Report for CS 4810 - 001 Intro to Computer Graphics Luther Tychonievich

Project Title: **2020 Fall Course Evaluation**

Course Audience: **58**
Responses Received: **30**
Response Ratio: **51.72%**

Report Comments

Fall 2020 Individual Instructor Report by Section.

Final Report

Course Name: CS 4810 - 001 Intro to Computer Graphics
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 4810 - 001 Intro to Computer Graphics :

- Less than 1
- 1-3
- 4-6
- 7-9
- 10 or more

Course Questions:

Answer the following questions based on your experience in CS 4810 - 001 Intro to Computer Graphics.
(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.

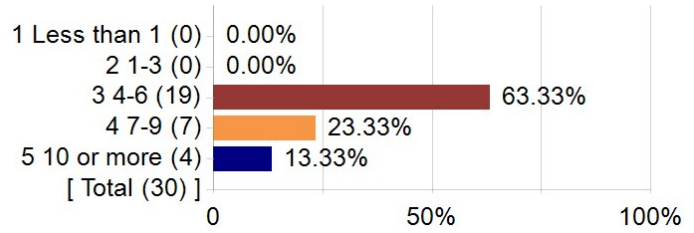
9B) You selected "DISAGREE or STRONGLY DISAGREE" on the previous question: Please give specific examples as to how Luther Tychonievich did not create an environment that respected difference and welcomed diverse perspectives.

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 4810 - 001 Intro to Computer Graphics:



Statistics	Value
Response Count	30
Mean	3.50
Median	3.00
Standard Deviation	0.73

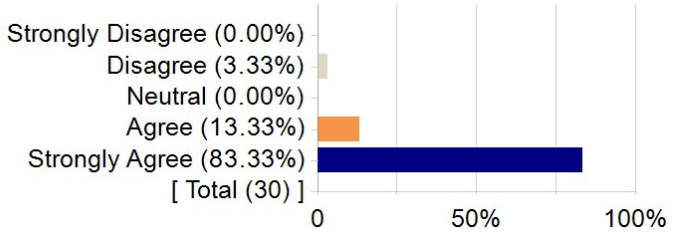
Course Questions

Mean values are displayed below.

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

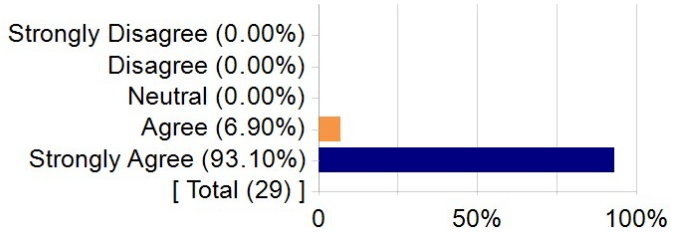
Question	Course (CS 4810 001)		Department (CS)		School (ENGR)		Institution (University of Virginia)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
The course increased my enthusiasm for the topic.	30	4.77	4370	3.88	10769	3.84	68880	3.99
Through this course I gained a deeper understanding of the subject matter.	29	4.93	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.	30	4.73	4365	4.38	10759	4.39	68848	4.53

1. The course increased my enthusiasm for the topic.



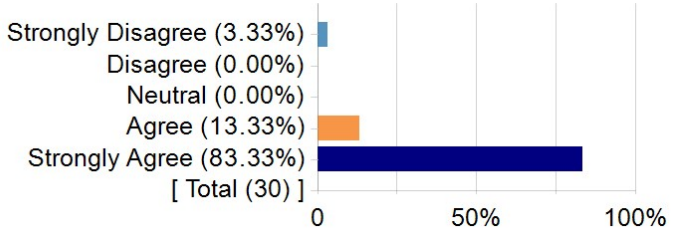
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	1	3.33%
Neutral	3	0	0.00%
Agree	4	4	13.33%
Strongly Agree	5	25	83.33%
Statistics			**Value**
Mean			4.77
Median			5.00
Standard Deviation			0.63

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



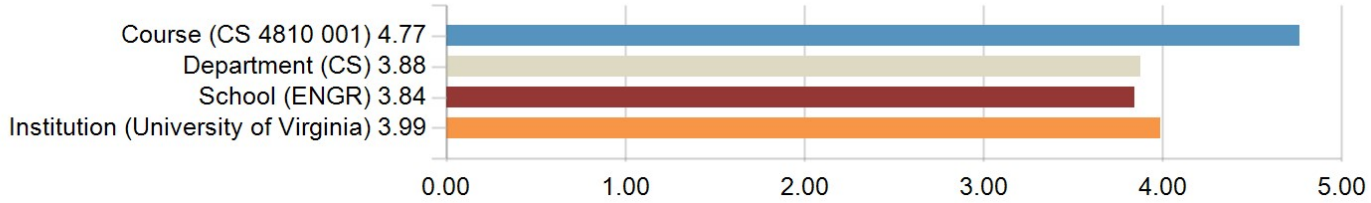
Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	2	6.90%
Strongly Agree	5	27	93.10%
Statistics			**Value**
Mean			4.93
Median			5.00
Standard Deviation			0.26

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.

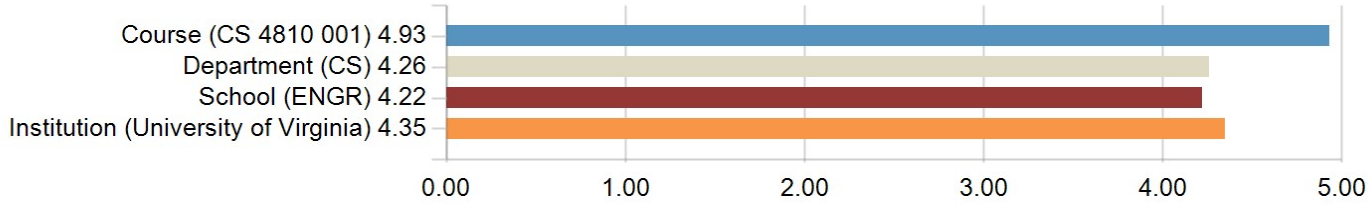


Options	Score	Count	Percentage
Strongly Disagree	1	1	3.33%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	4	13.33%
Strongly Agree	5	25	83.33%
Statistics			**Value**
Mean			4.73
Median			5.00
Standard Deviation			0.78

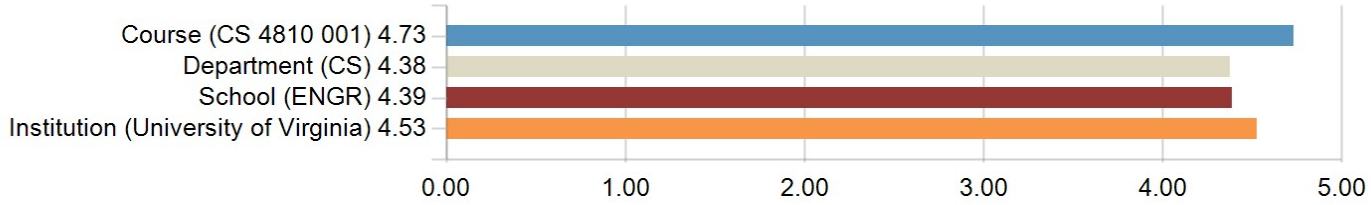
1. The course increased my enthusiasm for the topic.

