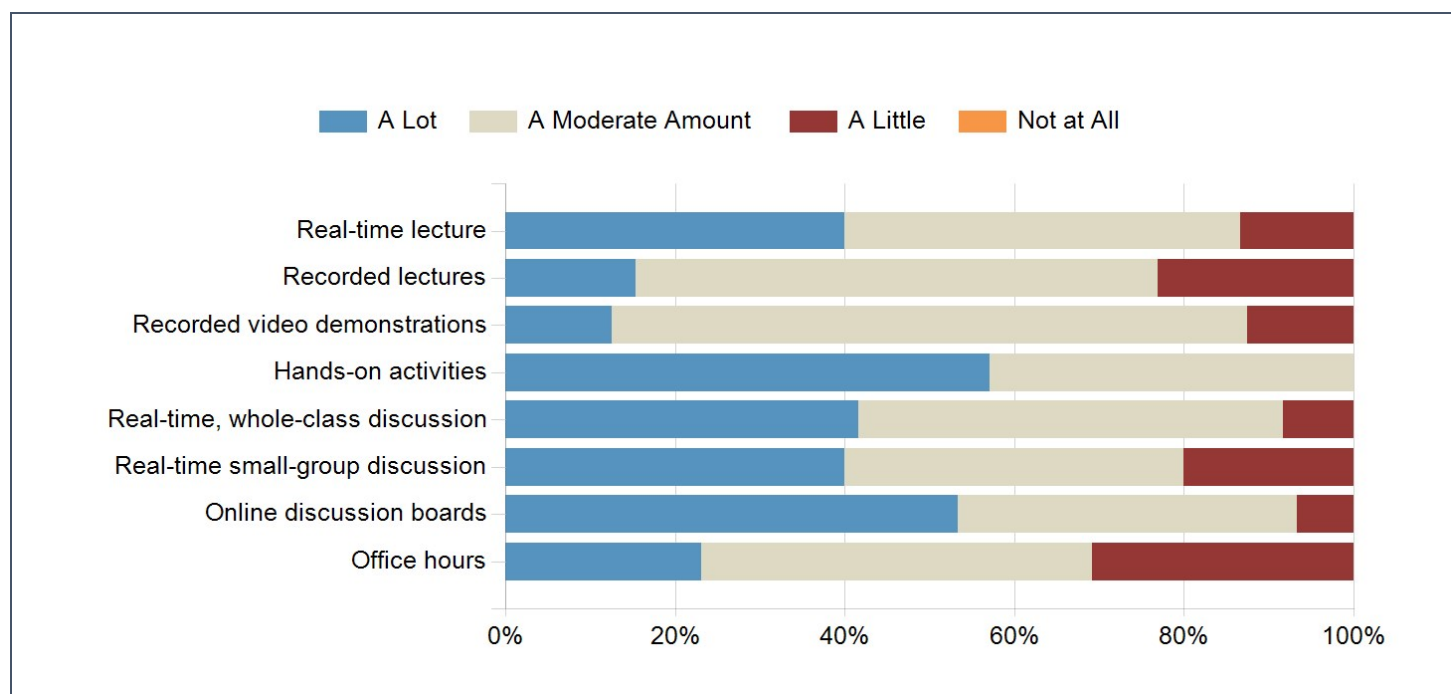


7. Online discussion boards



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
lectures were good and assignments were very hands on.
I thought Microsoft Teams ended up working out pretty well this semester.
The whole course was projects and those projects did teach me about the subject. Some were more brutal than others.
During the course, we have time to discuss.
small-group discussion allows us to discuss our homework, which helps me a lot when I had a hard time doing homework
Discussions on Teams/in the class and the virtual hacking sessions helped a great deal. It would have been very difficult otherwise.

Course Comments

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

Comments
I felt that a lot of the stuff that we learned in the course was a bit off topic and niche. A lot of the material was stuff that the usual software engineer wouldn't run into but was overall very fun and engaging class
This was a course where I keenly felt the lack of face-to-face interaction. The course itself was quite difficult for me and being unable to really interact with my peers meant that even relatively minor issues become very difficult to overcome.
I hope the course can provide more detailed instruction on basic OS knowledge.
Projects are fun and need to take time to finish. The instructor was willing to help students.
I'm so grateful for the deadline extensions! They definitely helped. I definitely feel more confident and willing to do the assignments knowing that if they are really hard and we all stuck you will agree to an extension with little or no penalty.

