CS 2150-003 Program & Data Representation - Spring 2019

ENGR (18893)

INSTRUCTORS: Floryan, Mark (mrf8t)

Respondents: 42 / Enrollment: 77

Summary: CS 2150-003 Program & Data Representation - Spring 2019 (18893)

Overall Course Rating

CS-2150-003 Mean 4.02 CS-2150-003 Std Dev 1.13 CS-2150-003 Response Count 210

SEAS, 2000-level courses Mean 4.05 SEAS, 2000-level courses Std Dev 1.01 SEAS, 2000-level courses Response Count 18076

Overall Instructor Rating

INSTRUCTOR: Floryan, Mark Mean 4.35 Std Dev 0.79 Response Count 294

SEAS, 2000-level courses Mean 4.27 SEAS, 2000-level courses Std Dev 0.89 SEAS, 2000-level courses Response Count 26519

~ QUESTIONS AND DETAILS ~

1. The course addressed technically rigorous subject matter consistent with the course objectives.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

~ ANSWER MATRIC	CES ~
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Results for CS-2150-003									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
42	4.67	0.57	30 (71.43%)	10 (23.81%)	2 (4.76%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	

Results for SEAS, 2000-level courses								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3616	4.39	0.71	1780 (49.23%)	1555 (43.00%)	187 (5.17%)	57 (1.58%)	21 (0.58%)	16 (0.44%)

2. The instructor used methods other than/in addition to traditional lectures (for example, active learning, in-class problems, collaborative learning, inclass discussion) effectively in this course.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for	Results for CS-2150-003, Floryan, Mark									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
42	4.12	0.94	19 (45.24%)	11 (26.19%)	10 (23.81%)	2 (4.76%)	0 (0.00%)	0 (0.00%)		

Results for								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3795	4.08	1.01	1507 (39.71%)	1384 (36.47%)	451 (11.88%)	229 (6.03%)	96 (2.53%)	128 (3.37%)

3. There was a reasonable level of effort expected for the credit hours received.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-003									
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	42	3.24	1.48	12 (28.57%)	9 (21.43%)	4 (9.52%)	11 (26.19%)	6 (14.29%)	0 (0.00%)

Results for SEAS, 2000-level courses									
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	3621	4.08	1.04	1409 (38.91%)	1576 (43.52%)	257 (7.10%)	200 (5.52%)	160 (4.42%)	19 (0.52%)

Not

Applicable

(NA)

(0.00%)

Not

Applicable (NA)

207

(5.72%)

Not

Applicable

(NA)

(52.38%)

Not Applicable

(NA)

1086

(30.03%)

Not

Applicable

(NA)

(0.00%)

Not

Applicable

(NA)

85

(2.25%)

Not

Applicable

(NA)

(0.00%)

Applicable (NA)

115

(3.03%)

Not Applicable

(NA)

0

(0.00%)

Not

Applicable

(NA)

126

(3.33%)

Disagree

(2)

(2.27%)

Strongly

Disagree

(1)

60

(1.58%)

Neutral

(3)

262

(6.92%)