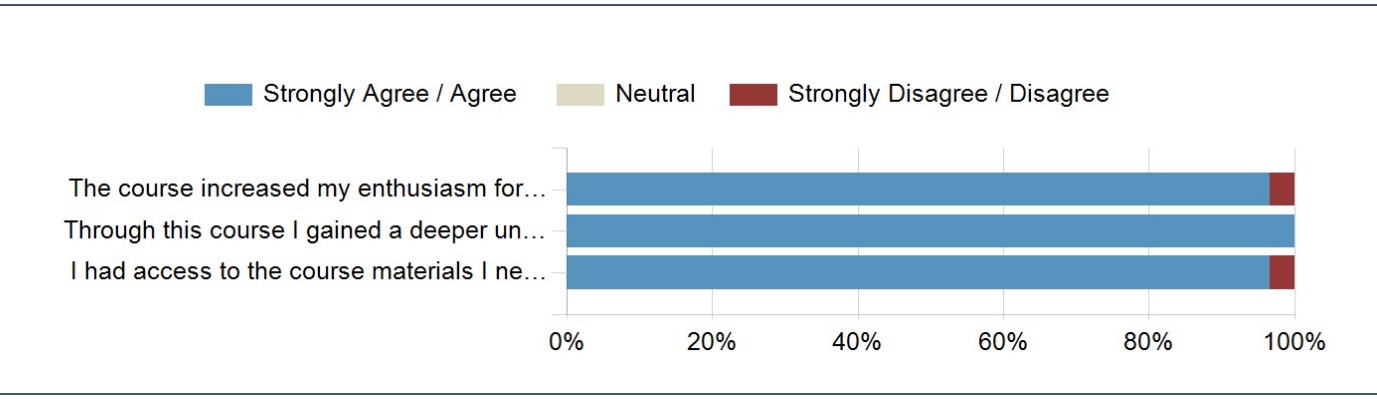


2. Through this course I gained a deeper understanding of the subject matter.

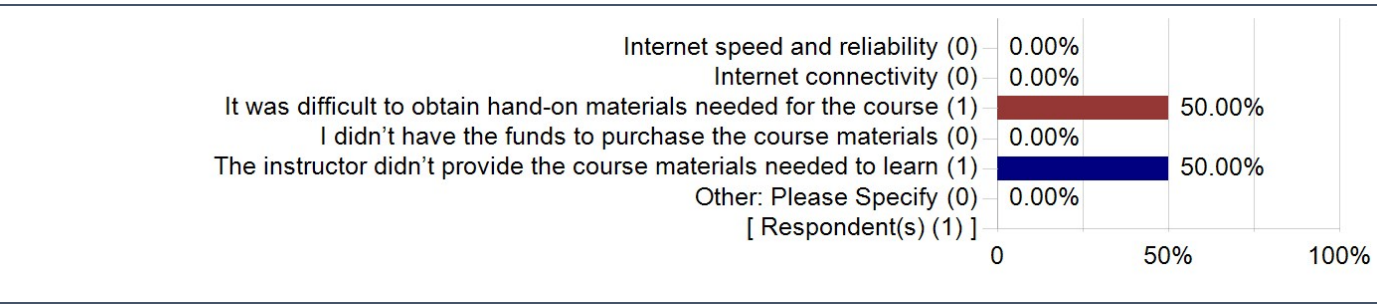


3. I had access to the course materials I needed to learn, including access to required textbooks, course readings, technology tools, and other materials required for class assignments and projects.





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.

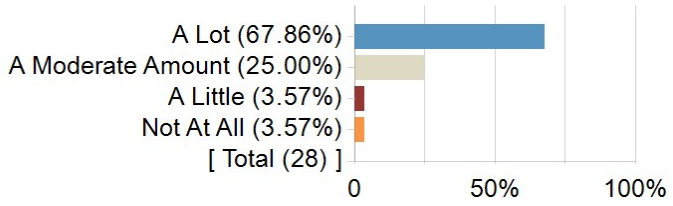
Scale: 1 = Not at All 2 = A Little 3 = A Moderate Amount 4 = A Lot

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

Question	Course (CS 4810 001)		Department (CS)		School (ENGR)		Institution (University of Virginia)	
	Response Count	Mean	Response Count	Mean	Response Count	Mean	Response Count	Mean
Real-time lecture	28	3.57	2772	2.93	7907	3.06	53264	3.34
Recorded lectures	29	3.72	3755	3.23	8443	3.16	42123	3.19
Recorded video demonstrations	8	3.75	2639	3.05	5445	3.00	27197	3.00
Hands-on activities	22	3.41	3229	3.27	6768	3.20	37978	3.19
Real-time, whole-class discussion	20	2.50	1903	2.46	6169	2.68	47373	3.11
Real-time small-group discussion	16	1.94	2335	2.54	6561	2.78	47174	3.12
Online discussion boards	21	2.71	3194	2.75	6299	2.66	30412	2.69
Office hours	24	2.79	3292	2.80	7720	2.77	41459	2.78

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

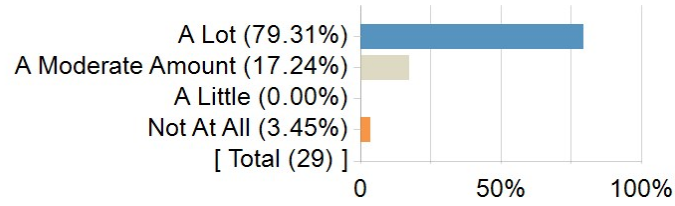
1. Real-time lecture



Options	Score	Count	Percentage
A Lot	4	19	67.86%
A Moderate Amount	3	7	25.00%
A Little	2	1	3.57%
Not At All	1	1	3.57%

Statistics	Value
Mean	3.57
Median	4.00
Standard Deviation	0.74

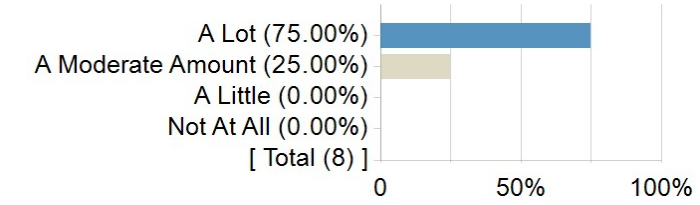
2. Recorded lectures



Options	Score	Count	Percentage
A Lot	4	23	79.31%
A Moderate Amount	3	5	17.24%
A Little	2	0	0.00%
Not At All	1	1	3.45%

Statistics	Value
Mean	3.72
Median	4.00
Standard Deviation	0.65

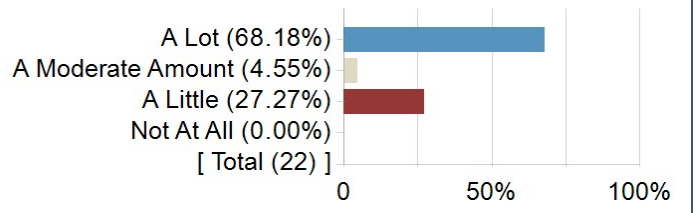
3. Recorded video demonstrations



Options	Score	Count	Percentage
A Lot	4	6	75.00%
A Moderate Amount	3	2	25.00%
A Little	2	0	0.00%
Not At All	1	0	0.00%

Statistics	Value
Mean	3.75
Median	4.00
Standard Deviation	0.46

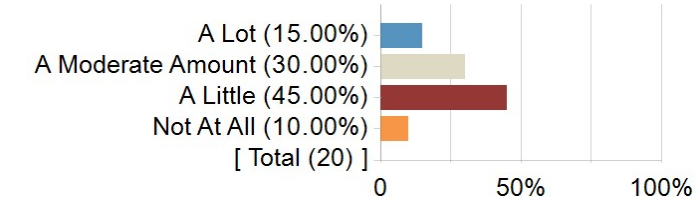
4. Hands-on activities



Options	Score	Count	Percentage
A Lot	4	15	68.18%
A Moderate Amount	3	1	4.55%
A Little	2	6	27.27%
Not At All	1	0	0.00%

Statistics	Value
Mean	3.41
Median	4.00
Standard Deviation	0.91

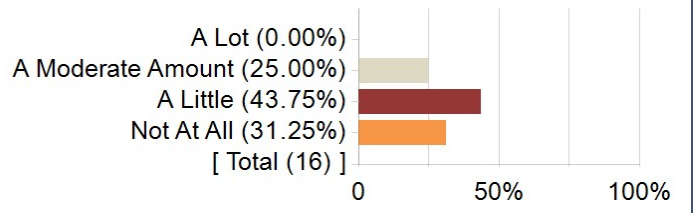
5. Real-time, whole-class discussion



Options	Score	Count	Percentage
A Lot	4	3	15.00%
A Moderate Amount	3	6	30.00%
A Little	2	9	45.00%
Not At All	1	2	10.00%

