CS 2150-002 **Program & Data Representation** - Spring 2019

ENGR (16542)

INSTRUCTORS: **Floryan, Mark (mrf8t)**

Respondents: 90 / Enrollment: 144

Summary: CS 2150-002 Program & Data Representation - Spring 2019 (16542)

Overall Course Rating

CS-2150-002 Mean 3.90
CS-2150-002 Std Dev 1.31
CS-2150-002 Response Count 450

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 4.33
Std Dev 0.88
Response Count 629

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 ~ | *~ ANSWER MATRICES ~*

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

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Question Type: Likert
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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	4.69	0.51	64 (71.11%)	24 (26.67%)	2 (2.22%)	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, in-class discussion) effectively in this course.

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Question Type: Likert
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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	3.97	1.13	35 (38.89%)	30 (33.33%)	12 (13.33%)	7 (7.78%)	4 (4.44%)	2 (2.22%)

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)
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.

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Question Type: Likert
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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	2.66	1.60	19 (21.11%)	13 (14.44%)	9 (10.00%)	15 (16.67%)	33 (36.67%)	1 (1.11%)

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%)

~ QUESTIONS AND DETAILS ~ | *~ ANSWER MATRICES ~*

4. The homework assignments helped me learn the subject matter.

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	4.56	0.64	56 (62.22%)	29 (32.22%)	4 (4.44%)	1 (1.11%)	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)
3619	4.20	0.93	1509 (41.70%)	1378 (38.08%)	305 (8.43%)	146 (4.03%)	74 (2.04%)	207 (5.72%)

5. The textbook increased my understanding of the material.

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	3.41	1.16	9 (10.00%)	8 (8.89%)	14 (15.56%)	6 (6.67%)	2 (2.22%)	51 (56.67%)

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	3.52	1.15	570 (15.76%)	792 (21.90%)	701 (19.39%)	312 (8.63%)	155 (4.29%)	1086 (30.03%)

6. The course material was well organized and developed.

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
89	4.28	0.80	40 (44.94%)	37 (41.57%)	10 (11.24%)	1 (1.12%)	1 (1.12%)	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)
3784	4.10	0.97	1459 (38.56%)	1549 (40.94%)	391 (10.33%)	209 (5.52%)	91 (2.40%)	85 (2.25%)

7. The instructor was knowledgeable about the subject matter.

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	4.66	0.58	63 (70.00%)	23 (25.56%)	2 (2.22%)	1 (1.11%)	0 (0.00%)	1 (1.11%)

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)
3791	4.53	0.72	2299 (60.64%)	1128 (29.75%)	170 (4.48%)	46 (1.21%)	33 (0.87%)	115 (3.03%)

8. The instructor was well prepared for class.

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	4.61	0.60	59 (65.56%)	25 (27.78%)	5 (5.56%)	0 (0.00%)	0 (0.00%)	1 (1.11%)

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	4.36	0.84	1945 (51.36%)	1308 (34.54%)	262 (6.92%)	86 (2.27%)	60 (1.58%)	126 (3.33%)

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~

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

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	3.90	1.07	29 (32.22%)	36 (40.00%)	13 (14.44%)	8 (8.89%)	3 (3.33%)	1 (1.11%)

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.

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	3.77	1.15	25 (27.78%)	40 (44.44%)	9 (10.00%)	11 (12.22%)	5 (5.56%)	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.

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	4.51	0.68	53 (58.89%)	29 (32.22%)	6 (6.67%)	1 (1.11%)	0 (0.00%)	1 (1.11%)

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.

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Question Type: Likert

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contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
90	4.51	0.62	50 (55.56%)	35 (38.89%)	3 (3.33%)	1 (1.11%)	0 (0.00%)	1 (1.11%)

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:

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Question Type: Multiple Choice

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contributed by Office of the Provost

Results for CS-2150-002

Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
90	0 (0.00%)	5 (5.56%)	5 (5.56%)	26 (28.89%)	54 (60.00%)

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.

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Question Type: Likert
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contributed by Office of the Provost

Results for CS-2150-002

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
90	4.68	0.60	66 (73.33%)	20 (22.22%)	3 (3.33%)	1 (1.11%)	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 course.

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Question Type: Likert
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contributed by Office of the Provost

Results for CS-2150-002

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
90	4.47	0.81	55 (61.11%)	26 (28.89%)	6 (6.67%)	2 (2.22%)	1 (1.11%)

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 were defined and adhered to by the instructor.

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Question Type: Likert
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contributed by Office of the Provost

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
90	4.53	0.58	52 (57.78%)	34 (37.78%)	4 (4.44%)	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 and made himself/herself available to students outside the classroom.

