### CS 2150-001 Program & Data Representation - Fall 2017

ENGR (16960)

INSTRUCTORS: Floryan, Mark (mrf8t) Respondents: 144 / Enrollment: 207

### Summary: CS 2150-001 Program & Data Representation - Fall 2017 (16960)

### **Overall Course Rating**

CS-2150-001 Mean 4.06 CS-2150-001 Std Dev 1.21 CS-2150-001 Response Count 717

SEAS, 2000-level courses Mean 4.06 SEAS, 2000-level courses Std Dev 1.03 SEAS, 2000-level courses Response Count 16524 Overall Instructor Rating

INSTRUCTOR: Floryan, Mark Mean 4.53 Std Dev 0.71 Response Count 1004

SEAS, 2000-level courses Mean 4.27 SEAS, 2000-level courses Std Dev 0.89 SEAS, 2000-level courses Response Count 24814

### ~ QUESTIONS AND DETAILS ~

### ~ ANSWER MATRICES ~

### 1. What is your major (and whether you are declared or not)?

Question Type: Multiple Choice

contributed by Floryan, Mark (mrf8t)

Results fo	or CS-2150	)-001, Flory	∕an, Mark						
Total	BS CS (declare d) (NA)	BA CS (declare d) (NA)	BS CpE (declare d) (NA)	Undeclar ed, but aiming for BS CS (NA)	Undeclar ed, but aiming for BA CS (NOT Deferred ) (NA)	Undeclar ed, but aiming for BS CpE (NA)	Deferred from BA CS (NA)	A SEAS major that is not listed above (NA)	A major outside the SEAS school not listed above (NA)
143	55 (38.46%)	31 (21.68%)	17 (11.89%)	4 (2.80%)	15 (10.49%)	1 (0.70%)	0 (0.00%)	17 (11.89%)	3 (2.10%)

Results fo	Results for SEAS, 2000-level courses											
Total	BS CS (declare d) (NA)	BA CS (declare d) (NA)	BS CpE (declare d) (NA)	Undeclar ed, but aiming for BS CS (NA)	Undeclar ed, but aiming for BA CS (NOT Deferred ) (NA)	Undeclar ed, but aiming for BS CpE (NA)	Deferred from BA CS (NA)	A SEAS major that is not listed above (NA)	A major outside the SEAS school not listed above (NA)			
223	82 (36.77%)	77 (34.53%)	21 (9.42%)	4 (1.79%)	15 (6.73%)	1 (0.45%)	0 (0.00%)	20 (8.97%)	3 (1.35%)			

# 2. How many credits should the course be worth? Please add your comments here.

Question Type: Short Answer

 $contributed\ by\ Floryan,\ Mark\ (mrf8t)$ 

Results for CS-2150-001, Floryan, Mark								
Total	Individual Answers							
143	See below for Individual Results							

4 credits given the amount of in-class time (3\*50 minutes + 1h15m lab)

4 at the minimum. The lab is short - 75 mins. Sounds good right? But we have pre-lab, in-lab, and post-lab. The total time cost for us to finish all of them is always more than 8 hours. You need to review notes, take tutorials, do research, use virtual box, go to OH, and still suffer from the bottom of your heart.

4

Probably 4, given that the labs can be quite a bit of work.

So many more than 3 - I dedicated easily 6 hours minimum a week to this class, more realistically closer to 8-10 depending on the lab. 4 definitely, but I think 5 is even closer to reality.

4 because of the lab credit and the amount of work required

I think it should be worth 4 credits. I definitely spent more time on this class than the other 3 credit courses I was taking, and was usually more workload than my Differential Equations 4 credit class this semester.

I would say it should be around credits because student has to use more than 15 hours a week for this class. So basically it is said that we should use 3 hours a week for credit so 15 hours per week would be 5 credit class.

- 4 With lab, which takes a minimum of 3 hours, and an average of 6 hours total
- 4 This should be 4 credits because it includes much more work and also since it has a lab session outside of the class time as well.

### ~ ANSWER MATRICES ~

6 given the class requires more than 10 hours of homework per week, which is well over twice the usual for a 3 credit course.

I think the course should be worth 4 credits. 3 credits for the lecture and 1 credit for the lab.

4 credits. The class takes so much time.

I don't have much of an opinion on this. Either 3-credits or 4-credits seems fair for this course.

#### At least 4

In my opinion the coursework was much more time consuming that any of the 4 credit math classes I have had to take during my time here. Using that logic I'd say the class should be worth 4 credits rather than 3.

At least 4. The amount of time required to do well in this class, finish the assignments and really understand the material is frankly a little ridiculous for a three credit course.

4 We spend an average of 10+ hours a week for the labs (Course Forums). Thus, the class should have more credits.

3

3

3

3

3

3

3

Definitely 4, probably most time consuming undergrad class at this university

4. The amount of work is similar to other 4 credit classes.

4 (or more)

Four. Almost all of the students I spoke to spend at least 12 hours a week doing many of the labs, and the workload only increased when the exams came.

5

5

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5

5

4

4

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1

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4

4

	03 2130-001 Flogram & Data Representation - Fall 2017
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	4
	4
	4
	4
	4
	4
	4 credits, please. Save people from themselves
	4. The labs take up a TON of time. This course should absolutely be worth 4.
	At leas 4 credits. Realistically, I would say 5 credits based of the number of hours I had to put in the class on a weekly basis.
	5 - About 10-15 hours per week were spent on the labs
	3 credits, we have to devote enough effort and time in understanding the concepts.
	3, even though the courseload might be a bit much, the lab is really not a separate thing, it's very integrated into the course. Additionally, it's more of a homework thing over the span of a week anyways, and the lab section is kind of just a mandatory office hours.
	given the definition of credit hours, this should probably be 25. having essentially 3 big assignments each week took over my entire life and left very little time for my other classes. i'm not sure how having 3 lectures plus a lab equate to 3 credits. heinous workload
	4 would be reasonable because of the lab block, 3 lectures, and serious time commitment. I spent on average 20 hours a week on this course and more than my other 4 classes combined.
	4. The labs are a lot of work and take up a lot of time and therefore, should be worth 4.
	This class should be worth 4 or 5 credits to make it worth the time spent on homework assignments AND the time in lab and lecture.
	4 credits, its just as hard as physics 2 which is 4 credits counting lab
	With the rigorous course load and the outside class time that this course demands, I believe this course should be worth at least 4 credits. On average most weeks I had to spend at least 8-9 hours on the labs, often times more. This course really demands that you put in hours and hours of your time to achieve the level of learning.
	4 credits because we meet three days a week and have a lab section in addition to all of the work required out of class for the lab.
	I spent about 9 hours a week on the course. I guess three credits is enough.
	This class should be worth at least 4 credits due to the amount of time required, the difficulty of the content, and because the course also includes a lab; the fact that this course is worth only 3 credits but could take upwards of 20 hours of work for a week is ridiculous.
	4 credits. Spent at least 12 hours per week working on homework for this course, and dedicated a significant majority of my time towards completing the basic assignments in this course.
	4 The lab work took a lot of time to complete.
	The course should be 4 credits. The amount of work outside of this class was on average over 10 hours. As such I think making this a four-credit class would be more appropriate.
	5, as I spend around 15-20 hours outside of class working on the assignments.
	4 or 5, the amount of time required outside of class is greater than the amount of time I spent outside of class for my 3 other classes combined.
	5, this class doubled my work load every week
	4 4 hours a week, 4 credit-hours. Seems pretty straightforward to me.
	4 or 5 if possible
	At least 4 credits. It is insane the amount of work that must be done for the class for only 3 credits.
	4 Credits. This class has a substantial amount of work to be done outside of the classroom, not to mention such work being quite difficult at times.

4 credits. This workload is more than required for a 3 credit course currently.