Statistics	Value
Mean	2.50
Median	2.00
Standard Deviation	0.89

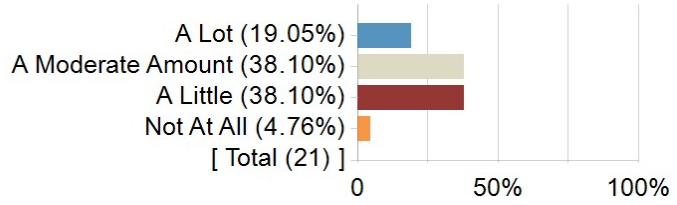
6. Real-time small-group discussion



Options	Score	Count	Percentage
A Lot	4	0	0.00%
A Moderate Amount	3	4	25.00%
A Little	2	7	43.75%
Not At All	1	5	31.25%

Statistics	Value
Mean	1.94
Median	2.00
Standard Deviation	0.77

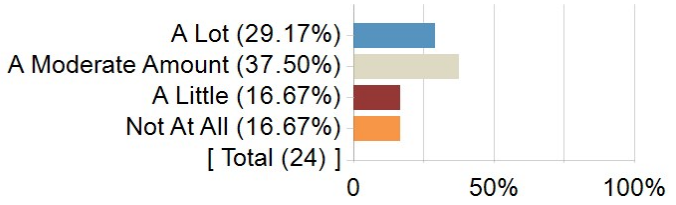
7. Online discussion boards



Options	Score	Count	Percentage
A Lot	4	4	19.05%
A Moderate Amount	3	8	38.10%
A Little	2	8	38.10%
Not At All	1	1	4.76%

Statistics	Value
Mean	2.71
Median	3.00
Standard Deviation	0.85

8. Office hours

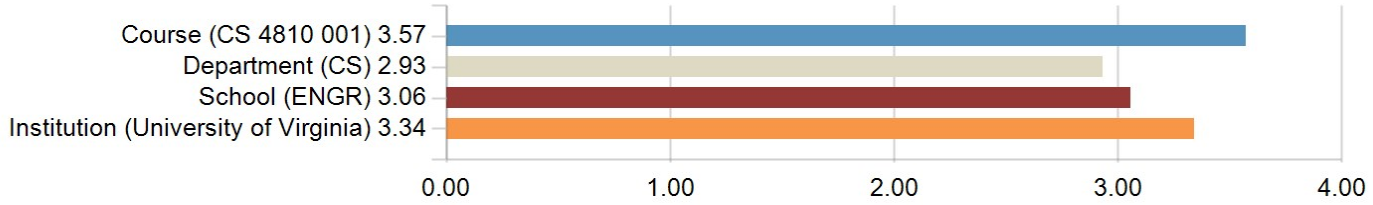


Options	Score	Count	Percentage
A Lot	4	7	29.17%
A Moderate Amount	3	9	37.50%
A Little	2	4	16.67%
Not At All	1	4	16.67%

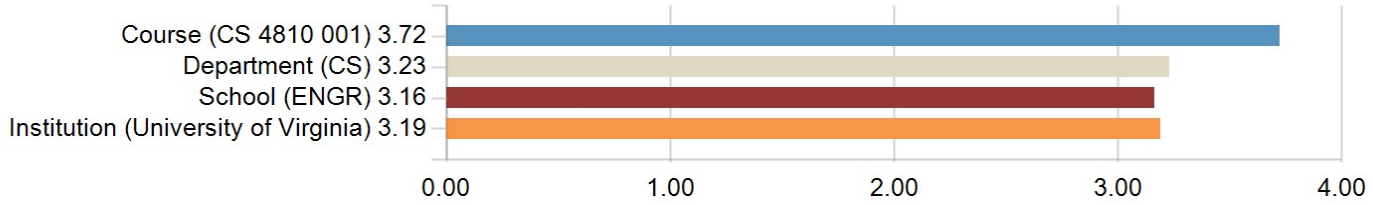
Statistics	Value
Mean	2.79
Median	3.00
Standard Deviation	1.06