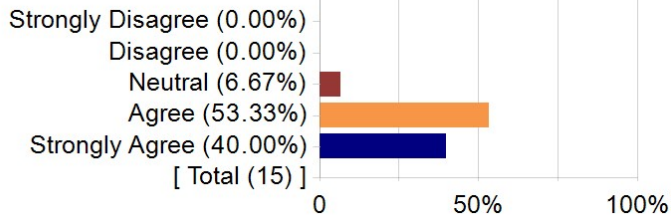
Instructor Questions

Mean values are displayed below.

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

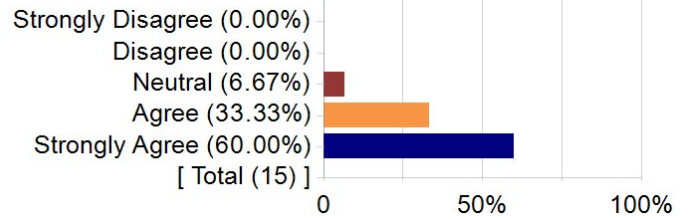
Question	Instructor Average - all courses (xl6yq Xiaozhu Lin)		Department (CS)		School (ENGR)		Institution (University of Virginia)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
The instructor clearly communicated the course schedule and expectations for participation (e.g., readings, discussions).	15	4.33	4511	4.36	12427	4.37	78080	4.45
The instructor clearly communicated the course learning objectives.	15	4.53	4514	4.36	12422	4.37	78047	4.45
The instructor implemented learning activities and assignments that allowed me to demonstrate understanding of the course material.	15	4.47	4525	4.31	12458	4.31	78209	4.35
The instructor provided me prompt and useful feedback on my learning.	15	4.20	4530	3.96	12476	3.99	78319	4.12
The instructor provided opportunities for my active participation.	15	4.40	4520	4.01	12459	4.12	78294	4.26
The instructor was available to help support my learning.	15	4.40	4505	4.18	12424	4.26	78028	4.39
The instructor fostered an environment where I felt valued as an individual and that I belonged in the class.	15	4.40	4517	4.13	12458	4.20	78201	4.32
Overall, the instructor was an effective teacher.	15	4.47	4515	4.21	12430	4.23	78097	4.36
The instructor created an environment that respected difference and welcomed diverse perspectives.	15	4.33	4528	4.03	12472	4.11	78305	4.28

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



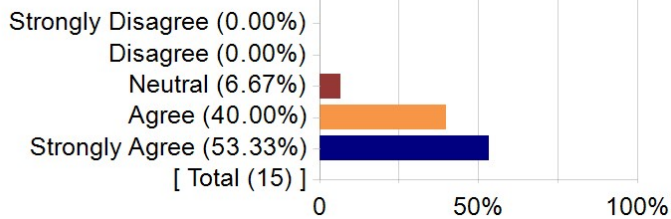
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	1	6.67%
Agree	4	8	53.33%
Strongly Agree	5	6	40.00%
Statistics			Value
Mean			4.33
Median			4.00
Standard Deviation			0.62
Standard Error (base on SD)			0.16

2. The instructor clearly communicated the course learning objectives.



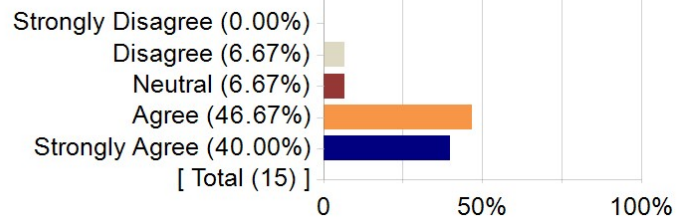
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	1	6.67%
Agree	4	5	33.33%
Strongly Agree	5	9	60.00%
Statistics			Value
Mean			4.53
Median			5.00
Standard Deviation			0.64
Standard Error (base on SD)			0.17

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



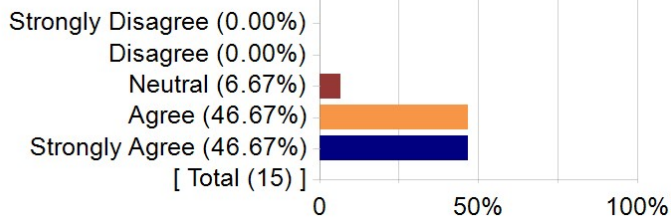
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	1	6.67%
Agree	4	6	40.00%
Strongly Agree	5	8	53.33%
Statistics			Value
Mean			4.47
Median			5.00
Standard Deviation			0.64
Standard Error (base on SD)			0.17