### ~ ANSWER MATRICES ~

Haha I love how this is the first question. Personally I think 5. But I'm not good with time, so I understand 4. 3 is absolutely unacceptable. I had so much difficulty this semester and I was in 13 credits (including Fun1) In order to do well on the labs, which I often didn't, it would require (me) about 30-40 hours in that week, sometimes more. I finished first year with 2 all nighters. I finished this semester with 3. Per week. If I die due to sleep loss, it's because of this class. I'm sooo off schedule I'm writing this at 2:30 am. what am i doing.

4-5 credit. Takes the most amount of time of any class I have ever taken, including 4 credit classes/

6 since the amount of hours spent per week compared to other classes corresponds to 6 in my opinion

Definitely 4. I put in more work for this class than any other I had this semester including two 4-credit classes (Calc III and Physics II). When I am spending around 15 hours a week just on the assignments (and maybe it just takes a long time for me), I feel like it should be worth more

3 or 4

3 or 4

4 Labs take many many hours to complete. I think the amount of work for this class is way more than the regular 3 credit CS courses due to the difficulty of the labs.

Like five... But I suppose four is more realistic. It's more work than many four credit courses. But less work than some... Definitely at least four!

This class should be worth four credits because there is a tremendous amount of work required every week to succeed.

4 - I spent A LOT of time outside of class working on the labs

4 or more - we spend 3 hours in lecture and 1 hour in lab, and the lab has three parts per week...I think it is definitely worth 4 credits.

4 credits. This class is way too much work, stress, and time for only 3 credits.

3 since everybody gets low grade

4-6 easily

3 lecture 1 lab

3, while it was a lot of work, it is a very important course for CS majors and the work was worth the reward

At least 6. Of course, that is never going to happen. But that would accurately represent the workload for this class.

I would say 4 because it's more work than pretty much all of my 3 credit classes.

4; Due to lab.

4 or 5, the workload is very heavy throughout the week

I think both 3 or 4 credits is justifiable. If I wasn't in 12 credits, I would probably feel differently, as I do think that the time put into this class would warrant 4 credits.

I mean I've never seen a course worth more than 4 credits, but I think it should be worth 5. Maybe, the lecture is worth 4 credits and the labs are worth 1 credit (even though it should really be that the lecture is worth 1 credit & the labs are worth 4 credits just based off of the endless hours put into labs).

4 We have a lab section and three lectures per week. We end up doing the majority of our work outside of that lab period as well. This is easily four credits worth of work.

More than 4. Since it takes so much of our time.

4 credits because while I thought the work was necessary in terms of learning the material, it still required a significant amount of time and effort which surpasses the standards for 3 credits.

4 credits, there is SO MUCH WORK and a lab

4. 3 hours of class time + about 8 hours total per lab = 11 hours. Isn't the rule that you should expect to do 2 times the work outside the class as the number of credit hours?

4 at least

I think 3 credits is fine, but it also makes sense if it is more. I spent more than 10 hours a week studying in this material, so I think this course can deserve more than that.

### ~ ANSWER MATRICES ~

I think that this class should be 4 credits. This class is rather time consuming and has a lot more work than my other 3-credit classes. It would be nice if there were another credit in my transcript to reflect that.

At least 4. This class is so much work.

3 for the course and another 1 credit for lab.

4 or 5 credits

- 4 -- three classes per week plus the one hour for lab should be a 4 credit class. Not to mention the time put in outside of lab.
- 4. One extra credit for the labs.
- 4, take so much time and lab take so much time too so should be 4
- 4, the labs should be the other credit because this class took a lot of my time as compared to other 4 credit classes I have taken before

I think 3 is appropriate

4 credits, at least. This class was more time-consuming than any 4 credit class that I have taken at UVA. I also believe that the grading is very fair in general and people put in a lot of work to earn their grade, so most students would like it to impact their GPAs more significantly.

At least 4! Lab should definitely be its own credit.

- ${\bf 4}$  , it is easily the most time-consuming class I have ever taken by a longshot. I spend about 15 hours a week on the class.
- 4-5, I'm a solid coder and I not only learned a lot but had to spend a great deal of time coding some of the labs. I definitely spent more time per credit for this class than most, but not disproportionately so like physics lab.

It should be 4 credit course because it covers a lot of material and workload is a 4 credit course

- 4. Floryan already said he agrees, but just looking at the average hours reported for time spent on this class outside of this lecture (19) that number is ridiculously high for a 3 credit course. From what I understand, there are weird rules about lab time with TA's, namely that it only counts as half a credit hour per hour, but the workload warrants an exception in my opinion.
- 4 This class takes up at least 20 hours a week I would say.

4-5

4-5

3-4

3. The workload was, for the most part, appropriate for 3 credits.

At least 4-3 hours of class time + 1 hour of lab per week

4 to 5

- 3. It is a good deal of work, but there are also a lot of other science courses which are 3 credits but more work
- 4. if not. 5
- 4 credits, mad work
- 4 credits, its crazy that its not. I spend 3x the time on this class that I do for a 4 credit math course
- 4. Took way more time than my other 3 credit classes.

5

4, a lot of time needs to be spent outside the class for homework.

I would say 3 is reasonable. The labs were not so hard in my opinion that another credit should be added on, especially because the homework was replaced by the lab work.

At least 4. I spent way longer on this course than any of my others

5, mainly because of the amount of coursework. It is more than twice the average amount of coursework for a CS class.

at least 4 because of the lab section

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~				
	For the amount definitely be 4. 4 credits 4 credits	of work required, this course should be about 6 credits. Realistically though, it should			
3. Please list any comments (pro or con)	Results for CS-2	2150-001, Floryan, Mark			
about the teaching assistants here.	Total	Individual Answers			
These results will be passed onto the	120	See below for Individual Results			

TAs so that they also have some feedback from the course evaluations.

> Question Type: Short Answer contributed by Floryan, Mark (mrf8t)

Results for CS-2150-001, Floryan, Mark							
Total	Individual Answers						
120	See below for Individual Results						

The TA's basically do the homework for people at office hours. I only went a few times, but because of this I would have to wait 1 hour even though there were only 4 people who needed help ahead of

TA's were very helpful during the in-labs. If I had to make one recommendation it would be to answer to Piazza questions more promptly, but they did a pretty good job with that too.

Grading was quick and fair

too few TAs at some of the OH

Pro: some of the TAs were very approachable and very helpful Cons: some were not

I think every TA I talked to was EXTREMELY helpful. I am very thankful for them.

I think expanding OH would be useful

Thought they were helpful and informative

Lots of variability in the grading, especially for the homework

My only interaction with TA's came from grading and there were many instances when I had to submit regrades (and got the points back). I don't know if that's the TA's faults, but perhaps attention to detail should be emphasized so grading only has to be done once.

I found most of the TA's to be incredibly helpful especially during office hours. I did catch someone in the last 10 minutes of the queue being open once who told me to "just google it" but that was the only somewhat negative experience I had.

Awesome! We need more TAs.

TAs were awesome, except for a few who clearly were not cut out to be TAs. Some were pretty flat and rude, so maybe selection process should be more rigorous.

The TAs at office hours are very helpful. The lab TAs were also helpful.

5pm TAs are great! (Priya, Zach, and Jake)

I didn't have much experience with the TAs, I did most of the work myself and discussing with peers

I am sometimes confused when going to office hours and did not see TAs. I had waited there in the queue for 1 hour, and no more showed up. It would be great if students received some notification i.e. 'no office hour today'.

The graders on occasion take points off for things not on the grading guidelines, and are reluctant to give them back when confronted over it.

Sometimes the TA's can be harsh graders and others can be a little less harsh which is unfair to the students.

Some of the TAs were knowledgeable but there were some who were a little lost when I went to office hours, which is understandable but a little bit frustrating at times.