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

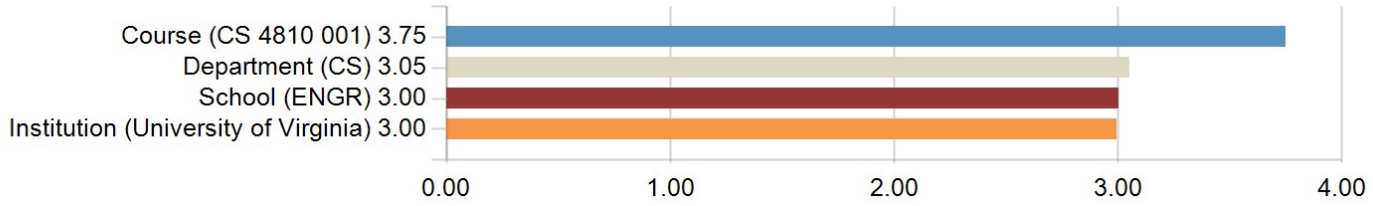
1. Real-time lecture



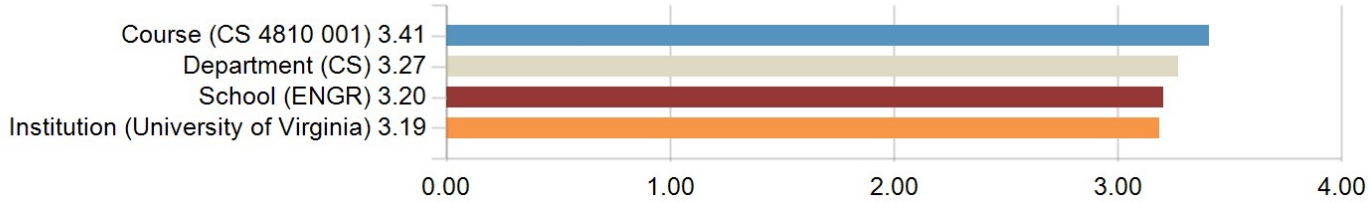
2. Recorded lectures



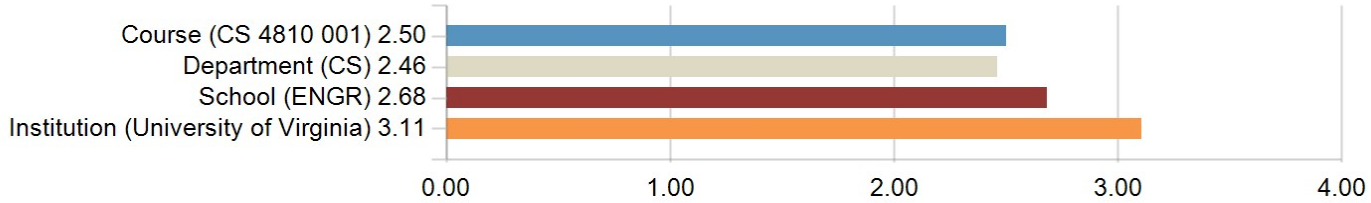
3. Recorded video demonstrations



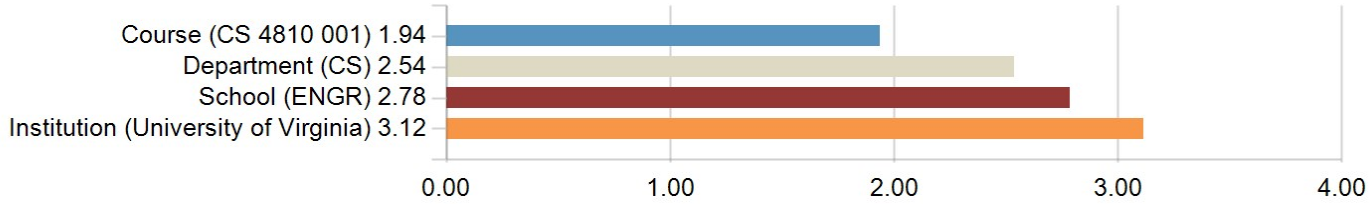
4. Hands-on activities



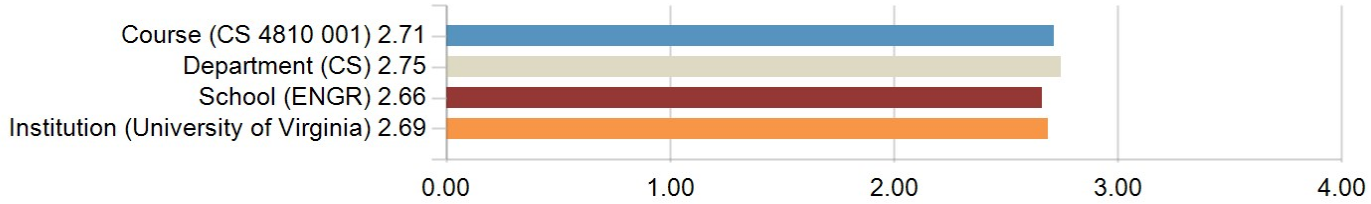
5. Real-time, whole-class discussion



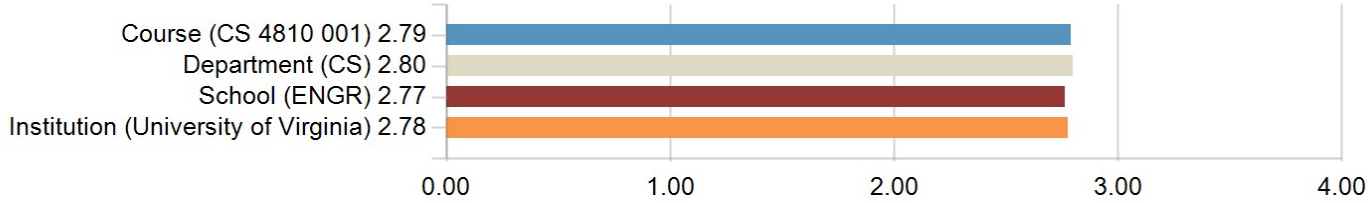
6. Real-time small-group discussion



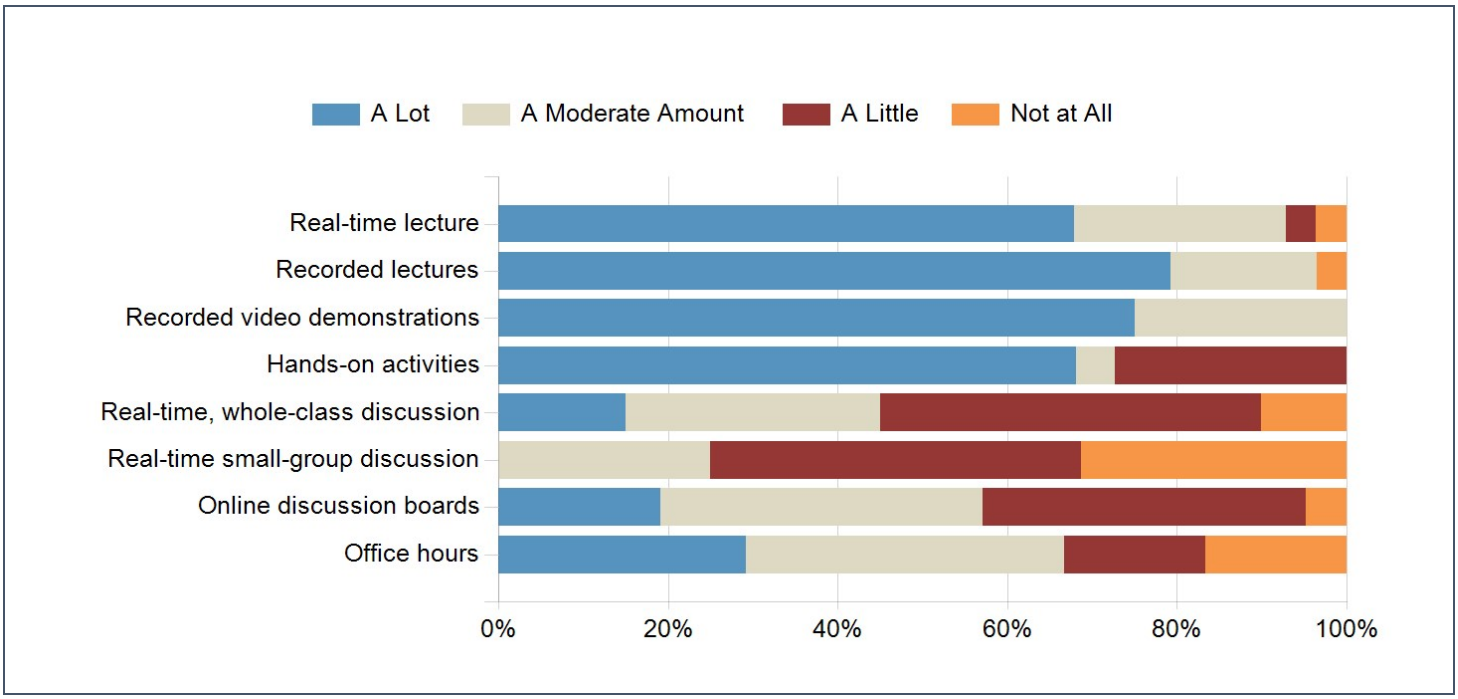
7. Online discussion boards



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 phenomenal, well thought out, and incredibly interesting. Lecture progressed through closed loop feedback, Prof Tychonievich pinging the class for questions and clarifications, and the class confident enough to request it. There was a a lot of reading material, but the content itself was not centralized. This is reflective of the depths and scope of places that have rigorous information, and encouraged this sort of behavior at a personal level. Office Hours were absolutely incredible. Prof Tychonievich has a ridiculous grasp on each assignment and the mistakes that can be the cause of certain results. The down up approach of learning the graphics pipeline, implementing it from scratch, should be the standard at universities.
I think the lectures (both live and the reviewing the recorded lectures) were very helpful, but the homework assignments were where I learned the most.
Having access to recorded lectures allows you to go back and review material that might not be in your notes and get a fuller understanding of the content.
Real–time lectures were helpful and provided opportunities to ask questions while material was being taught. Having them recorded was extremely helpful for review (the minor editing was appreciated!). There was a good, in–class activity towards the start and I wish there were a couple more of them. While most of my Zoom classes didn't have a lot of active participation even with some in–class activities, this one had a surprising lot of participation in the Zoom chat (which were mostly side conversations but pertained to the material and kept me focused on the lecture instead browsers, phones, etc.). Office hours were very productive, especially which bringing fairly pointed questions.
I think I got the most out of the lectures and the assignments.
the homeworks were really challenging but fun
The lectures were all recorded, in depth and clear, making the class easy to understand.
I'm really just a lecture learner.
The synchronous lectures were very fun to watch
Recorded lectures and variety of media built into all of these activities were crucial to help.
I didn't use office hours for this class, so I cannot comment on that. Both real–time and recorded lectures were done well, structured schedule was very useful. Use of optional elements in assignments was very effective.
Recorded lectures gave me the freedom to work in watching/engaging with the material on my own time and allowed me to figure out my best schedule without being mandated to watch/attned lectures at a certain time.
Lectures were packed with fascinating material and were very fast–paced. Due to the nature of my attention–span, I found that I fared better when watching recordings, as I could speed them up, slow them down, and rewind whenever needed. The graphic nature of Professor Tychonievich's teaching style (original drawings, diagrams) was super effective in teaching abstract concepts, and his constant high enthusiasm helped keep students engaged.
The lectures and office hours were really useful. I really learned a lot in this class and had a lot of fun doing the assignments.
The homework assignments were really interesting and rewarding, I feel like they all did a great job of illustrating the rendering algorithms we saw in lecture and reinforced concepts well. The lectures were also very engaging, the use of visuals and drawings to teach really helped me learn.
Really liked that we created a rasterizer/raytracer/image processor from scratch (with adequate guidance) because I know everything that is going on in my code. When it produces correct (or close) results, I feel confident that I understand the material, and is generally what is occurring in industry–level applications. The quizzes were also really good at reinforcing key concepts that could not be covered by the coding assignments, I liked that.