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



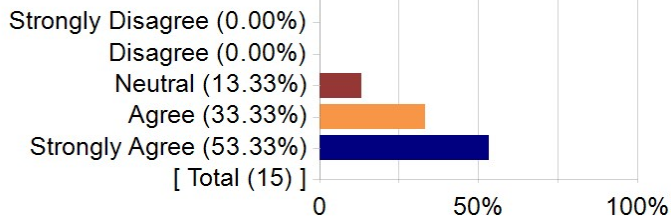
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	1	6.67%
Neutral	3	1	6.67%
Agree	4	7	46.67%
Strongly Agree	5	6	40.00%
Statistics			Value
Mean			4.20
Median			4.00
Standard Deviation			0.86
Standard Error (base on SD)			0.22

5. The instructor provided opportunities for my active participation.



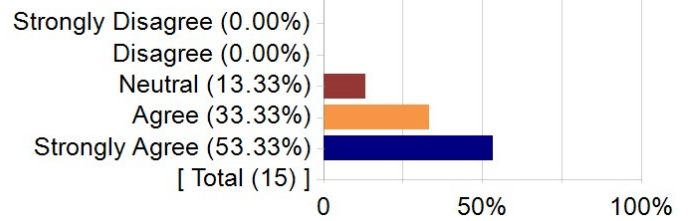
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
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Agree	4	7	46.67%
Strongly Agree	5	7	46.67%
Statistics			Value
Mean			4.40
Median			4.00
Standard Deviation			0.63
Standard Error (base on SD)			0.16

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



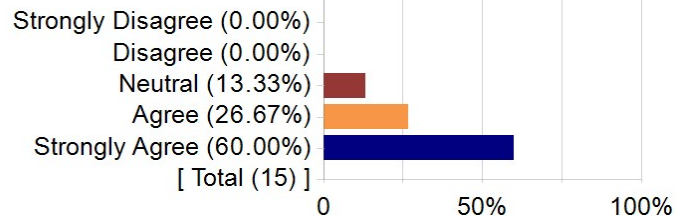
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
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Agree	4	5	33.33%
Strongly Agree	5	8	53.33%
Statistics			Value
Mean			4.40
Median			5.00
Standard Deviation			0.74
Standard Error (base on SD)			0.19