~ QUESTIONS AND DETAILS ~ ~ ANSWER MATRICES ~ 4. The homework assignments helped Results for CS-2150-003 me learn the subject matter. Agree (4) Total Mean Std Dev Strongly Neutral Disagree Strongly Agree (2)Disagree (3)Question Type: Likert (5) (1) 42 4.60 0.59 27 13 2 0 0 contributed by Dean of the School of Engineering (30.95%) (4.76%)(0.00%)(64.29%)(0.00%)and Applied Science Results for SEAS, 2000-level courses Agree (4) Disagree (2) Mean Std Dev Strongly Total Neutral Strongly Disagree (1) Agree (5) (3) 3619 4.20 0.93 1509 1378 74 305 146 (8.43%)(2.04%)(41.70%)(38.08%)(4.03%)5. The textbook increased my Results for CS-2150-003 understanding of the material. Agree (4) Total Mean Std Dev Strongly Neutral Disagree Strongly Agree (5) Disagree (1) (3) (2)Question Type: Likert 42 3.45 0.83 9 contributed by Dean of the School of Engineering (4.76%) (16.67%)(21.43%)(4.76%)(0.00%)and Applied Science Results for SEAS, 2000-level courses Strongly Agree (5) Disagree (2) Mean Std Dev Agree (4) Strongly Disagree Total Neutral (3)(1) 3616 3.52 701 1.15 570 792 312 155 (19.39%)(15.76%)(21.90%)(8.63%)(4.29%)6. The course material was well Results for CS-2150-003, Floryan, Mark organized and developed. Total Mean Std Dev Strongly Agree (4) Neutral Disagree (2) Strongly Disagree (1) Agree (5) (3) Question Type: Likert 4.31 0.75 42 19 18 4 0 contributed by Dean of the School of Engineering (42.86%) (45.24%) (9.52%) (2.38%)(0.00%)and Applied Science Results for SEAS, 2000-level courses Agree (4) Std Dev Total Mean Strongly Neutral Disagree Strongly Agree (5) (3) (2)Disagree (1) 3784 0.97 1459 1549 391 209 (38.56%)(40.94%)(10.33%)(5.52%)(2.40%)7. The instructor was knowledgeable Results for CS-2150-003, Floryan, Mark about the subject matter. Std Dev Disagree (2) Strongly Mean Strongly Total Agree (4) Neutral Disagree (1) Agree (5) (3) Question Type: Likert 42 4 71 0.51 n 31 10 contributed by Dean of the School of Engineering (23.81%) (2.38%)(0.00%)(73.81%)(0.00%)and Applied Science Results for SEAS, 2000-level courses Disagree (2) Agree (4) Total Mean Std Dev Strongly Neutral Strongly Agree (5) Disagree (1) (3) 3791 4.53 0.72 2299 1128 170 46 33 (60.64%)(29.75%)(4.48%)(1.21%)(0.87%)8. The instructor was well prepared for Results for CS-2150-003, Floryan, Mark class. Agree (4) Total Mean Std Dev Strongly Neutral Disagree Strongly Agree (3) (2)Disagree Question Type: Likert (5) (1)42 4.48 0.63 23 16 3 0 0 contributed by Dean of the School of Engineering (54.76%)(38.10%)(7.14%)(0.00%)(0.00%)and Applied Science

Std Dev

0.84

Strongly

Agree (5)

1945

(51.36%)

Agree (4)

1308

(34.54%)

Results for SEAS, 2000-level courses

Mean

4.36

Total

3787

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

9. I received adequate preparation from the prior courses in the curriculum to be successful in this course.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for	CS-2150-0	03						
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
42	3.85	1.01	12 (28.57%)	16 (38.10%)	9 (21.43%)	3 (7.14%)	1 (2.38%)	1 (2.38%)

Results for SEAS, 2000-level courses								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3604	3.91	1.02	1008 (27.97%)	1392 (38.62%)	512 (14.21%)	237 (6.58%)	104 (2.89%)	351 (9.74%)

10. The grading policy was fair.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-003, Floryan, Mark								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
42	3.86	1.05	12 (28.57%)	18 (42.86%)	8 (19.05%)	2 (4.76%)	2 (4.76%)	0 (0.00%)

Results for SEAS, 2000-level courses								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3788	4.17	0.92	1555 (41.05%)	1541 (40.68%)	365 (9.64%)	186 (4.91%)	62 (1.64%)	79 (2.09%)

11. The instructor responded adequately to in-class questions.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-003, Floryan, Mark										
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
	42	4.57	0.55	25 (59.52%)	16 (38.10%)	1 (2.38%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	

Results for SEAS, 2000-level courses									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
3787	4.34	0.84	1851 (48.88%)	1396 (36.86%)	243 (6.42%)	113 (2.98%)	50 (1.32%)	134 (3.54%)	

12. The instructor effectively used technology in support of the learning goals for this course.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

F	Results for CS-2150-003, Floryan, Mark									
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
	42	4.40	0.63	20 (47.62%)	19 (45.24%)	3 (7.14%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	