Course Comments

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

Comments
Professor Tychonievich is one of the best lecturers at this University. Also, repeal PROV–005!!!!!!!!
My peers at other universities who took graphics classes are familiar with different tools such as OpenGL and the like, but would be hard pressed to describe the graphics pipeline which is the essence of computer graphics. Tests do not encourage critical thinking in the way that assignments do. Allowing students to think critically is one of the most important facets of a class, and CG does that extremely well.
I really liked this course and thought it worked very well in the online format.
Recorded lectures were excellent for delivering material, and Discord is an amazing substitute for other office hours/discussion board solutions.
This course was fantastic and Professor Tychonievich was incredibly helpful and understanding throughout the entire semester.
It's a shame that this class doesn't have the interest necessary for it to be a full–time course (i.e. offered every semester). This class was a great introduction into the fundamental algorithms and principles that enable the most common graphics applications (e.g., lines, 3D manipulation, ray tracing) as well as fantastic survey into the algorithms and technologies that make the cutting edge application of computer graphics (e.g., simulations) possible. This course was so great that I'm disheartened that the computer science department doesn't have graphics research or further courses in the topics.
This is an amazing course and is a very easy recommendation for me to make to any CS major, and even many non–CS majors. I was very happy with the delivery of the course content and I was fascinated by the subject matter
The lectures were all recorded, in depth and clear, making the class easy to understand. It was great how everything could be accessed on the website.
It was a wonderful course. The material was engaging, the lectures were fun, and the homeworks were exactly the right level of difficulty to learning and really worked to enhance my understanding of the material.
I would like you to know this has been a thoroughly pleasant course. The algorithms and approaches we covered have lifted another veil that hides the strangeness of rendering images on the computer, and now I see clearly.
I like Tychonievich's courses. They aren't perfect, but they feel very good. Assignments feel meaningful, and assessments are not overbearing. Everything feels organized. Everything feels manageable, but at the same time, I feel like I'm learning a lot. Unfortunately, every other course feels like a major pain in comparision. Every other course feels like I'm trying to learn something by slamming my head against the wall repeatedly.
It was excellent. The TAs, professor, and course topics were very well selected/organized, and my experience with this class, while stressful at times, was probably the most rewarding one out of all CS classes I've had at UVA.
I liked this course's material and presentation a lot.
The assignments we're really challenging but I honestly really enjoyed it and think this has been my favorite upper level CS class. There was no fluff or filler material, everything discussed in lecture felt important and invariably ended up coming back around in the homework assignments. The independent nature of some of the material and having to figure out intricacies and details on my own was a bit frustrating at times but overall really forced me to understand the deeper details of graphics in order to succeed in this course.
Professor Tychonievich always manages to create a super memorable course experience. I got a lot out of this class, and it was a delightful experience. The only bad part was that it ended.
very knowledgeable about the topic; very flexible; good support resources (website, grading system, schedule, etc)
Really great course. Tychonievich is a really clear professor and effective at teaching. The assignments were also good at teaching the material and enjoyable to do. Despite the disclaimer at the beginning of the course that we might not have access to much help, I definitely felt that I was able to get help when I needed it.
This was one of the most interesting courses I've taken at UVA and I hope it can come back regularly for future students or even have a follow–up course that takes a deeper–dive into some of the topics.
One of the best classes I've taken at UVA, people still care about computer graphics!
It was very good. I think other classes can take a page or two from the structure of this class

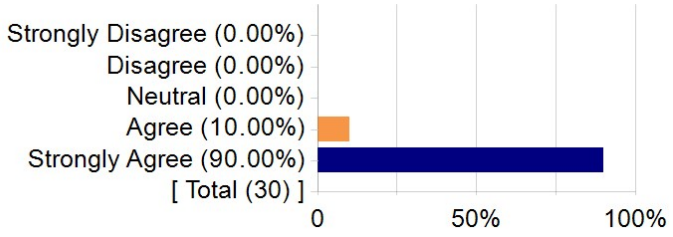
Instructor Questions

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).	30	4.90	132	4.60	4511	4.36	12427	4.37
The instructor clearly communicated the course learning objectives.	29	4.90	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.	30	4.87	132	4.46	4525	4.31	12458	4.31
The instructor provided me prompt and useful feedback on my learning.	30	4.63	131	4.31	4530	3.96	12476	3.99
The instructor provided opportunities for my active participation.	30	4.53	132	4.12	4520	4.01	12459	4.12
The instructor was available to help support my learning.	30	4.70	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.	30	4.73	131	4.29	4517	4.13	12458	4.20
Overall, the instructor was an effective teacher.	30	4.93	130	4.52	4515	4.21	12430	4.23
The instructor created an environment that respected difference and welcomed diverse perspectives.	30	4.50	132	4.27	4528	4.03	12472	4.11

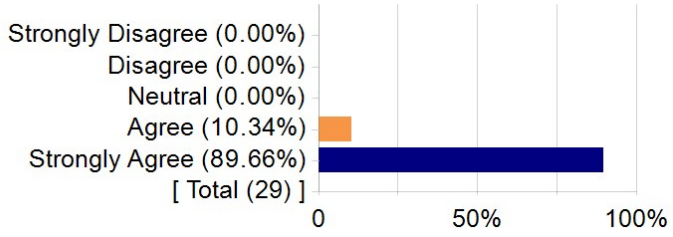
1. The instructor clearly communicated the course schedule and expectations for participation (e.g., readings, discussions).



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	3	10.00%
Strongly Agree	5	27	90.00%

Statistics	Value
Mean	4.90
Median	5.00
Standard Deviation	0.31

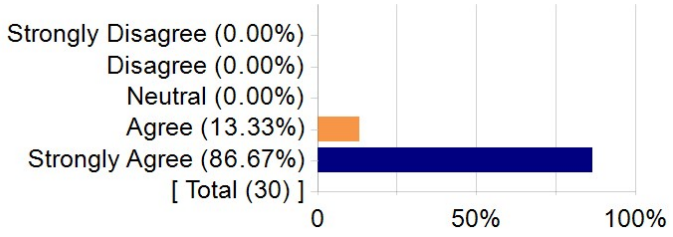
2. The instructor clearly communicated the course learning objectives.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	3	10.34%
Strongly Agree	5	26	89.66%

Statistics	Value
Mean	4.90
Median	5.00
Standard Deviation	0.31

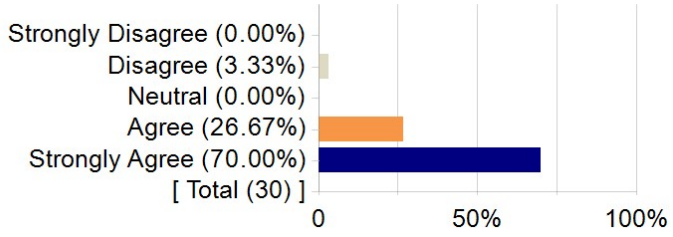
3. The instructor implemented learning activities and assignments that allowed me to demonstrate understanding of the course material.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	4	13.33%
Strongly Agree	5	26	86.67%