I found the TAs to be really nice and some in particular really went above and beyond in their efforts to help students both in labs and on Piazza. However, I also had some frustrations with what appeared to be incomplete understanding of the language specifications of C++. Regardless, I think they all did an excellent job.

Pros: Most of the TAs are very knowledgeable and are ready to explain the topics or answer questions regarding the labs/errors. Cons: Need more TAs for office hours. The waiting time for busy weeks is ridiculous.

TA's were helpful and quick to respond on Piazza.

no comment

The lab TAs were very helpful, but I wish they were more familiar with the grading guidelines. There were a few times when I asked a question that they couldn't really answer because they didn't know how it was going to be graded.

The TA's were very helpful when I asked them questions. I hope they keep teaching the class!

I didn't make use of the TA's but I'm sure they were helpful

The TAs were all good, but there were some who were clearly much more qualified than others.

They were helpful but a little too strict on grading some labs.

TAs were really helpful and saved me during some of these labs.

The TAs were helpful and always responded within a reasonable amount of time on piazza

The TAs were great - their level of preparation definitely varied (some people were incredible and others didn't help and you just got back in the queue) but all in all they were a lifeline

I didn't really every use the TAs so I can't comment.

I did not interact with the TAs.

Most of the TA's in 2150 know what they're talking about, which is good in terms of the CS department. Except there was one female TA blonde with a nose ring I think who clearly did not know what she was talking about and had an attitude when poorly explaining a recursive method in assembly. She was like you just "pop pop" etc without setting up before hand what we pushed or what we are popping. She also turned off the queue I believe that day. I was there at OH with friends to sign up at 5:45pm and at around 6:10pm got removed and place back at the end when I signed in again. Ended up solving the recursive method on my own after having wasted around 2 hours.

The TAs were good- could probably use more guidance in terms of how they grade.

- The TA's were often very helpful and receptive during office hours but not really lab - Some TA's were excellent while some did not know what they were doing, causing the support received to be inconsistent

The TAs were EXCELLENT. Ryan is a fantastic TA - he debugs code faster than I can type: cout<"Ryan is a fantastic TA"<<endl; Generally, the TAs were very capable, though I would appreciate less sass on Piazza. Zachary Danz is a good TA, but would give sassy answers on important posts rather than factual answers. Appreciate his work, but would also appreciate it if Piazza posts could be answered in a straightforward manner.

The TAs were all very helpful and kind at office hours! They did a great job explaining concepts I didn't understand and always did their best to help me fix my code when I couldn't figure out why it wasn't working. My only suggestion would be cutting down on the time spent per person. I noticed some TAs would be with the same person for 20+ minutes because they are too nice and that made the office hours queue go really slow sometimes which was frustrating.

TA's were a enormous help at times of distress. However, I do not feel that there were enough TA's for people. This was easy to see especially in the harder labs. It we can have more TA's that would definitely improve the course.

Ahhh...some TAs are very helpful and understand the concepts well. Some TAs are not helpful and just show up during the office hour without even know what that week's lab is about and just spent several minutes on each student without really touching the problem and then moved to the next one.

The TAs were knowledgeable and constructive.

Pro: they are pretty good and helpful Con: they cannot make personal suggestions to improve your code(like coding review)

n/a

TA's were really helpful most of the time but if one ever didnt know something he/she would use other TA's to help answer the students question.

The TAs are very knowledgeable in the course materials, but many of them are very unforgiving and will often mark down grades for no reason and especially sometimes for the wrong reason. This is really frustrating as it requires us to submit a regrade but regrades take so long to handle its just a waste of time especially when they just mess up on grading.

They are very helpful when I ask questions

TA's were great, don't have any cons about them.

They were there for help when needed.

My comments are on the delivery of the way TA's teach or aid students, whether it be in person or through online means, such as Piazza. For example, if you ask any TA a question, I literally mean any TA, they bring an overwhelming amount of entitlement to the explanation. They appear to communicate help as if they have an upper edge on us as students. Seemingly acting as if we are not worth their time or that what we ask has little to no meaning/is a stupid question. Now, I'm not stating that most questions we ask are legitimate, but the "talk-down" attitude numerous TA's use is unacceptable. In my experience with the TA's, which has been numerous times across the semester, they act in a way that they want us to feel the great burden/stress they held while taking the course themselves. This is simply not the attitude the TA's need to use when making the course challenging or competitive. Knowing several TA's outside of the classroom, they are nice people! In fact, several would help you on whatever as friends/people in general. But whenever they get into 2150 TA mode, they forget all of that. This response is meant to simply identify that the TA's need to work on their communication skills. I have spoken with several other students currently enrolled and we all have agreed that this is a major flaw the TA's have. This is a source of frustration and honestly, hinders some from asking questions to TA's in the course, i.e. ask the professor directly in class/office hours or discuss among each other. They can laugh/dismiss all that they want at this comment/response, but really the instructors should really take control and realize that change in an organization comes from within. At that all stems from the culture you employ. Mainly, the faculty member/instructor in the course needs to make it so that 2150 is not a course seen as a stress/weed-out course, but more of a challenge that will allow you to learn a ton on your CS journey. Also, if you can tell Head TA Marina Sanusi, Bye Felicia.

Teaching assistants were incredible helpful during this course, but I wonder if they were too responsible for teaching students how to complete the homework.

Teaching assistants are very helpful when you ask for questions but they do not do much during labs to teach the general student body.

They were very helpful during lab, but less so during office hours, probably because they had a long queue and had to be quick.

Pro - they are very knowledgeable and helpful con - while there are many of them, there are still too few at office hours to help students efficiently.

The TA's are pretty good

I didn't interact much with the TAs, they seemed very nice but I can't say anything specific.

Good job.

TAs were good. However, there was definitely some TAs who were better/more diligent at explaining than others

The TAs are good at answering questions on Piazza.

All of the teaching assistants that ever helped me always understood what was going on and were super helpful!

its was pretty good.

no comments

TAs were always very helpful

The TA's were very helpful, especially those in my lab section (Tuesday 12:30). Other TA's, particularly some of those on piazza, were buttholes at times and were hurtful more than helpful, but in general they were good.

TAs are very helpful in general but tend to spend too much time with one student in office hours, making it harder for others to get help. TAs should implement a 10-minute limit per student, especially in busy office hours.

It's a hard job, especially in this class. I wish they would have helped a little more in debugging.

I think the TAs graded assignments a little unfairly.

The TA's for the 12:30 were pretty good. The Hispanic girl was fantastic, the blonde girl was ok, the one guy was average

The teaching assistants were always very eager to help and approachable.

When addressing errors, some TAs messed my code up even more than it already was. It was unfair that I had to sit in Office Hours for a long time just to have my code messed up even more. There was one TA (male, orange/blonde hair): he was super smart and was by far the best TA I have encountered. He always stays overtime to make sure we understand the concepts we are working with and is very effective in finding solutions to problems that other TAs could not figure out.

There's not enough of them! There should be a generic Q & A session for students before pre-lab. It is often the case the everyone is stuck with the same part of the code. Normal office hours queues are insanely long, and people tend to hog the TA's. My suggestions would decrease the amount of time TA's and students waste.

### ~ ANSWER MATRICES ~

The TAs are very helpful! It would be even more helpful if the assignments kept us on similar pages, so they wouldn't have to read our whole code to help us effectively.

The TAs that I encountered were all good. They were knowledgeable and good at answering questions. Marina Sanusi did a fantastic job filling in for Floryan one day.

please please hire more useful TA's :( only 2-3 TA have been helpful and I have been to OH everyday. Most TA are "uhm...I'm not sure" or "uhm...have u tried running it...go from there" OFC I HAVE TRIED RUNNING IT AND DIDN'T FIGURE OUT IF I KNEW I WOULD HAVE NOT COME TO OFFICE HOURS

I found them very helpful!