Results for	Results for SEAS, 2000-level courses									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
3787	4.29	0.84	1709 (45.13%)	1473 (38.90%)	320 (8.45%)	103 (2.72%)	45 (1.19%)	137 (3.62%)		

13. The average number of hours per week I spent outside of class preparing for this course was:

Question Type: Multiple Choice

contributed by Office of the Provost

Results for CS-2	2150-003				
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
42	0 (0.00%)	0 (0.00%)	7 (16.67%)	13 (30.95%)	22 (52.38%)

Results for SEAS, 2000-level courses								
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)			
3619	232 (6.41%)	1175 (32.47%)	1285 (35.51%)	536 (14.81%)	391 (10.80%)			

~ QUESTIONS AND DETAILS ~				~ ANSWER	MATRICES ~			
14. I learned a great deal in this course.	Results for	CS-2150-003	3					
Question Type: Likert contributed by Office of the Provost	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
contributed by Office of the 1 tovosi	42	4.62	0.54	27 (64.29%)	14 (33.33%)	1 (2.38%)	0 (0.00%)	0 (0.00%)
	Results for	SEAS, 2000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	3608	4.20	0.91	1571 (43.54%)	1480 (41.02%)	339 (9.40%)	146 (4.05%)	72 (2.00%)
15. Overall, this was a worthwhile	Results for	CS-2150-003	3					
course. ~ Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
contributed by Office of the Provost	42	4.45	0.77	25 (59.52%)	12 (28.57%)	4 (9.52%)	1 (2.38%)	0 (0.00%)
	Results for	SEAS, 2000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	3598	4.13	0.99	1543 (42.88%)	1379 (38.33%)	395 (10.98%)	178 (4.95%)	103 (2.86%)
16. The course's goals and requirements	Results for	CS-2150-003	, Floryan, Ma	rk				
were defined and adhered to by the instructor.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Question Type: Likert contributed by Office of the Provost	42	4.43	0.59	20 (47.62%)	20 (47.62%)	2 (4.76%)	0 (0.00%)	0 (0.00%)
	Results for	SEAS, 2000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	3782	4.31	0.80	1760 (46.54%)	1627 (43.02%)	264 (6.98%)	86 (2.27%)	45 (1.19%)
17. The instructor was approachable	Results for	CS-2150-003	, Floryan, Ma	rk				
and made himself/herself available to students outside the classroom.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Question Type: Likert contributed by Office of the Provost	42	4.24	0.79	18 (42.86%)	17 (40.48%)	6 (14.29%)	1 (2.38%)	0 (0.00%)
	Results for	SEAS, 2000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	3785	4.29	0.85	1844 (48.72%)	1396 (36.88%)	406 (10.73%)	83 (2.19%)	56 (1.48%)
18. Overall, the instructor was an	Results for	CS-21 <u>50-0</u> 03	, Floryan, Ma	rk				
effective teacher. ~ Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
contributed by Office of the Provost	42	4.43	0.74	24 (57.14%)	12 (28.57%)	6 (14.29%)	0 (0.00%)	0 (0.00%)
	Results for	SEAS, 2000-	level courses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
	3793	4.18	0.98	1722 (45.40%)	1388 (36.59%)	416 (10.97%)	159 (4.19%)	108 (2.85%)