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

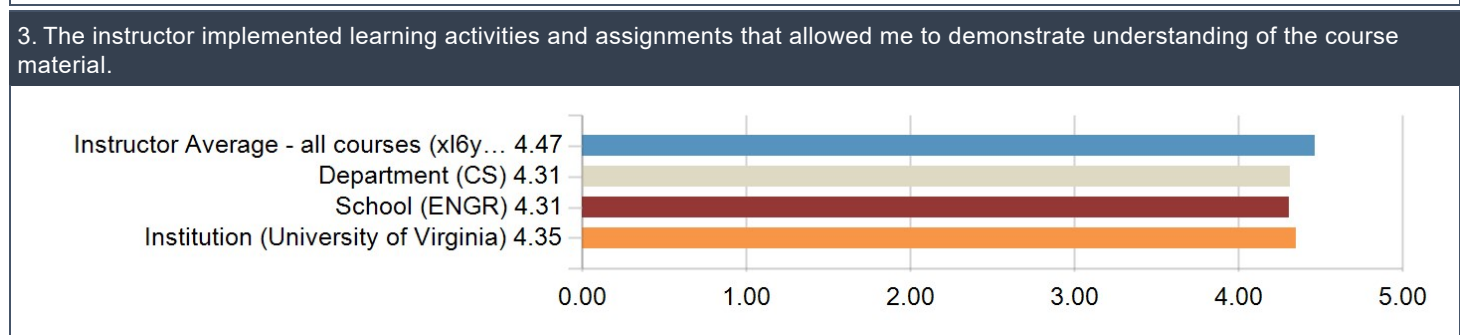
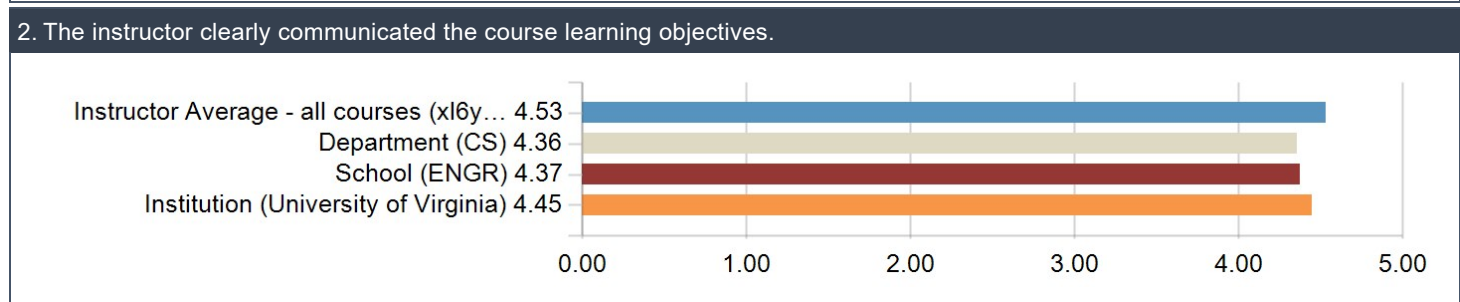
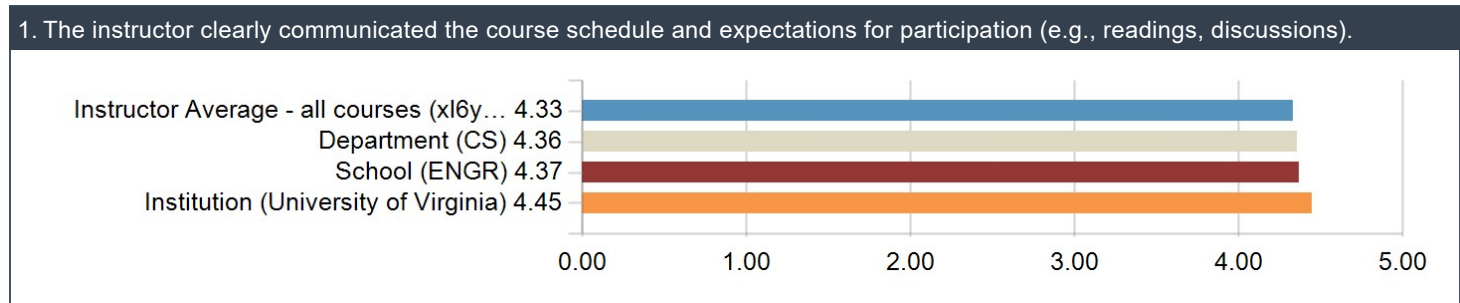
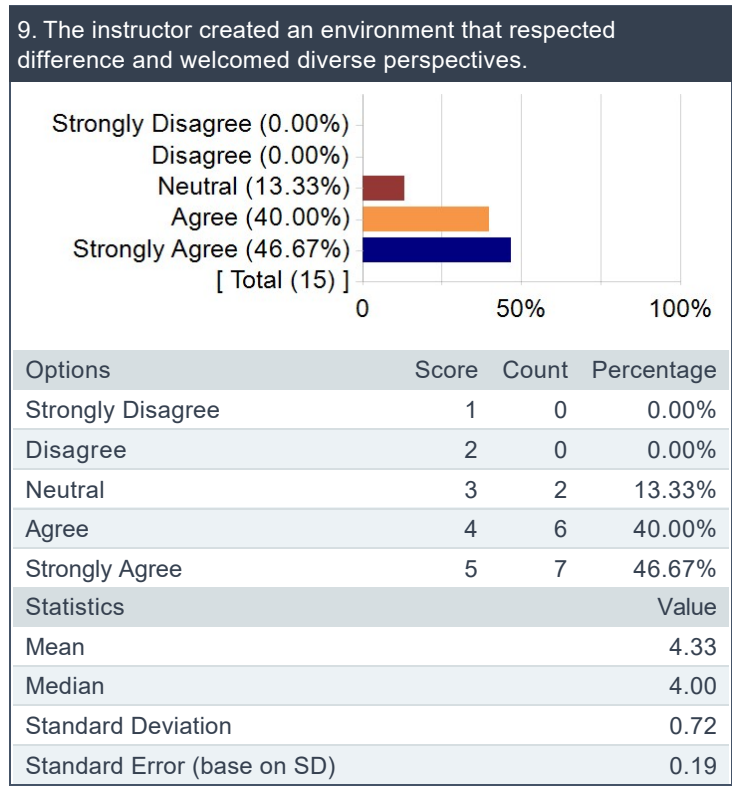


Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	2	13.33%
Agree	4	5	33.33%
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Statistics			Value
Mean			4.40
Median			5.00
Standard Deviation			0.74
Standard Error (base on SD)			0.19

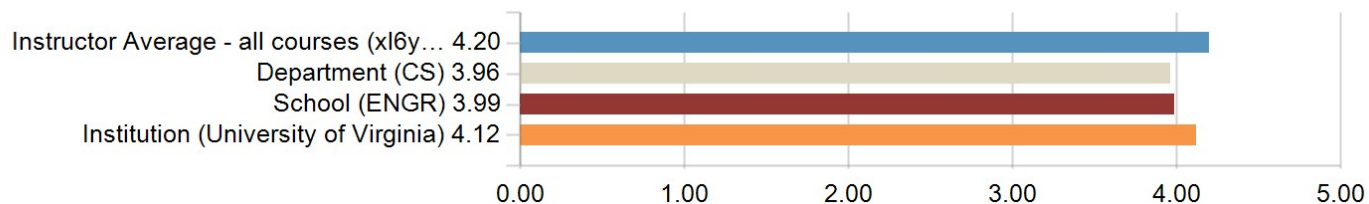
8. Overall, the instructor was an effective teacher.



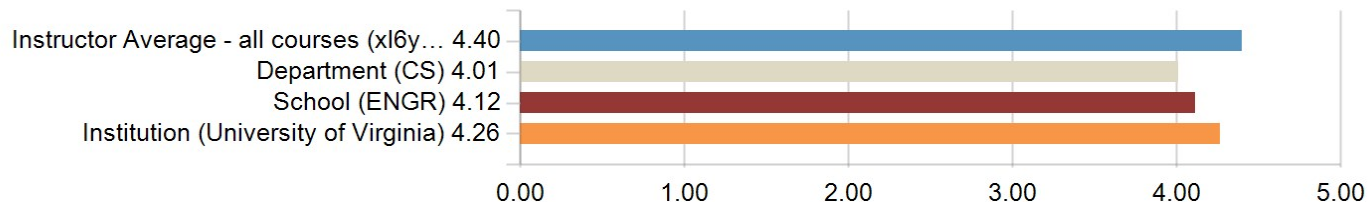
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Disagree	2	0	0.00%
Neutral	3	2	13.33%
Agree	4	4	26.67%
Strongly Agree	5	9	60.00%
Statistics			Value
Mean			4.47
Median			5.00
Standard Deviation			0.74
Standard Error (base on SD)			0.19



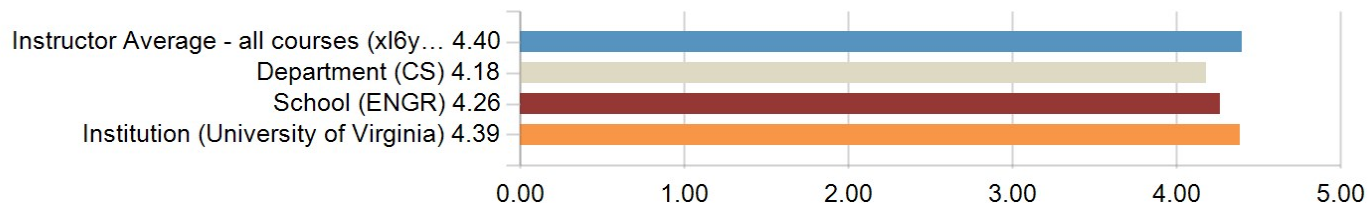
4. The instructor provided me prompt and useful feedback on my learning.