I don't have much experience with the TA's, but for me, as long as they're there and can talk through an issue, whether they know a definitive answer or not, is pretty useful.

Most of the TAs are really helpful but some of them can't explain the real problems. I feel like they can be more familiar with what we are doing, especially for the assembly codes section.

The TA's were very helpful, approachable, and knowledgeable.

I thought the TAs were great. some did have trouble sometimes with certain things, but overall they were extremely helpful and 90% of them were polite and approachable.

They do an excellent job of prompt responses to student questions. They are fairly harsh when it comes to minor mistakes on labs.

more teaching assistants, they're always busy

The TAs were very helpful during labs. They generally knew their stuff and were good teachers. However, there were sometimes long waits when all the TAs were occupied helping somebody, and often they were helping the people understand things they didn't get on the prelab rather than helping people on the inlab material as would make sense during an inlab period. There was one time I asked a TA for guidance on how to do file i/o in c++, and it took a long time of me trying to debug my weird stumbling-around way of doing it in front of him before he decided to show me the standard way of doing it, which was what I asked.

TA's were all very helpful but I'm not sure there were enough of them for the traffic they had for office hours

Did not really interact with them.

Pro: Office hours are almost every day and are generally very helpful

The TA's were solid! They just didn't have experience with the 64-bit assembly, so there was some difficulty there, but they were lots of help.

CS is hard to TA because reading code is very different from writing it and the errors are often not even to do with the code but the computer. Good luck.

Great people, very helpful.

TAs were friendly and helpful. Did not interact with them much.

The TAs were good, there just weren't nearly enough of them at office hours.

TAs were great. Always were able to answer reasonable questions. Piazza responses were generally timely.

There are quite a few good TAs, but there are some that are kind of not helpful at all

TA's were very prompt and helpful, especially on Piazza. However, some of the grading was rather late, which was annoying at times.

Zachary Danz was the most unhelpful TA I have ever encountered. He is extremely condescending on Piazza and in person (at office hours), and he usually ends up not helping anyway. He typically "answers" questions by making some snarky remarks about reading the instructions again (even if the question was specifically asking for clarification because the instructions were confusing) or just linking a website that is just as confusing and unclear. Zachary Danz is simply not suited to working with students. Please do not ever hire him again.

They are fantastic

I loved all of the TAs and frequently elected to do my assignments in Thornton stacks simply to have the TAs accessible to me in case I needed assistance. Some of the TAs definitely challenged me more than others and didn't offer much help up front, but it was a good mix where I didn't feel frustrated like none of them ever actually could help me work through an error.

TAs have been extremely helpful

I only came across two TA's that actually knew what they were doing and could fully help me. I was not that impressed with the TA's.

### ~ ANSWER MATRICES ~

Grading TA's were harsh, unforgiving, and often lazy, leading to lots of necessary regrades. This was made doubly difficult by the harsh disincentive placed on requesting exam regrades.

Some TAs did not know some basic concepts but they were generally helpful

helpful and knew most of the answers

Always available, very knowledgeable.

Well I personally didn't try to get help from the TAs that much. When I did, they were helpful.

I didn't use them very often, but I appreciated them keeping on top of piazza.

They were usually helpful

They were really helpful to visualize some concepts.

The TA's are too chatty when they aren't busy. It's too distracting for me so I just work from home.

they were good.

limit the time spent per student

Google it.

The TAs were helpful at times, but there are not enough to always meet the needs of the students during labs and during office hours. It is difficult since they are our only resource for guidance/help in this class.

I think some TA's were more knowledgeable than others. I found that the TA's in my lab section never seemed positive or excited to help - instead it felt like I was bothering them. The TA's I encountered in Office Hours were definitely more friendly and helpful, so I tended to wait to ask my questions until then! (Even though it would take forever because the queue was always long & slow).

They were great, I think going over the lab for the week when the section started would be helpful also.

Helpful when I could get help. However,TAs need to do a better job spreading out their help. I've noticed sometimes TAs would spend more than half an hour helping just one student, which is a problem when there are 20+ students on queue.

No comment because I didn't really go to office hours.

The TAs are great but there is not enough of them. Waiting in the office hour queue can easily take 1.5 hours with 10 people ahead of you.

The Teaching Assistants didn't do much. Whenever I asked a question, they were unable to help at all. Get better TAs or at least give the TAs something to do. Otherwise, there is no point.

Everyone is helpful so there is only pro for them.

Every time I went to TA office hours, I always left having resolved my issue.

Bryan has been really helpful and supportive throughout the whole semester.

# 4. 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

Results for CS-2150-001									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
144	4.79	0.41	114 (79.17%)	30 (20.83%)	0 (0.00%)	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)
3298	4.41	0.71	1691 (51.27%)	1345 (40.78%)	186 (5.64%)	46 (1.39%)	19 (0.58%)	11 (0.33%)

### ~ ANSWER MATRICES ~

# 5. 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.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-001, Floryan, Mark										
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
144	4.27	0.92	72 (50.00%)	46 (31.94%)	13 (9.03%)	9 (6.25%)	1 (0.69%)	3 (2.08%)		

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)			
3549	4.12	1.00	1499 (42.24%)	1263 (35.59%)	421 (11.86%)	213 (6.00%)	82 (2.31%)	71 (2.00%)			

### 6. 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-2150-001										
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)		
144	3.35	1.52	51 (35.42%)	25 (17.36%)	14 (9.72%)	32 (22.22%)	22 (15.28%)	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)	
3304	4.05	1.09	1387 (41.98%)	1250 (37.83%)	261 (7.90%)	261 (7.90%)	141 (4.27%)	4 (0.12%)	

### 7. The homework assignments helped me learn the subject matter.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for	Results for CS-2150-001											
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)				
143	4.60	0.62	92 (64.34%)	43 (30.07%)	4 (2.80%)	2 (1.40%)	0 (0.00%)	2 (1.40%)				

Results for	SEAS, 200	0-level cour	rses					
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3306	4.24	0.89	1457 (44.07%)	1267 (38.32%)	278 (8.41%)	122 (3.69%)	53 (1.60%)	129 (3.90%)

### 8. The textbook increased my understanding of the material.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for	Results for CS-2150-001										
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)			
144	3.05	1.07	6 (4 17%)	3 (2.08%)	25 (17.36%)	5 (3.47%)	4 (2.78%)	101 (70 14%)			

Results for	SEAS, 200	0-level cou	rses					
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3310	3.62	1.14	642 (19.40%)	838 (25.32%)	651 (19.67%)	258 (7.79%)	150 (4.53%)	771 (23.29%)

### 9. The course material was well organized and developed.

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-001, Floryan, Mark										
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	
	143	4.53	0.63	83 (58.04%)	56 (39.16%)	1 (0.70%)	3 (2 10%)	0 (0.00%)	0 (0.00%)	

Results for	SEAS, 200	0-level cour	rses					
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3540	4.10	0.98	1424 (40.23%)	1378 (38.93%)	413 (11.67%)	213 (6.02%)	76 (2.15%)	36 (1.02%)

Not

Applicable

(NA)

(0.00%)

Not

Applicable

(NA)

68

(1.92%)

Not

Applicable

(NA)

(0.00%)

Not Applicable

(NA)

(2.00%)

Not

Applicable (NA)

(3.52%)

Not

Applicable

(NA)

424

(12.83%)

Not

Applicable

(NA)

(0.00%)

Applicable (NA)

(0.84%)

Not Applicable

(NA)

0

(0.00%)