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Question Type: Likert
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contributed by Office of the Provost

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
90	4.32	0.80	44 (48.89%)	34 (37.78%)	10 (11.11%)	1 (1.11%)	1 (1.11%)

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 effective teacher.

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Question Type: Likert
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contributed by Office of the Provost

Results for CS-2150-002, Floryan, Mark

Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
90	4.48	0.64	50 (55.56%)	33 (36.67%)	7 (7.78%)	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%)

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~

19. Please make any overall comments or observations about this course:

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Question Type: Short Answer

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contributed by Office of the Provost

Results for CS-2150-002

Total	Individual Answers
55	*See below for Individual Results*

This is the hardest I have ever had to work in any class of my entire schooling career. I spent more time on this one class than my other 12 credits of classes combined. This course made my semester miserable, but it also taught me a massive amount of important information, so I guess it was a tradeoff necessary to really understanding low level computing.

N/a

I really enjoyed lecture. Mark Floryan was a very humorous guy, and I highly enjoyed his lecture.

I think this was one of the most satisfying classes I have ever taken because you truly have to earn your grade. Floryan was an engaging and insightful lecturer and is part of the reason why this course is so beneficial to any CS student. I appreciate the humor he incorporated into each lecture to make it fun.

Deserves more credits

Tough, time-consuming class, but well worth the time and effort. Floryan is an awesome lecturer!

I loved this class. I learned more in the past 3 months of this class than I have in the rest of my computer science education. In my opinion, the AVL tree part of lab 5 was by far the hardest assignment I had this year. My favorite lab was the Huffman lab, definitely don't change anything about it.

#growing pains

5 credit course

Extremely difficult to find a professor - and even harder to complete assignments

This might be my favorite course I have taken at UVA, even though it was a lot of work I feel like I learned so much about programming and how it works at the machine level that I feel so much more knowledgeable about the subject matter. As I said in my suggestion.txt file I think that office hours could implement a priority queue depending on the severity of the problem at hand, and if it is possible, the instructors could make themselves more available with more frequent office hours during the week, as if there is a complication with the Pre-Lab the office hours usually weren't until after the assignment was due. Other than that, I really enjoyed this course and thought Floryan did a great job not only being excited about the content but teaching it extremely well. Thank you for a fantastic semester!!

Floryan was good but this course was brutal. It caused me quite a few relationships and lowered by confidence as a programmer. I really appreciate both Floryan and Bloomfield not trying to condescend the students during their questions because PDR is incredibly hard.

This course is a back breaking amount of work, but you already know that. Also just get rid of IBCM and go straight into assembly

Hardest class I've ever taken. Material was necessary and important but work load was absolutely ridiculous.

This course should be 4-5 credits for the workload! Overall, learned a lot. Exam conflicts should be resolved much earlier; I didn't hear back about the final exam makeup time until yesterday (3 months later) and now I might be stuck taking three exams in 24 hours.

The Lectures aren't meant for anything other than introducing us to the tools we need to complete the labs. Not sure if that's a good or bad thing, just putting that out there.

No outstanding comments

This is such a fulfilling class, but way too much work for three credits. I spent basically all my time outside my classes only focusing on this course, so its a good thing I took easy courses otherwise. I have never spent so much time on a class and although I learnt alot, I think that the office hour times should be made more available. Alot of the times the TAs were not helpful and closed the queue early. I think that there should be office hours everyday.

This was by far my favorite CS class I have taken. Yes it was hard, but honestly for a higher level CS class it could have been so much worse. Many of the labs were incredibly challenging at the time, but looking back they actually weren't too too terrible and I definitely learned a lot while working through them. Lectures were mostly interesting, although there were times when we spent a lot of time walking through example code when I feel like it might have been more beneficial to have had to read through it and try to understand it on our own. Also, regarding the tests, they were hard, but I feel like they could have been better. With most of the answers, I feel like the answer was stated pretty directly in lecture, which yes midterms should test what was covered in class and my grade appreciated that, but I feel like there could have been more thought-provoking/challenging questions that required more consideration than simple recall. (I may end up regretting saying this after the final.) Professor Floryan was engaging and I loved having him (I also had Bloomfield for the first part of the semester and he was great too.)