		CS 2150-003 Program & Data Representation - Spring 201						
~ QUESTIONS AND DETAILS ~		~ ANSWER MATRICES ~						
19. Please make any overall comments	Results for CS-2150-003							
or observations about this course:	Total Individual Answers							
Question Type: Short Answer	27	See below for Individual Results						
contributed by Office of the Provost								
	Hardest (in terms of sheer amount of work) but most worthwhile course I've taken at UVA.							
	spent working on this semester. I th assignments are of teaching style, wh That all being said matter (obviously) teach anyway. Th in my time at UVA hours for one ass	ould MOST DEFINITELY be a 4 or 5 or ever 6 credit course. The amount of time I this one course far outweighs the time I spent on all of my other courses combined ink the class structure could be improved, by for example making it so that the in lab due Wednesday morning or night. I also think that Floryan could improve his lich mostly consists of him reading from the slides that we already have access to. d, I do think that Floryan and Bloomfield are both very knowledgeable in the subject and are probably much better one-on-one, since the material is kind of hard to e labs for this course are definitely the most challenging assignments I've had here to but there was never one that I couldn't complete (they may have taken me 12+ ignment, but darn it I got them done). I learned SO much in this class and I definitely programmer because of it.						
	Mark Floryan knows a lot about a lot of things. Great guy, enthusiastic lecturer. CS 2150 just has way too much work to be considered a 3 credit class.							
	Should be more credits in my opinion							
	this class was fun Floryan and Bloomfield are cool? people hope to take more classes taught by either of you guys							
	This course was both challenging and useful.							
	much work expect semester and office answered. Overall changed and it seems this class real	s good and knowledgeable, but the class itself really wasn't the best. There was too ted for a 2000 level class that only gives three credits. I found myself struggling all ce hours never really helped because they took forever to get my question I, I would not recommend this course. I feel there are many things that need to be sems like this class is almost set up for students to fail. I really like computer science, ly made me not like it that much anymore because it was so frustrating. The I really consider how they teach the course.						
	The course is well structured and the labs really helped me understand the concepts taug think that the exams should be easier in difficulty.							
	I do not have comments to make at this time.							
	Some of the lab docs were confusing.							
	way the weekly la period to do, so th If we can have a la documents they "research topics" learn much from it" The wor form it" The wor	Illy taught nearly all of the basic data structures in the beginning of CS. But just the bs are structured, it could be improved. For instance inlab takes more than the class new should get longer time. Lab extention are nice and should be used in the future. Deter way to make students learn, I would tear down all the tutorials and lab are are way too long, yet, YET, they don't provide everything whenit comes to like and other bullshit excuses for making students do more work. We certainly won; to hyea, go read this book abour bash shell script, and you will use like two lines the is chanllenging and I am fine with that, they could be presented in way better a arial lab documents If you think we have not stared at a computer screen long asses, then please help the students save their vision						

Strongly recommended for anyone interested in CS. Great introduction to a wide variety of topics. Both instructors for this semester are great.

The workload seemed like too much and while that is understandable for a course like this the jump from 2110 to 2150 was enormous in terms of work outside of class. While I feel as though this course shouldn't need much change, its the preparation entering into this course that needs change.

~ ANSWER MATRICES ~

This class was hard. It's supposed to be hard, but there are things that should be changed to make it effective. I spent hours a week slaving away on each part of the lab only to get points unfairly taken off. Some of the labs asked for too much. Everything was doable, but the deadlines were too rigorous. I think there should be more time to do the In-Lab. At the beginning of the semester, Bloomfield said "In-Lab should only take you an hour. The time of your lab period." That was THE biggest lie. Staying up all night trying to do the pre-lab and then having to wake up and code for 17 straight more hours was ridiculous. Just think about it from our perspective, you all get to go home at decent normal work hours, but if we're staying up until 5 AM trying to finish something there's a problem. I love CS and I appreciate how much this class has taught me, but asking to turn in the In-Lab hours after the Pre-Lab was too much. The week of the National Championship was great because the Post-lab was due Saturday. I worked on most of it on Thursday night and was able to sleep on it and actually think about the material to be able to finish it on Friday morning. Maybe you could incentivize people to finish stuff early, but set slightly later deadlines. The exams in this class are ridiculous. Please post keys to previous exams or give them to TAs or something. I literally went to class every day and spent every second I could in TA office hours and still failed both exams. Just a simple topics list would go a long way. This course covers so much and just saying to study everything is not helpful. I feel like many weeks I would go through the motions of finishing the lab, but not understand what I was supposed to from it. Maybe you could set aside 5 minutes every Friday lecture to conclude what concepts should be taken away from the lab. There was a disconnect between what we talked about in class and the subject matter of labs, in my opinion. The TAs who grade need to be on the same page and give better feedback because

CS2150 is a well structured and interesting course that goes in depth about data structures and lower level representations of data and languages. There is a decent amount of overlap between CS2110 and CS2150, but that overlap is made up for the fact that 2150 goes a lot more in depth with the same topics, and is more theoretical. Overall good course and good professor.