Not

#### ~ QUESTIONS AND DETAILS ~ ~ ANSWER MATRICES ~ 10. The instructor was knowledgeable Results for CS-2150-001, Floryan, Mark about the subject matter. Std Dev Agree (4) Total Mean Strongly Neutral Disagree Strongly Agree (5) (2)(3)Disagree Question Type: Likert (1) 143 4.85 0.36 121 22 0 0 contributed by Dean of the School of Engineering (15.38%)(0.00%)(0.00%)(84.62%) (0.00%)and Applied Science Results for SEAS, 2000-level courses Disagree (2) Mean Std Dev Strongly Agree (4) Total Neutral Strongly Disagree (1) Agree (5) (3) 3543 4.55 0.67 2189 1071 169 32 14 (0.90%)(0.40%)(61.78%)(30.23%)(4.77%)11. The instructor was well prepared Results for CS-2150-001, Floryan, Mark for class. Agree (4) Total Mean Std Dev Strongly Neutral Disagree Strongly Agree (5) Disagree (1) (3) Question Type: Likert 143 4.75 0.47 109 contributed by Dean of the School of Engineering (76.22%)(22.38%)(1.40%)(0.00%)(0.00%)and Applied Science Results for SEAS, 2000-level courses Strongly Agree (5) Agree (4) Disagree (2) Mean Std Dev Strongly Disagree Total Neutral (3)(1) 3545 4.39 0.80 1864 1233 258 26 93 (7.28%)(52.58%)(34.78%)(2.62%)(0.73%)12. I received adequate preparation Results for CS-2150-001 from the prior courses in the Total Mean Std Dev Strongly Agree (4) Neutral Disagree (2) Strongly curriculum to be successful in this Disagree (1) Agree (5) (3) course. 1.17 142 3.80 45 51 17 17 Question Type: Likert (31.69%) (35.92%) (11.97%) (11.97%) (4.93%)contributed by Dean of the School of Engineering Results for SEAS, 2000-level courses and Applied Science Agree (4) Std Dev Total Mean Strongly Neutral Disagree Strongly Agree (5) (3) (2)Disagree (1)3306 3.83 1.09 892 1096 529 124 (26.98%)(33.15%)(16.00%)(7.29%)(3.75%)13. The grading policy was fair. Results for CS-2150-001, Floryan, Mark Std Dev Disagree (2) Strongly Mean Strongly Neutral Total Agree (4) Question Type: Likert Disagree (1) Agree (5) (3) contributed by Dean of the School of Engineering 144 4.06 0.90 18 10 and Applied Science 49 66 (34.03%) (45.83%) (6.94%)(12.50%)(0.69%)Results for SEAS, 2000-level courses Disagree (2) Agree (4) Total Mean Std Dev Strongly Neutral Strongly Agree (5) Disagree (1) (3) 3554 4.12 0.92 1392 1463 424 196 49 (39.17%)(41.16%)(11.93%)(5.51%)(1.38%)14. The instructor responded Results for CS-2150-001, Floryan, Mark adequately to in-class questions. Agree (4) Total Mean Std Dev Strongly Neutral Disagree Strongly Agree (3) (2)Disagree Question Type: Likert (5) (1)143 4.69 0.52 102 39 0

(27.27%)

(71.33%)

Strongly

(0.70%)

Neutral

(0.70%)

Disagree

(0.00%)

Strongly

Std Dev

Results for SEAS, 2000-level courses

Mean

Total

contributed by Dean of the School of Engineering

and Applied Science

### ~ ANSWER MATRICES ~

# 15. 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

Results for	CS-2150-0	01, Floryan	, Mark					
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
144	4.57	0.67	92 (63.89%)	45 (31.25%)	5 (3.47%)	1 (0.69%)	1 (0.69%)	0 (0.00%)

Results for	SEAS, 200	0-level cour	rses					
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
3545	4.27	0.88	1649 (46.52%)	1305 (36.81%)	339 (9.56%)	114 (3.22%)	52 (1.47%)	86 (2.43%)

# 16. 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	150-001				
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
144	1 (0.69%)	4 (2.78%)	26 (18.06%)	33 (22.92%)	80 (55.56%)

	Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
	3310	172 (5.20%)	860 (25.98%)	1225 (37.01%)	600 (18.13%)	453 (13.69%)

### 17. I learned a great deal in this course.

Question Type: Likert

contributed by Office of the Provost

Results for 0	Results for CS-2150-001										
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)				
144	4.68	0.62	106 (73.61%)	33 (22.92%)	3 (2.08%)	1 (0.69%)	1 (0.69%)				

Results for \$	Results for SEAS, 2000-level courses									
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)			
3303	4.25	0.89	1545 (46.78%)	1272 (38.51%)	291 (8.81%)	149 (4.51%)	46 (1.39%)			

### 18. Overall, this was a worthwhile course.

Question Type: Likert

contributed by Office of the Provost

Results for CS-2150-001								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	
143	4.59	0.70	98 (68 53%)	34 (23.78%)	8 (5.59%)	3 (2.10%)	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)	
3305	4.17	0.98	1497 (45.30%)	1193 (36.10%)	346 (10.47%)	205 (6.20%)	64 (1.94%)	

# 19. The course's goals and requirements were defined and adhered to by the instructor.

Question Type: Likert

contributed by Office of the Provost

Results for CS-2150-001, Floryan, Mark							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
144	4.64	0.48	92 (63.89%)	52 (36.11%)	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)
3541	4.32	0.77	1633 (46.12%)	1529 (43.18%)	275 (7.77%)	74 (2.09%)	30 (0.85%)

### $\sim QUESTIONS~AND~DETAILS~\sim$

### ~ ANSWER MATRICES ~

# 20. The instructor was approachable and made himself/herself available to students outside the classroom.

Question Type: Likert

contributed by Office of the Provost

Results for (	Results for CS-2150-001, Floryan, Mark							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	
141	4.43	0.72	78 (55.32%)	48 (34.04%)	13 (9.22%)	2 (1.42%)	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)
3547	4.26	0.88	1689 (47.62%)	1286 (36.26%)	413 (11.64%)	115 (3.24%)	44 (1.24%)

### 21. Overall, the instructor was an effective teacher.

Question Type: Likert

contributed by Office of the Provost

Results for CS-2150-001, Floryan, Mark							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
144	4.67	0.63	104 (72.22%)	35 (24.31%)	3 (2.08%)	1 (0.69%)	1 (0.69%)

Results for \$	Results for SEAS, 2000-level courses						
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
3555	4.16	1.00	1633 (45.94%)	1226 (34.49%)	409 (11.50%)	191 (5.37%)	96 (2.70%)

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

Question Type: Short Answer

contributed by Office of the Provost

Results for CS-2150-001					
Total	Individual Answers				
96	See below for Individual Results				

It was a good class to take to develop and lay the foundation for Computer Science and SWD techniques.

Hardest class I've taken, but the most worthwhile. Should definitely be worth 4 credits though.

The content of this class is both interesting and relevant, however the course curriculum could use some streamlining and course structure should be updated.

Hell on Earth. Destroyer of social lives. Tanker of GPAs. Leading reason of All-Nighters. Lucifer's spawn.

Interesting, a lot of material though

Great class and every cs major should take this not only because it is required but because it is the foundation to be better computer scientists in the future

This class was more work than any class I have ever taken, but it was also the best class I have ever taken at UVA. I have taken a number of classes in the CS department and Floryan is the best professor I have had, really great job.

Difficult class

I really loved this class. It is probably my favorite thing I've taken at UVa so far. I've learned so much while taking the class that I wouldn't change anything relating to the material covered. I felt that it was definitely challenging, but not in a negative way.

The grading policy is a little anal and a few labs are somewhat too long, but overall the course is fine the way it is. I would like to see less handout code and more example code instead of tutorials. Like for lab11, don't give us the code to read in the edges, it's unnecessary.

There needs to be more guidance for students who are not as well-versed in CS as those who have taken AP CS or worked for companies where they had to code.