Statistics	Value
Mean	4.87
Median	5.00
Standard Deviation	0.35

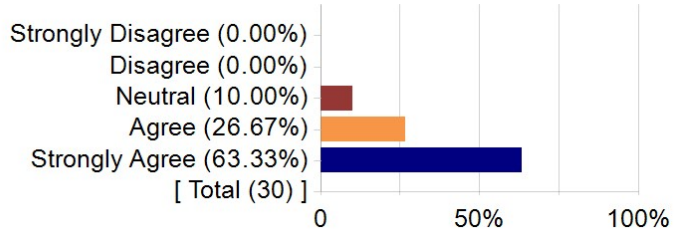
4. The instructor provided me prompt and useful feedback on my learning.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	1	3.33%
Neutral	3	0	0.00%
Agree	4	8	26.67%
Strongly Agree	5	21	70.00%

Statistics	Value
Mean	4.63
Median	5.00
Standard Deviation	0.67

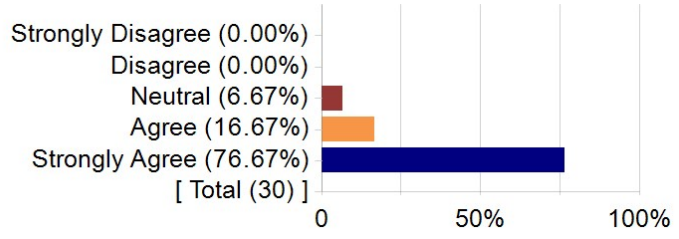
5. The instructor provided opportunities for my active participation.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	3	10.00%
Agree	4	8	26.67%
Strongly Agree	5	19	63.33%

Statistics	Value
Mean	4.53
Median	5.00
Standard Deviation	0.68

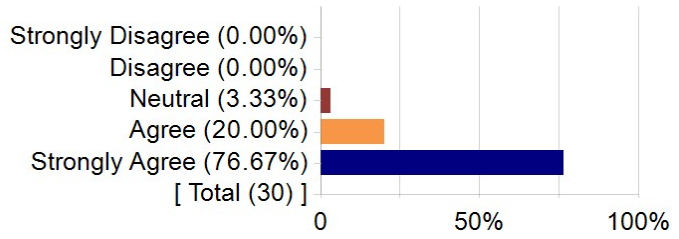
6. The instructor was available to help support my learning.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	2	6.67%
Agree	4	5	16.67%
Strongly Agree	5	23	76.67%

Statistics	Value
Mean	4.70
Median	5.00
Standard Deviation	0.60

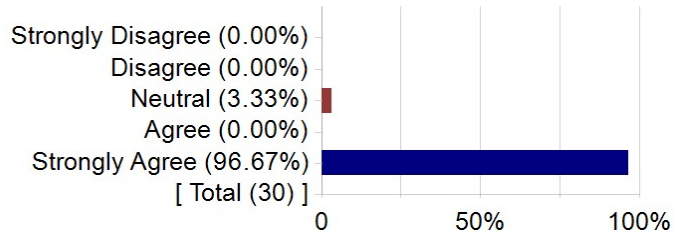
7. The instructor fostered an environment where I felt valued as an individual and that I belonged in the class.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	1	3.33%
Agree	4	6	20.00%
Strongly Agree	5	23	76.67%

Statistics	Value
Mean	4.73
Median	5.00
Standard Deviation	0.52

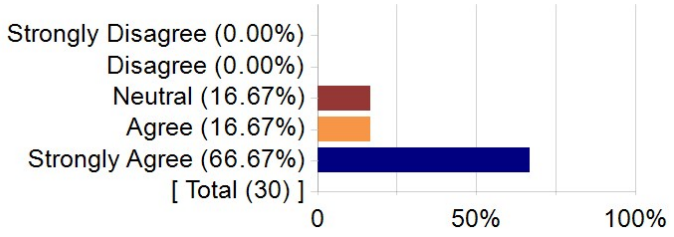
8. Overall, the instructor was an effective teacher.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	1	3.33%
Agree	4	0	0.00%
Strongly Agree	5	29	96.67%

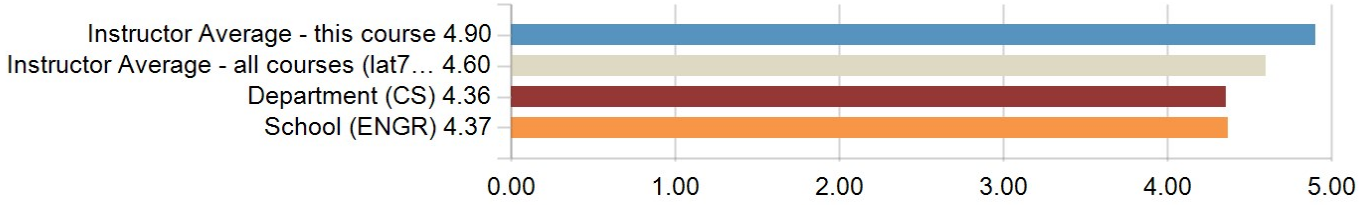
Statistics	Value
Mean	4.93
Median	5.00
Standard Deviation	0.37

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

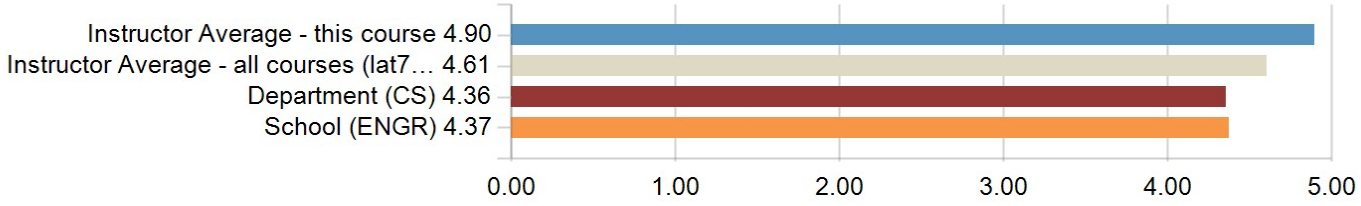


Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	5	16.67%
Agree	4	5	16.67%
Strongly Agree	5	20	66.67%
Statistics			**Value**
Mean			4.50
Median			5.00
Standard Deviation			0.78

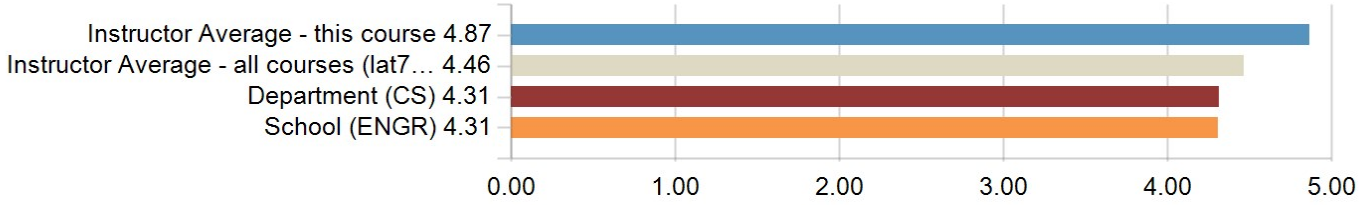
1. The instructor clearly communicated the course schedule and expectations for participation (e.g., readings, discussions).



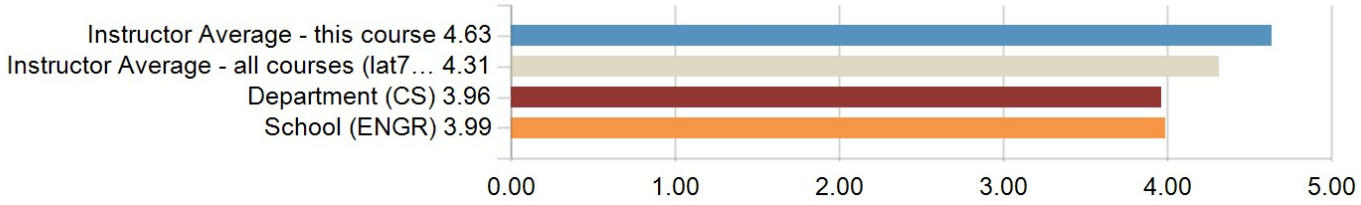
2. The instructor clearly communicated the course learning objectives.