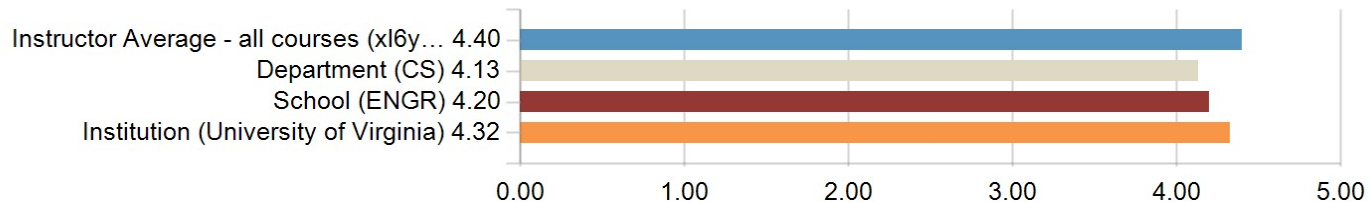
5. The instructor provided opportunities for my active participation.



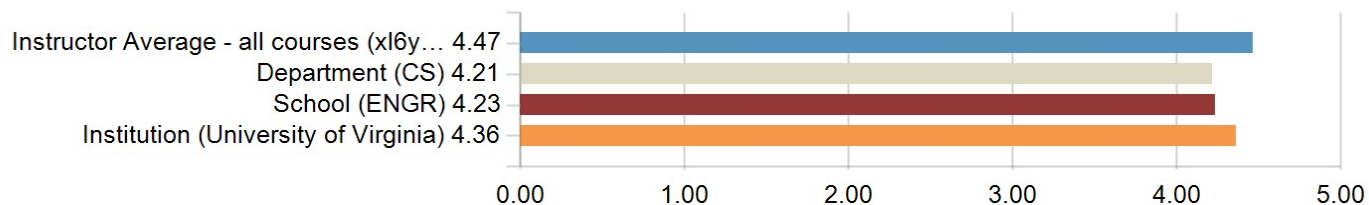
6. The instructor was available to help support my learning.



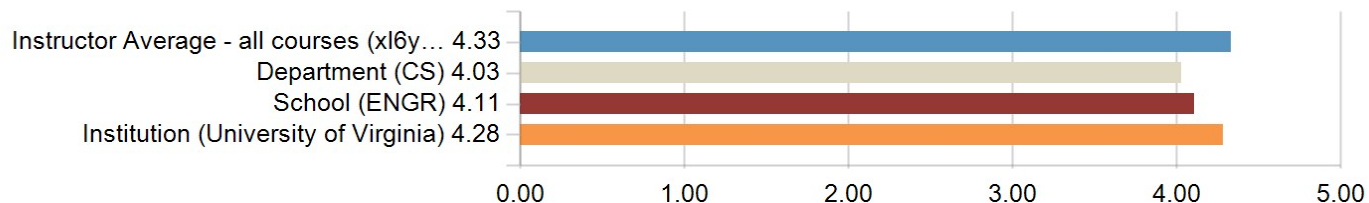
7. The instructor fostered an environment where I felt valued as an individual and that I belonged in the class.