Great class and I learned alot. Some units seemed less important than others (assembly and IBCM) but overall I learned alot and would definetely encourage others to take it

this one's a doozy, but worth it.

I hope Floryan have more office hours for us so we don't have to wait in the line.

### ~ ANSWER MATRICES ~

This was definitely the most rewarding class I have ever taken. It was incredibly challenging but I felt like I was given everything that I needed to succeed. Floryan was funny, interesting, a good communicator, and well organized. Everyday I came into class wanting to learn and pay attention which is something I can't say about any of my Systems Engineering classes this semester. There were definitely times in the semester that I just wanted to be done with the class but I never wanted to stop learning (except maybe in the Assembly section). Great job and keep being the kind of teacher that we were promised to have when coming to UVA. You revived my faith in the faculty at this school

This was a great course. Should have it been four credits? Yes. Was it still worthwhile regardless? Yes.

This is a very hard class, but I still learned a lot in it.

Before I rant about how horrible this class is, I would just like to acknowledge that Floryan was one of the best professors I've had at UVA, and I found his lectures to be very good. I understand that he did not develop the course content (the general material covered and the labs) for the class, and thus I can't really hold him responsible for what I am about to say. Professor Floryan did an excellent job with the tools he was equipped with - I just wish he was equipped with better tools (aka less absurd with the tools he was equipped with - I just wish he was equipped with better tools (aka less absurd labs). His tests were difficult but overall I believed they were fair. The problem with this class lies in the lab work, which was made by Professor Bloomfield. The labs in this class are fucking ridiculous. Excuse my language, but I don't use that word lightly. I'm not going to waste my time explaining how much time they took because it's well known that this class's workload is unbelievably bad. I'd just like to share how this class impacted my semester and my life. Thanks to the countless hours I'd have to spend each week on the labs, I probably spent about 75% of this semester in my room working. I'd say at least 50% of my work came from this class. And the other 5 classes I took weren't easy either. I'm fairly confident I would've had a better time sitting in a prison cell for 3 months than taking this class, because that's basically what it felt like. My room was my cell, and I could only leave when I finished my 2150 lab. Except as soon as I finished one part of a lab, the next one opened up. So I really never had any freedom. I lost sleep because of this class, but you've probably already heard that a million times. I didn't just lose sleep though. Prior to this semester, I'd been going to the gym 5+ times a week for over a year. I had to quit going to the gym because I no longer had time. Moreover, I didn't have time to make myself somewhat healthy food or go out to eat, so I often ended up eating crappy microwaveable food just to save time. This class completely ruined my physical health. Having to do homework virtually around the clock for 3 months meant that I had no social life (again, no I wasn't doing CS 2150 HW all day every day for 3 months, but I took 16 credits this semester, and so when I wasn't doing 2150 hw, I was doing hw for another class). I lost touch with almost all of my friends because of how busy I was doing work, mostly for this class. This lead to emotional and mental health issues. I have developed depression thanks to this class. This was a direct result of the detrimental effects 2150 had on my physical and mental health. My depression lead to suicidal thoughts. I couldn't even tell you how many times this class had me wanting to kill myself just to put me out of my misery. That's absolutely fucked up. And I know I'm not the only one. I've heard of other students resorting to alcoholism to cope with this class. Now, I'd like to clarify: I've always been a very healthy person before this class. I certainly never had encountered depression before this semester. This was something completely new to mé. I never actually did anything harmful to myself - I simply became apathetic to everything and everyone. But the fact this class even had me entertaining the thought of suicide is just beyond screwed up. The last three months were the most miserable three months of my life by a very large margin, and that's all thanks to CS 2150. It seemed like some of the labs were made by a sadist who just wanted to see students suffer. Almost every lab had components that were just completely unnecessary and a waste of time. For instance, bash shell scripting came up once and then we never saw it again. And what was the point of doxygen comments? There were just so many bullshit parts to the labs that easily could be scrapped so that we didn't have to spend 20+ hours a week on this class. Alright, I think I've made my point. Or perhaps I just wasted another 20 minutes of my life. I just hope people start taking these reviews seriously, because this class is so bad it should be illegal. And yet after hundreds and hundreds of people have already pointed this out, nothing has been done to address the glaring issues. It's just fucking unbelievable.

-

Many other students may be saying the same comments, but I wanted to add to the collection of voices saying that this was a very informative class. While the course load was ofcourse very straining at times, I found myself understanding the material at a deeper level because of the stress. I strongly agree with the introductions made at the beginning of the semester where it was said that the time spent would be difficult, but the students will come out of it feeling like they got something out of it

Overall, I would say the 2150 experience was a worthwhile one. The journey was VERY rocky at some points, but the benefits outweigh the struggles along the way! The positives: - Truly gained a better understanding of how different data structures work and their pros/cons, how computers actually run programs, all the under-the-hood details of how computers interpret code, etc. - Professor Floryan does a great job lecturing. He is very knowledgeable and you can tell he enjoys teaching. He teaches at a fast pace, but always makes sure everyone seems to be on the same page. His dry sense of humor adds to the entertainment value as well - Get a lot of coding experience. All the labs are a lot of work, but all the practice gave me a lot more confidence in my coding ability which is priceless. - The TAs are all very helpful and good at explaining topics. They genuinely try to help people gain a better understanding and try their best to help you get your code working if you are stuck. The negatives: -The relentless tide of prelabs, inlabs, and postlabs week after week can get very stressful and overwhelming especially on top of assignments from other classes. Some labs are more time consuming than others, but there was never a time where I could knock out an assignment in a single sitting. -The TAs are all lovely, but I often found myself frustrated at office hours because sometimes it took HOURS to get help because so many people go. More TAs or more office hours slots would be greatly appreciated. - For all of the work expected in the class, I canât figure out why it is only three credits. In chemistry lab, I literally had to write a report about an experiment measuring WATER. If this gets me a lab credit I donât see why CS lab canât be its own credit. - Suggestion: please drop the lowest lab grade!

### ~ ANSWER MATRICES ~

I didn't go to lecture so I can't comment on that (sorry... it's a long story involving health issues), but I actually really enjoyed this class. It frustrated me at times because C++ is my language of choice and I felt as if C++ was kind of begrudgingly taught by an institution that prefers Java (I'm the opposite. I hate Java.), but in the end, I thought the labs were an excellent way to get a better grasp of the material that was covered. I also tip my hat to the fact that the course avoided expensive textbooks and effectively used its own flavor of Open Educational Resources. As a suggestion, I think that lab attendance should not be required. If it is to be required, then something needs to change in regards to how one goes about submitting an extension request. It seemed pretty common to see students walk into lab, sign on, submit an extension, and leave. This seems to negate the purpose of a lab where attendance is required in an effort to prevent students from using IDEs, working together, or whatever. I think one way this could be changed is by requiring all students who submit extension requests to first submit what they have competed thus far. This way, in order to be granted an extension, one would have to show that they put in some requisite effort. However, what is to prevent students from simply scp'ing their competed labs, walking in, submitting, and then leaving? Again, I think the easiest thing is to simply remove the required lab attendance. Perhaps instead, the TAs could hold recitations during those hours, or the lab times could be used as general help sessions where TAs could help students struggling to implement solutions to the lab.

I really enjoyed this class even though it was super tough. There is a lot of course material here that gets crammed in to one semester and for that reason the final seems super daunting.

This was a great course, though I think the order of the labs needs to be restructured (ie: Lab 10 should occur before Thanksgiving break. Maybe switch the course order a bit such that Lab 10 material is discussed before assembly, and an assembly lab is due over Thanksgiving break instead). Reports required a lot of information, and it was difficult to write about four or five different topics while still staying within the page limits.