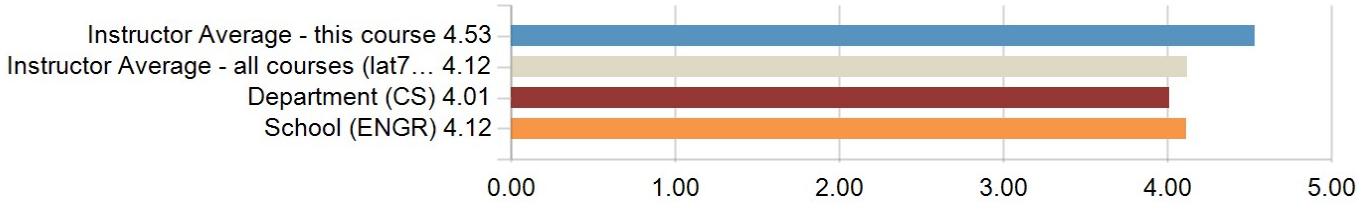
3. The instructor implemented learning activities and assignments that allowed me to demonstrate understanding of the course material.



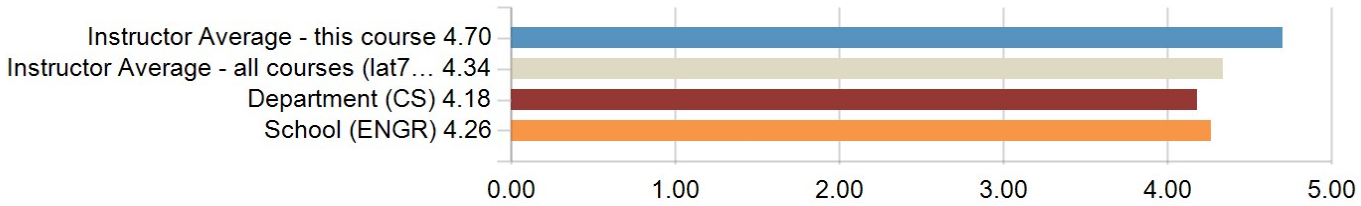
4. The instructor provided me prompt and useful feedback on my learning.



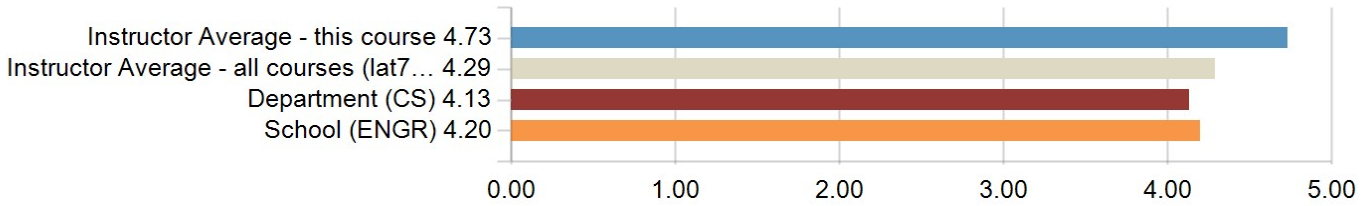
5. The instructor provided opportunities for my active participation.



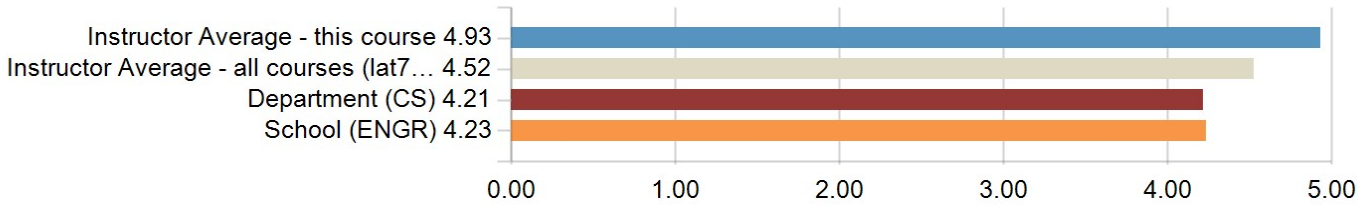
6. The instructor was available to help support my learning.



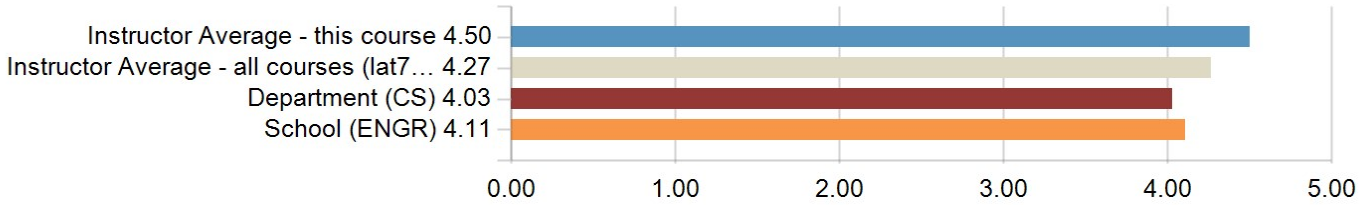
7. The instructor fostered an environment where I felt valued as an individual and that I belonged in the class.