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	I know that this is already being considered by the CS department, however, I strongly believe that this course should be worth more than 3 credit hours based off of the amount of time is needed to do work for this course.
	This was the most difficult course I have taken at UVA but not necessarily the rigor of the stuff we were learning but the time required to complete the labs. With that, I also learned the most that I have ever learned in a course.
	I have never put in so many hours into a class. I must have spent 15+ hours a week on this class between classes, lab and the many many hours I spent doing the labs. With that being said, I really enjoyed this class. I had the pleasure of having both Professor Bloomfield and Professor Floryan as my lecturer this semester and I was surprised that you could have two great teachers teaching the same class. Typically, there is one professor who is much more liked than the other, but I really enjoyed them both. At times, this class made me want to curl up into a ball and cry my pain away but that was what made it fun. The relief of finishing a lab was amazing. Looking back, this probably was one of the most rewarding classes I have ever taken. Thank you Professor Floryan. I promise that I laughed at most of your jokes this semester.
	Should be a 4 credit class based on the workload. Additionally, lab difficulty could be better balanced.
	This class is a truly great class, I was in the section that had both Bloomfield and Floryan and they both were fantastic! I really appreciate how much thought goes into the organization of the class and how easy it is to find the information. I think the work could be spread out more throughout the week so the week isn't so front heavy.
	The grading policy for the exams was pretty harsh. For example, on one test there were 12 true/false questions, and I got 9/12 correct but was only awarded 3/6 points for that section. I don't get who would come up with that policy instead of just giving equal credit for each question.
	I had a lot of complaints about the class, but was afraid of the "anonymous" comments on collaboration because I didn't know how anonymous it actually was. First, the TA's suck at grading. I've received so many points off for mistakes. I've submitted multiple regrades and got the points back, but they shouldn't be making so many mistakes in the first place. Second, how come you didn't know the answers to some of the previous test questions? I know you won't put the questions on the test, but what about Bloomfield? Next, how come you guys don't post the answers for previous tests online? If we don't know the answers and you don't give us the answers at the review sessions because you don't know them, how the hell are we supposed to prepare for the tests? That's the most retarded part of the class.
	As known, learned a lot, but probably should be worth another credit for the amount of work.
	I lost a lot of sleep over this class... I really hated the amount of work we had to do, but I have friends at other schools who have CS classes that are more demanding than this, so I don't think that this should be made any easier... I think 2110 should be designed to be better at preparing students for 2150 (maybe have some coding in C++, work in a coding environment without an IDE for 1 lab, etc). Also, I have a few suggestions to improve office hours. 1) get more TA's during weeks of hard labs. 2) Implements a second queue for students who need less than 5 minutes of help (like an express lane). 3) Have some TA's address general questions about the lab in a group setting. You're a very funny guy, had fun learning from you.
	A lot of hours were put into this course, but I wouldn't say it was unreasonable for the amount of material we were learning.
	I really appreciate both Professors for their efforts to make the confusing concepts and topics clearer to us. The class is challenging but really worthwhile.
	The homework assignments were an integral part of learning the material, but lecture wasn't always the most interesting and the exams were heavily conceptual. I wish they were more balanced between conceptual and technical.
	Good class, but a lot of hours per week.
	Unavoidably, the teachers were not able to attend to their 300+ students, so most of the small technical aspects of the course were handled by the TAs. Obviously, it depends on the funding supplied by the department, but adding more TAs to this class would be very helpful.
	I think the way cs2150 is working is more suitable for people who have already had adequate knowledge and experiences of programming, not people who have just taken cs1110, cs2120, and cs2102. A lot of things are taught in cs2150 that's for sure, but I don't think I understand many of them thoroughly. I think more coding examples should be given in class and the hw instructions should be clearer. Many times I understand the logic at a high level but I had trouble implementing it because I'm not that familiar with c++ and we are not using IDE either. BTW Emacs is hard to use. We could not even open two things at the same time to check things in my .cpp and .h files. Compared to the time I spent, the things I learned are too trivial. For example, as for many lab reports we are writing, do you really think most of use could learn and understand those things on our own?? Many times I was just writing stuff that me myself don't know for sure. Isn't that a waste of time? We don't get any correct answer back from either labs or exams. I think the process of learning is that you make a mistake and then correct it. But if we never get any correct answer how can we ever know what went wrong and what should be right?? The TAs aren't that helpful either. I had a really busy schedule this semester but I spent this amount of time and effort in writing this just so you know how unreasonable this course is and how I think it could be improved. I know CS is difficult for most people and I'm not a talent in this field but I'm not stupid either. This course is just too much for most of the students. If it is just difficult and lots of work then I won't say this much. But the problem here is that I don't think I learned a lot either. For people who have prior experiences with c++ or have dedicated to cs while young they may found it more rewarding, but there are still many people like me who decided to do cs on their first or second year of college life.