-Some of the descriptions of lab reports were a bit unclear as to how detailed the reports should be. I was pretty much stabbing in the dark when I submitted the first one, and then I only felt comfortable writing others when I got my grade back for the first one. -I got annoyed at how restrictive the grading guidelines were occasionally, but I know they are the way they are for a reason.

mark floryan is a great teacher, and just a great person overall. super approachable, funny, etc

Floryan is THE MAN! He is an incredible lecturer & keeps everything fun and lively in class - even with added jokes here & there! Honestly, I didn't need this class to fulfill my degree requirements, but he kept me going (even through the days when I wanted to throw my laptop at the ground because of segmentation faults & 40+ other errors). I think the course itself is interesting, and I definitely had a lot of "aha" moments throughout the semester, but I still found it hard to grasp some of the information. I think it's LOADED with material that could be broken up across two separate classes. Also, I think 1110/1112 & 2110 need to give more experience to get students prepared for 2150. I felt like I got thrown into the deep end, and the entire semester I was pretty much drowning. I love that the tests are conceptual/theoretical and not code based - since I find that I understand the material but there's definitely a disconnect between me understanding the material & then having to execute code in the labs. Please please consider making this course into 2 courses or assigning more credit hours. Even lessening some of the lab work would be helpful.

floryan is a funny guy.

I thoroughly enjoyed lectures, this was one of few classes were I legitimately found lectures interesting every day.

There is a lot of work, this class should be 4 credits if it follows a similar curriculum for the future semesters. Otherwise, perhaps taking out the mandatory lab or the Thanksgiving Lab assignment may make the class seem nicer.

Great course in general where you learn a lot. I just wish the curriculum was a bit more spread out, as in the first 3 programming courses (1110 series, 2110, 2150) could be organized a bit better. There are several extraneous topics (particularly in 2110 and 2150, I do not have experience with 111X at UVA) that could be cut out of each of these two courses, such that 2110 students could feel like they gain something more from the course, and 2150 students aren't overwhelmed by the course.

Floryan is a homie. Top tier professor right there.

Course material was very disorganized, giving the impression of having not been looked at or modified significantly for multiple years. Lab assignments were especially bad, bordering on illegible, often doubling the amount of time spent per assignment. As far as I could tell, lab documents were initially written in plain-text as a single stream-of-consciousness and afterwards were only ever tweaked slightly, without any attempt at the serious revision necessary. Meanwhile, students were expected to produce clean, organized, and well revised work, giving the impression of a double-standard.

This class was awesome! It was bitter sweet but I liked it.

It's not okay to have an assignment due in the middle of Thanksgiving break.

Good course perfect amount of challenge to difficulty in the class.

This course was very helpful in learning better coding practices and concepts at a more challenging level. I would say that there is way too much work for just one class. I know that all the material is important, but homework assignments could possibly be easier by providing more psuedocode or guidance to decrease the amount of time needed to do the labs.

### ~ ANSWER MATRICES ~

As a non CS major, this was by far my favorite class this semester. The only part I had trouble motivating myself with were the non c++ parts of certain labs (bash scripting, makefiles, c code) These were always so much harder to figure out because of limited knowledge and less resources online. Other than that, this was an amazing, challenging class, thanks for everything you taught us!

this course was very helpful in learning the material and becoming better at CS in general because it taught so many topics and often forces students to work through all the problems.

Definitely a lot of material to learn, but its worthwhile to take the course, I learned a lot about various data structures. Specifically, was able to learn about higher-complexity things like graphs and Huffman that were very interesting and how I could see were applicable in the field.

Good course, but it is a ton of work. The labs are mostly very helpful except for some of the reports. The assembly reports were a little much.

Mark Floryan is an amazing professor who is very open to his students and can explain concepts very well. He is very fair when it comes to grading. I think some concepts should be improved (stated in our lab 12) but otherwise, it is a very useful class.

Thank you for a great semester of teaching! We should change the way the slides are presented.

I really enjoyed this course and I felt that I learned a great deal. Professor Floryan was an excellent teacher and his lectures were easy to understand and very interesting!

love Florvar

I would strongly recommend making this class worth more than 3 credits. The amount of I work I put into the labs for this class definitely is not reflected with how much credit I received.

11/30 Thu To Do Schedule Completed ⢠SSD HW 0800 - Reveille ⢠CS 3103 OH ⢠Set up at house ⢠FUN 2 ⢠Go to Barracks for cheque . Change the late policy for labs - 25% is a pretty hefty penalty even if the submission is 5 minutes late. I propose 15% for the first 12 hours and then an additional 10% for the next 12 hours. The penalty will still be 25% for a 13-hour late submission but may encourage people to submit late homework more quickly . Standardize the submission timings - making them all midnight for the day their due would be helpful . Perhaps combine the inlab and postlab into a larger Lab assignment. It will be due the same time as the postlab . Take out IBCM lab and have 3 x86 assembly labs instead of 2. I feel all the skills learned in the IBCM lab could have been done using x86 . Perhaps cover some different kinds of "sorts" in more detail . Annotated code in slides detailing important features of the code- could use arrows and textboxes.

In lab should be longer

Floryan was awesome and the class as a whole was interesting and engaging. The only gripe I have is that the class was a lot of work for only 3 credits

I think students needed more context for what was expected for the labs on assembly (8 & 9) in terms of how to access the assembly code and how to break down what they were seeing. Those postlabs were also terrible. Overall though a fascinating and really cool course where I learned a lot but also worked my butt off

This class was the most time-consuming class I've ever taken, but it was extremely useful.

It was a grind, but at the same time a blast to learn under your guidance. Thank you!

Course was very rigorous, both in terms of workload and difficulty. Would suggest this course be less "bloated" with more core concepts in the future, or split into two classes with same or more course content, or have the course credit raised to 4.

Thank you Floryan! You explained everything really well. One thing that may be useful is to switch to powerpoint because it allows students to take supplemental notes associated directly with a slide instead of trying to jot everything down on paper.

wish there are more professor office hours

This class takes so much time compared to all of my other classes, and I 'm not in CS major. Even though I'm so frustrated and tired, I felt that it fun to do this too. Thank you for a great experience.

Prof. Floryan does a great job of teaching, but this class has such a gargantuan amount of material that it's very hard to actually do well and retain everything for the tests/homework.

This definitely earns its reputation as being one of the most difficult CS courses.

My favorite course out of all CS classes and general classes I have taken. Very well organized and taught in an engaging way. Excellent lectures. Even though the labs and the exams were tough, I did learn a lot from those, especially the labs. Lab section was okay I guess; I always signed in and left so can't really say much about that. I wish the labs were worth more since we spend a lot of hours on them.

Floryan was very straightforward with all his students and in lecture. He clearly knows the material and explains concepts concisely.

Excellent course

The amount of work in this class is absurd and evil. If it really is necessary then at least give more than 3 measly credits. However, there are a lot of times where labs require you to do repetitive or irrelevant busy work that does not help you learn anything. For example, hash lab was unnecessarily complicated by the word puzzle solver, it should have just been making a working hash table. Another big problem is that in office hours TAs regularly spend upwards of 20 or 30 minutes with one student. TAs are great but this is clearly an abuse of office hours when things get busy. Office hours need a 10 minute limit per student because even someone who is lost but prepares their questions well shouldn't need more than 10 minutes to get back on track. Piazza is helpful but most questions require someone to look at your code. The inefficient office hours were the biggest impediment to my learning in the class because I often couldn't move on with my code without getting help, but help was not always gauranteed. Finally, the lab research reports we started doing towards the end of the class were useless and not helpful. It would have been so much more helpful to get this information straight from Floryan because I don't know if I understood everything correctly trying to google it on my own. Overall, Floryan > Bloomfield but the class is still sadistic and unfair.