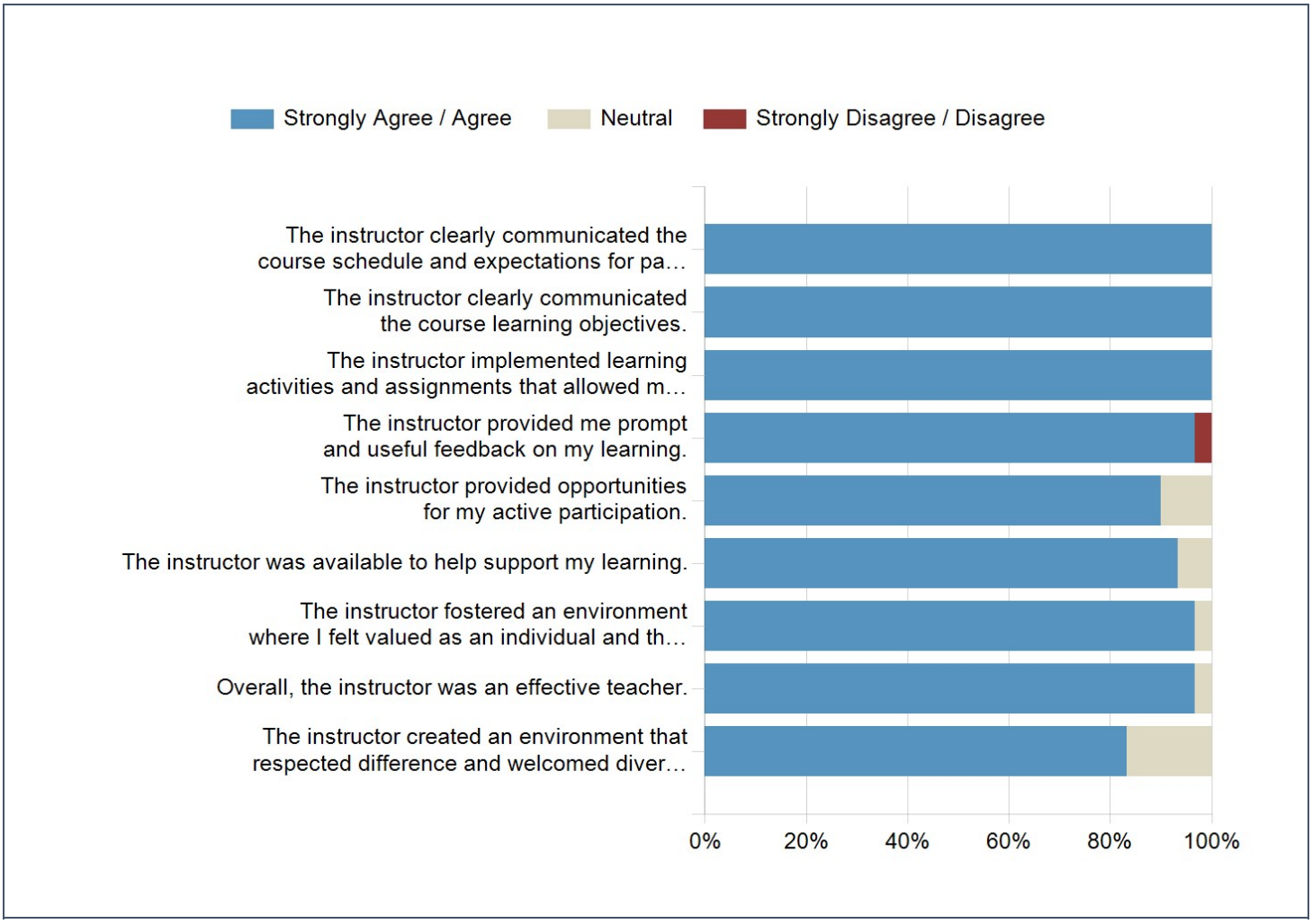


8. Overall, the instructor was an effective teacher.



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




Strongly Agree / Agree
Neutral
Strongly Disagree / Disagree
The instructor clearly communicated the course schedule and expectations for pa…
The instructor clearly communicated the course learning objectives.
The instructor implemented learning activities and assignments that allowed m…
The instructor provided me prompt and useful feedback on my learning.
The instructor provided opportunities for my active participation.
The instructor was available to help support my learning.
The instructor fostered an environment where I felt valued as an individual and th…
Overall, the instructor was an effective teacher.
The instructor created an environment that respected difference and welcomed diver…
0%
20%
40%
60%
80%
100%

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
Prof Tychonievich gave the opportunity to discuss a variety of topics in office hours with a great deal of care
Professor Tychonievich held weekly in–class discussions where any student was welcome to ask questions about visual phenomena. The Discord discussion threads also created an incredibly friendly and relaxed environment for students to discuss topics both related and unrelated to the course.
He was very encouraging and welcomed everyone's thoughts and perspectives and encouraged participation
He made it very clear that in order to get where we are today in the field of engineering, it takes different ideas and approaches. He welcomed all kinds of questions, even ones that seemed a bit off topic, and would always use them as opportunities to help our understanding of the material.
Professor Tychonievich is always more than happy to give everyone a chance to speak their mind and engage critically with the course content. He also actively encouraged people that disagreed with him to feel free to give their criticisms, and allowed us input into how we thought the course should be graded
Very fun class environment with lots of enthusiasm when answering and teaching making you feel open to asking questions
Luther give about 10 mins every Wednesday for students to ask vision questions about the real world which was really interesting in my opinion
Professor Tychonievich created an online forum using discord that exposed me to some interesting ideas of my peers. He set ground rules for this forum that kept chatter relevant.
idk but i never remember any controversial topics being brought up or being offended
He forbade discussion of religion or politics, making everybody feel welcome. He shared lots of ideas at face value and addressed everybody's interests/questions.
The instructor used class discussions and encouraged participation from all class members. There was time allotted every week during which any student could ask for an explanation on any visual phenomenon.
Class discussions, especially "fish–eye" on Wednesdays encouraged anyone to ask questions about real–life visual phenomenons and was honestly the most enjoyable part of the class to learn about and hear what sort of diverse topics that students wanted to talk about as well as learning how this phenomenon occur from a physics/scientific perspective.
Professor Tychonievich was clear from the start on his inclusive policy, and maintained an open, welcoming environment throughout the semester. He made sure every student's voice was heard, and continuously seeked feedback and provided clarification.
nice guy
He took input from everyone and was considerate of issues that students might have throughout the semester.
Allowing active class participation during lectures by asking questions and being readily available outside of class to answer any questions and address concerns. Also placed value on learning the material and not how fast you learn/do it (encouraged people to go at their own pace)
Professor Tychonievich was super welcoming and warm, always responded to questions, was never condescending, and help foster a class that could welcome each other's opinions and interests!
He allots time every other class for students to ask him about visual phenomena in the world/how they happen/how they are made in computer graphics. This particularly allows for people to bring in different experiences from unique locations and also different computer graphics backgrounds. He also asks if we have any questions at checkpoints during the lecture and at the end.

Instructor Comments

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

Comments
Those quizzes ... I am not sure how I feel about them as a pedagogical tool, but they certainly are an interesting assessment tool
I really appreciated how knowledgeable you were about every subject we discussed! When I read about this course I realized it was the kind of course I'd been looking for since first year, something with technology *and* art. It wasn't exactly what I was expecting but I'm grateful for that; I learned so much, not just about graphics itself, but to appreciate the technology and engineering that go into art that we generally take for granted. You were also incredibly kind in office hours when I was confused, and I really appreciate that you never made me feel dumb. Thank you for everything!
I do not have any suggestions because I think this course is perfect and I really enjoyed taking it
I very much enjoy the way recordings work on your server, but it would be helpful to have a way of hearing what questions students are asking. When that audio is cut out, it can be slightly confusing to connect the answer to the specific question that was being asked.
It's pretty hard to give good feedback in this course because it seems like this course has been well–polished over the years. The only area I would like to see improvement to is the end of the course. I think polling for which concepts to survey into is a great idea, but I'd like to be more enabled to put some of the ideas to practice where possible. For the earlier, not student–chosen concepts, they were clearly implementable and the homework assignments were made to compliment the topics. However, I wish there was some additional guidance on how to continue into the more complicated topics on our own since there is no continuing course or homework assignment for the material (save for the alternative project at the end of the semester).
I thought the quizzes were really helpful in forcing me to review the material. I also thought the assignments were absolutely fascinating.
I would only recommend requiring more math prereqs and potentially comp arch as a prereq and going into more depth about GPU functionality and the linear algebra in the class
update collab and course website, I found it confusing for a while trying to navigate the website
Great class. Could think of creating another class (like a graphics 2) after this one that dives in deeper into the content that was covered later on in the semester.
teach it more often!!
Its very good the way it is.
Include more real–time graphics/animation projects. Those were really fun. I would also suggest an intro to raytracing assignment, since I know a lot of people were frustrated initially getting started with raytracing, because it was unrelated to previous assingments.
I liked the course content. I think having some material on post–process would be interesting.
The homeworks were often time very frustrating and it felt like I would be shooting in the dark for the first couple of hours until things started to click/make sense. I think having a bit more information on the homework writeups about common pitfalls to avoid/potential causes for images looking a certain way would help reduce the time wasted trying to debug something that isn't immediately obvious/clear to the unexperienced eye.
Maybe assign readings more specifically? There are usually a few links to readings for each class on the schedule, but they vary dramatically in reading length and importance. It would be awesome to have a better idea of what to prioritize when it comes to readings (idk if people are reading entire Wikipedia articles). Thanks for a great semester!
some of the quiz questions are very specific and basically require you to re–watch the lecture with the quiz open
Though rare, on some occasions there were typos which led to misunderstandings. Also I think it would be helpful to link a reading or website about the Model, World, View, Projection, Viewport process. Though it was briefly introduced well conceptually in class, it was still hard to get started on the 3D rasterizer with just that information.
I think it might be good to add some more pre–requisites for this course to allow more in–depth study of certain algorithms and concepts that we had to cover superficially
If CS 4810 is only going to be taught every two years or so, I don't think having Algorithms or Computer Architecture be prerequisites would deter enough people from taking the course. It might also be fun to have an animation project included, like the fluid or cloth simulations.
Not sure if I have any, sorry