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	This class should be worth 4 credits for the amount of work
	I liked the class, and felt I learned a lot. The labs varied in difficulty, and while some were much harder than others they never felt difficult for the sake of difficulty. My only minor complaint about the labs is that we have to reupload every file if we forget one or forget to select which assignment to submit.
	While I am happy to say that I learned a ton in this course, it comes with price of putting in many more hours than expected for 3 credits. I do not think my answer of 10+ for the average number of hours spent outside of class preparing for the course is accurate enough. I would say I spent more like 15 hours on average on each lab. I think that the information is important and I have become a much better programmer. This course taught me time-management and how to program more creatively. It also made me understand what was happening behind my programs. I do not think the grading policy was always fair. For example, on an exam there was a question with 12 TF questions worth 6 points in total. Instead of subtracting .5 for each TF, 1 point was taken away. So 11/12 correct TF resulted in a score of 5/6.
	Unfortunately, I can't rate Floryan because I didn't go to any of his lectures. The class was worth the time I put into it.
	Overall, this has been one of my favorite classes I've taken at UVA. Although it is a lot of work, none of it was busy work and I felt like I was always learning something along the way. The only tough part was the way exams were graded.
	This class taught me a lot, but it was also a lot of work. The work load was never unmanageable, it just required good time management skills.
	has to be more than 3 credits man
	One of the best CS classes (also one of the worst in terms of how hard it was), but I definitely learned a lot. I just wish that the course was structured differently and material was shuffled to teach us from top to bottom instead of jumping around high level and low level information. But thanks for an amazing course, Floryan!
	Why are the Labs SO LONG?
	Method of communication between students and professors is awful. Often took several days for professor to respond to support request.
	I really enjoyed this course and the work done in it. I felt like it was a fun challenge to do some of the labs. My only suggestion would be that I found it difficult to use some of the documentation such as the lecture notes due to their format and the mix of .md and .html file formats the lab documents are in.
	Very difficult. I learned a lot.
	While I don't think this will happen, I do think this should be a 4 credit course considering the amount of work required and the amount of time students are expected to spend on work outside of class. While I understand that the course is meant to be intense and that a lot of the assignments are designed to be challenging, I think that it could be dialed back for the inlabs a little bit. While in the beginning of the semester it was relatively easy to finish the lab during lab section, it became increasingly difficult to finish before the midnight deadline as I had other classes and academic commitments that sometimes lasted until 10 pm. At that point I couldn't go to office hours and only had 2 hours to figure out how to solve any problems I had with my code. If nothing else, I think the due date of the inlab should be pushed back at least until Wednesday morning, although that would encourage consecutive all nighters after staying up late working on the prelab. I think the tests were fair but the grading was pretty harsh. Especially on the second test I don't understand why the TAs would choose to take off a full point for True False questions that were obviously supposed to be half a point. I know the curve should make up for it but it still doesn't make much sense. Overall I think both Floryan and Bloomfield are good lecturers and I learned a lot even though I didn't get a lot of sleep.
	n/a
	I thought this class required a reasonable amount of effort for the hardest CS class I will take as a CS minor. I feel like I understand so much more about CS and am prepared for future classes.
	It was a lot of work, but I learned a lot. There are a few things I felt were not really necessary to the course: - The lab 9 section on C (and, although I haven't done it yet, I suspect the objective C part of lab 12) seemed kind of pointless. If C had been covered in class I feel that I may have some grasp on it, but just doing it for one assignment in lab was more of a nuisance than a learning experience because I had to look up how to do everything in C terms instead of C++ terms then instantly forgot how to do everything, so I didn't actually learn any C from that. It was also not used anywhere else in the course and I didn't feel like it was something I actually needed to know. - Inlab of lab 4: I would have learned the material better if it were just taught to us instead of having us google things and only be partially confident in our answers based on things we found from google. I don't remember all of my answers for it and I was not at all confident that they were all right when I submitted it. - There were also a few readings throughout the course such as the bash shell script reading that were very long and only parts of them were directly relevant to what we were doing. As a result, all of the stuff that wasn't a part of the lab was easily forgotten and reading through it was kind of a waste of time. - I still don't see what is so valuable about requiring us to code in a Unix environment, but I guess that was just a minor inconvenience so that's not a big deal anyway.

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	This class was a lot more work than just 3 credits. I spent more time on this class than I have for any 4 credit class that I have ever taken at UVa. The learning curve for the beginning of this course was extremely difficult. Additionally, it was frustrating to go to TA office hours and be on the queue for 2 hours before being helped. More TAs need to be staffed for lab, especially when it is known that the labs are difficult. I wish it was easier to get one-on-one help, since it's such a large class and I didn't find the TAs helpful in any of my experiences with them. This class was so damn hard. Great course. The lab pages could be better organized and presented (eg. more aesthetically pleasing) to facilitate reading and understanding