The one suggestion about this course is to not make the prelab and inlab due on the same day. It can become a lot to have two assignments due on the same day, especially when the prelab and inlab are the most time consuming parts of the homework.

You made a 3 credit CS class feel like 3 3 credit classes. I had no life outside of e-school this semester, primarily because of this class. I have also questioned staying in CPE many times this semester, primarily because of this class. Overall, this class feels like a full-time job. Thank you for coming to my TED Talk.

CS 2150 has been one of my favorite classes I have taken so far at UVA. I did not think this class was that hard nor too time consuming, and I learned a great deal. I actually think that the labs were a little too lenient with providing pseudocode and algorithms, and sometimes entire usable code. I feel I learned the best when no code or algorithms were provided at the start, so that I had to actively think about the steps I need to take to incrementally complete the problem. I think my biggest disappointment in terms of this class was that the wordsearch code was already given to us in the Hashing lab. I understand that the point of that lab was hashing, and not extraneous algorithms, but I would have really loved to implement that myself from scratch. As a EE/CPE double major I especially loved the lower level programming, and wish we spent more time on assembly than we did. Some of the reports could be monotonous, but otherwise I don't think I disliked a single lab. Mark Floryan is also a really nice guy and good professor, and I'm glad he came back for the second half of the semester.

This course is very very difficult. There could be some measure done to make it less stressful for the student. It is hard to spend 10+ hours on this course, and take other courses at the same time. Material wise, it is okay, but the labs are hard to understand and then when one goes to TA office hours, he/she is 40th in the queue. Exams too are very hard, there wouldn't need to be a curve if the exam was reasonable.

N/A

2150 requires a lot of time out of your schedule and should probably be worth more than three credits. Overall, the first CS class where I feel like I learned how to really program and why things are done the way they are. Some labs were easy and others were really difficult, just had to make sure to always start labs early and understand all the information that was given to you.

I think the Honor Policy for this course is unnecessarily strict

This was the hardest CS class I've taken so far. The amount of work needed to complete some of the labs is ridiculous; some of the labs provided little to no guidance other than something along the lines of "Implement a linked list." While you will learn a lot in this course, you will do so through painstaking hours of scratching your head, debugging, possibly crying, giving up, and then discovering you should have used a pointer instead of a dereference. The workload for this class led to me neglecting the work of some of my other classes, making it feel like I was taking only this course the entire semester. I've lost sleep, sanity, and some of my passion for coding; the labs were monumental tasks and I was never motivated to complete them due to an outstanding desire to learn C++, but simply because I had to maintain my grade to pass the class.

2150 was quite the ride. I do think that this course was very worthwhile but I do also agree it was a lot of work. There were definitely some frustrating parts like when my prelab 12 wouldn't compile and there was no way for me to fix this problem on my own. Overall I do think that work in this class was worthwhile as the only way to really learn how to code is to do it.

Great job!

I think this course and all its necessary resources are well-organized, and the professors are excellent lecturers who can explain the material well. The labs, while difficult and requiring an intensive amount of work throughout the week, cover important concepts in-depth. I would have expected this class to be 4 credits due to the 10+ hours required for the assignments throughout the week. Additionally, I believe the strict penalties for submitting assignments late is unreasonable because the work involved in doing the each part of the labs is quite heavy for the short time period we have to complete each one. This would often result in my either having to turn in partially complete or functional code in order to not get 25% off, whereas if I continued to debug it for another day I could turn it in completely functional and late. Essentially I think the one-day penalty is very severe when considering that the grading isn't completed until weeks later, and it seems like it would be more worthwhile to turn in functional code with a minor penalty than rush through the assignments to not get the large penalty. Another big issue is TA office hours, which is an extremely inefficient and ineffective experience because there are not enough TAs present to help students in a timely manner. Arriving right on time for offfice hours means you can get help fairly quickly one time, but the help queue gets so backed up that you must wait over 45 minutes to be able to speak to a TA again and get any confirmation or clarifications on your work. This is a completely ineffective use of time especially given that students often have other time commitments throughout their evenings, and are unable to wait in the queue for hours to get 15 minutes of face time with a TA.