This course is definitely one of the best courses I have taken in college thus far because of how much I learned. It would be useful for us to work through algorithms in class with some kind of worksheetbecause when working out concepts like Djikstra's algorithm, it is difficult to copy it in our notebooks but the process is not detailed in the slides either. Floryan's office hours are also brutal because it is impossible to get in and talk to him with the line outside his office. Also, we did not like having Huffman Encoding over Thanksgiving Break. Those two days during break and the first day of break were horrible because of it.

**Thanks** 

No comment

Why is In-Lab extension only in in-lab computer a thing. Also Floryan is a great lecturer, but he needs new material for his jokes.

Very helpful course. Floryan's attitude occasionally made him seem unhappy about teaching, but overall he was a good professor.

I believe there should be more TAs still. The course is extremely difficult and the tests are too tricky and usually too surprising in terms of subject material. I believe the lectures should also be recorded again, that helped me a lot last semester.

I genuinely enjoyed the entire course, love, and understand computer science much more. Some materials in the slides can be made clearer and the compiler-generated assembly is not within the scope of what we learned. But other than that every lab was fun.

This class is much harder than it needs to be. The deadlines are extremely tight and at odd times. This class has been the sole source of my all nighters this semsester. There needs to be some easy points to make people feel better about themselves

This course was difficult and required a lot of work, but I think I learned a great deal. The only thing that bothers me about the course is that we had a lab over Thanksgiving break. I wanted to enjoy time seeing friends and family that I hadn't seen in a few months, but I had to worry about a lab assignment. In the future, I think it would be nice to not have a lab over Thanksgiving or make it optional.

This class is great. I don't think it's too hard but I can imagine people having that complaint. The work itself wasn't unreasonable difficult, there was just a lot of it, more than a three credit class warrants. Maybe one way to fix this would be to count the lab as a technically separate course (like a physics lab for example) so that it counted as its own credit. I'm not sure how the grading would work in that case though.

Floryan is the best lecturer I've had in the CS department so far. He presented all of the material logically and made it enjoyable. The course is a lot of work, but it needs to be in order to truly make the students learn its material. It would be nice if it counted as more credits because many people are told to "lighten up" their credit load for the class

My comments would clearly tie my anonymous evaluation to my onymous lab 12 submission.

The course was very stressful at times, but Professor Floryan was an incredible teacher from whom I learned a lot.

Floryan is a great professor. I learned a lot from the course, but I think the material is way too dense and the schedule is too packed.

Awesome class! More TAs, less IBCM, and you have the best course at UVa.

Definitely a lot of work, but a worthwhile and informative course.

This course was beneath my level of experience. I didn't really learn much that I didn't already know.

The main comment that I have for this course is that the workload was ludicrous for a three-credit class. Especially as a student with extreme interest, but limited experience in programming, this class was very much a struggle and consumed most nights of my week and far and above the number of hours that should be reasonably expected for a class.

Class is lit, thought it was great. Only real issue for me is that there are so many tutorials that are covered in labs (e.g. bash) that isn't even mentioned in lecture. I think it would be great if there was at least SOME reinforcement in lecture

Had a good time, thanks for everything!

Although this was a very time-consuming course, I think it was worth taking. This was one of my favorite classes that I've taken at UVA so far, and I learned a lot. Thanks for a great semester!

2150 was honestly my favorite class lâve taken so far. I have probably learned more in this one class than all of my other CS classes combined. Floryan made lecture so enjoyable, and I actually looked forward to it. I genuinely enjoyed the labs, especially lab 6, and they helped me grasp important concepts. I could really see the value in the course material, and how I might use it in my career. lâm almost tempted to fail the final on purpose so I can take 2150 again. This class just confirmed my decision to major in CS.

This has been my favorite CS class by far! Floryan, you are doing an amazing job, keep it up! The workload can get overwhelming at times, but the content is interesting and motivating. One recommendation: consider assigning different point values to the labs. It is a little unfair that the Hash Lab is worth the same as the first few labs where all we had to do was submit a question in a text file. Overall, amazing class, amazing professor!

Floryan is a cool guy and a great teacher. He is very likable and personable, and he knows a lot about the subject matter. This showed when a question was asked which went beyond the exact subject matter and florin was able and willing to think about it and answer it. The problem that this class faces is not that it is overly difficult. The difficulty was appropriate for the goals of the class. The problem lies in CS2110 and 1110, which fail completely to prepare students for a real programming course. 2150 shouldn't be the place where students actually learn to code, but unfortunately for many, it is. One knock I have against this course is the assembly labs. The "special" thing about the course compared to a comparable data structures course at a different university is that we have to learn assembly. I can see the value of this, but the 2 assembly labs were spent attempting to make sense of compiler generated code which failed to follow any standard. Give us good code to analyze, where you know that the topics you want us to write about are present. Let the analysis of messy code be a shorter postlab exercise in the second lab to show that wow, real programmers have to deal with and be able to comprehend this messiness. Also, the expectations for the reports for those two labs were incredibly unclear, and everyone spent hours and hours on them to get to everything we had to, even though they were specifically "not supposed to take hours and hours" Floryan is great. Prereqs stink. Assembly labs need to be fixed. Hope to take a class with Floryan again!

This class honestly sucks, it's the absolute worst. The material is super boring and is hard to remember, the only good thing was that Floryan is the teacher and he was pretty much my only motivation to go to class lol

Honestly a fantastic class. However, it took up about 5x as much time as any of my other classes. This should really be more than 3 credits.

Dear Professor Floryan, I greatly enjoyed your sense of humor and your determination to teach even when clearly no one understood and wouldn't speak up. Thank you. Sadly, I was one of those students who didn't learn much because much of the material was a theoretical level that I didn't know how to apply. This applied to most labs. Where I would end up crying myself to sleep because I couldn't get help on the labs and the TAs were not helpful. Perhaps I should have spent more time in Office Hours, but to be honest, I couldn't spend the hours because it was just too frustrating. I understand that this is a weeder course, but perhaps you could spend more time with example problems or practically applying the theory then talking at us or trying to give us a realistic perspective on where we are going with this information. Yes, it is a big class, but maybe rather than doing office hours, simply have more classes at a smaller number. Finally, I greatly didn't appreciate that you assumed that what you told one class would somehow spread through the classes. It always seemed that I was somehow out of the loop.

As a Systems major, I dreaded having to take this course but I knew that I had to in order to complete the pre-requisite for all other CS electives. However, about halfway through the semester I realized this was my favorite class in my current schedule. I have always believed that the programming classes at UVA are extremely fair with their grading policies, upfront with their expectations, and organized in their lectures and notes. I had heard such horrible things about this class before I took it that I really really made sure to prioritize it, and I think that has translated to my grades in the labs and tests (even though not stellar, still above average). The only downside of this is that it forced all of my other classes to be pushed to the bottom of my priority list and I found myself dedicating all of my time to complete the labs. I know this is a personal mistake, but I think that it is the result of the CONSTANT flow of work to be done in this class. Floryan was a great professor and all of the TAs were awesome (and I got to know them very well by attending office hours literally every single Monday). Overall, I really enjoyed this class and feel like I have accomplished a great deal by making it out alive!

Floyran pls

the course needs to be worth more credits

Professor Floryan was great. This was an intense programming course and I feel like I intensely developed my skills writing code in this class. This was a rewarding class.

Overall, this course is useful because I learned a lot via this course. I really think it is worthwhile. But sometimes I think we need to have more specific instructions so that during lab we can understand what is going on.

Floryan is awesome, not much to complain except for the mandatory in lab attendance.

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	I wish the lectures were recorded so that I could go back and relisten to things I didn't quite get the first time. Professor Floryan says a lot of helpful things in class that isn't captured on the slides, so either recordings or more comprehensive slides would have helped me learn better. I also think the regrade policy is a little intense. We shouldn't be punished for submitting a regrade and then finding out more points were taken off. Overall course was interesting, but I'm not sure how I would use this information in the future.