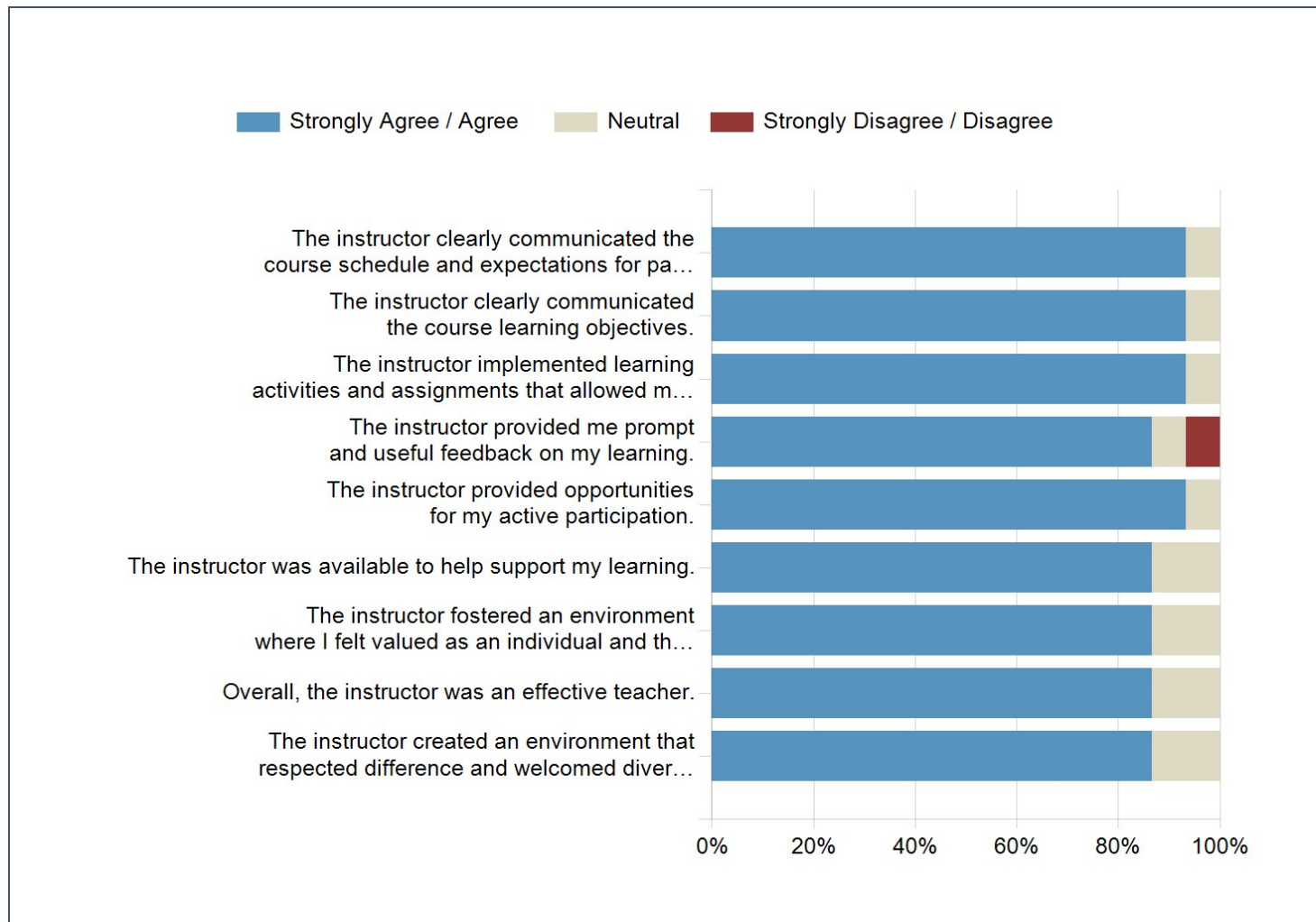


8. Overall, the instructor was an effective teacher.



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 Xiaozhu Lin created an environment that respected difference and welcomed diverse perspectives.

Comments
He always opened the floor for discussion and it was a very nice environment to talk about our issues with the assignments and any new developments that we figured out
The use of breakout rooms for smaller discussion groups helped give everyone a chance to talk in a more relaxed environment
There were multiple ways to solve the projects to get a good grade. As long as the general requirements were met you could be as creative as you liked– and this creativity was constantly encouraged by him.
He encourages students to discuss during the course and propose their idea.
Prof. Lin always encouraged students to discuss during online sessions and offline Microsoft Team conversations. Students were encouraged to share their perspective throughout the semester. Even the assignments allowed student to have solutions from different perspectives.

Instructor Comments

What constructive suggestions do you have to help Xiaozhu Lin improve this course for future students?

Comments
Maybe do more assignments on more relative topics and more on things that we would run into
He's a great professor!! He put a lot of time into this semester to make the class enjoyable despite the circumstances surrounding Covid. I found the class especially challenging at first because operating systems and computer architecture were my weakest areas at the start of my semester, but the professor did a good job of explaining the material. My only suggestion would be to refer students to the online textbook found in the syllabus when we covered scheduling, virtual memory, and threading since I think it does a good job of introducing those concepts to students who may not have seen them before. Besides that I think there may be a few other things that can be improved, such as pacing in regards to assignments, but I think those things will naturally improve with time.
Also the TA was really great too!
Holding closer to the schedule to allow for assignment 4 to actually be required would probably help with students understanding of file systems
A guide to working on the remote servers using visual studio code/notepad++ would have gone a long way. A large part of my issues up front were trying to access the code and environments needed to complete the assignments. I spent more time trying to configure my environment than working on some of the projects.
I hope the course can provide more detailed introduction on basic OS.
It would be better to provide a to-do list for the project.
More live hacking session would definitely help with the projects. Also the setup for each project is a bit different and live hacking sessions can help in that too.