ENGR (16936)

INSTRUCTORS: Bloomfield, Aaron S. (asb2t)

Respondents: 183 / Enrollment: 238

Summary: CS 2150-001 Program & Data Representa	ation - Fall 2015 (16936)
Overall Course Rating	Overall Instructor Rating
-	INSTRUCTOR: Bloomfield, Aaron S.
CS-2150-001 Mean 4.04 CS-2150-001 Std Dev 1.22	Mean 4.55 Std Dev 0.73
CS-2150-001 Response Count 911	Response Count 1272
SEAS, 2000-level courses Mean 4.08	SEAS, 2000-level courses Mean 4.28
SEAS, 2000-level courses Std Dev 0.98 SEAS, 2000-level courses Response Count 16504	SEAS, 2000-level courses Std Dev 0.87 SEAS, 2000-level courses Response Count 24082
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
1. Please list any comments (pro or con)	Results for CS-2150-001, Bloomfield, Aaron S.
about the teaching assistants here.	Total Individual Answers
These results will be passed onto the	147 See below for Individual Results
TAs so that they also have some feedback from the course evaluations.	
~	
Question Type: Short Answer \sim	
contributed by Bloomfield, Aaron S. (asb2t)	
	(answers to this question redacted since they are not about the primary instructor)

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
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~ QUESTIONS AND DETAILS ~		~ ANSWER MATRICES ~
2. How many credits should this course	Results for CS-2	150-001, Bloomfield, Aaron S.
be worth? Please add your comments	Total	Individual Answers
here.	172	See below for Individual Results
Question Type: Short Answer		
contributed by Bloomfield, Aaron S. (asb2t)		
	4 because of he	ow much work is done out of class and the lab section is an hour and a half.
	Definitely 4 to ju time spent outs	ustify the extra lab section, but also because of the rigorous coursework and amount of ide of class/lab working on assignments.
	4 would be a go 3.	ood number. People exaggerate the length of time it takes, but it should be more than
	FOUR!!! (at lea	st)
	I think it should	be worth 4 because of how much time the labs take in addition to lecture time.
	This class shou department tha	Id be worth 4 credits. 3 hours of lecture and a lab each week. In every other t is 4 credits.
	Maybe one mor	re than it's worth now? At least make the lab worth 1+ credits, instead of nothing.
	5, very demand	ing workload, significantly more than any 3 credit course I have taken
	Most people wil	I say 10 but realistically 4 or 5. Lab should count as an additional credit.
	At least 4. 3 cre	dit hours for the lectures, at least 1 for the lab.
	4 - It's three hour required often a	ur-long lectures, coupled with a two hour lab. The amount of work outside of class a while.
	This course sho significant, but	ould be worth between 3 and 4 credits. The time I spent on the course was not too many of my peers seemed to spend hours on the assignments.
	3 credits. If it w	vere 4 it would be harder to take other classes in conjunction.
		3. This class takes a lot of time for labs. There's always outliers that get things done majority, a lot of people seemed to stay in stacks late trying to debug their code. I'd
	4.	
	4.	
	4 because the I	abs are really long and I usually stay for the entire session
	nowhere near a	culous that this class is only 3 credits. Statistics in the college was 4 credits and was is much work as this class was. It was safe to assume that you had to put aside 12-14 b keep up with the material and do the labs.
	credits based o credits of this (a completing assi 2110 (which wa instructor I have	a 4-5 credit course. The weekly lab is nearly 2 hours per week. Most courses grant n the amount of time students spend in class, so it would only be fair to increase the and other) CS courses based on the amount of time spent on the labs and in the labs ignments. Another way to do this would be to allow Prof. Bloomfield to take over CS is taught by Nada Basit, who is the most thoroughly boring, stupid, and incompetent a had during my entire academic career) in order to reduce the workload and increase derstanding that students can gain from his course (would be courses).
	At least 4, mayl should be worth	be more. With the CS curriculum changing, perhaps in retrospect previous CS courses a less.
	6 credits for the	amount of time I spend for this class
	At least 4 becar	use the workload for this class is greater than any class I have taken.
	4. 3 in class cr of the 4 credit a	edits, plus an hour for the lab/discussion. I worked harder for this class than i did any upma courses.
	5 - my entire we	eek was consumed with cs
	3; I think it was	reasonable.
	3. The labs wer homework mad	e a lot of work but never more than 10 hours a week for me. The absence of any other e this fine.
	4!!!! or 17!!!!! th	is is too much work to only be worth 3 credits

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	I feel this course should be worth 4 credits. It's undoubtedly the most time consuming class I have taken in my 3 semesters at uva
	3, for the amount of time spent in class, out of class but not counting the amount of required time spent in lab.
	4, there is so much work that is to be done in this class, I felt like I was doing a great deal more work in this class than any other
	At least 4
	>=4, I am a 100% sure i spend more time on this course then all of my other 4 courses combined
	This course, despite being 3 credits worth was much harder, or at least, took a lot longer than many of my prior 4-credit classes. I think this course really should be a 4 credit course.
	Including the lab section, easily 4-5.
	I think 3 is fine.
	I think this class should be worth 4 credits, 3 for the lecture and 1 for the lab since not only did I have to study outside of class and prepare for lectures, the prelab, inlab, and postlab assignments were often quite extensive requiring hours of time. I spent more time on the CS labs than I did on my one credit labs.
	4 (or more if it were possible) considering how much time was spent on labs and preparing for the course
	3; I thought the course workload was pretty fair
	Maybe more than 3 because it takes some time
	4, a lot more work was put into this than any other 3 credit course I have taken.
	Two 4 credit courses. The amount of work is immense. At least make it 4 credits
	4 - This course is very challenging, requires lots of work and time, and has a mandatory lab therefore it should be worth 4 credits.
	3
	3
	3
	3
	3
	3
	3
	1
	3.
	I think it should be 3 credits. Computer Science students complain too much about this course, and it really is not an unbearable amount of work. There are 3 credit courses in other departments that are equally time consuming.
	6
	6
	4 - A lot of work is involved for this course outside of class
	I spent roughly 5 hours on each section of each lab, if not more. So that's at LEAST 15 hours a week outside of class. Some week its might've been around 20-23hrs, but let's say 15. The class should thus be worth 5 credits if you include class time. Maybe throw in an extra 1 credit for pain and suffering (x86, hash lab)
	5. I know that's a lot, but this class has taken more of my time than a 15 credit semester would.
	4
	4
	4

~ OUESTIONS AND DETAILS	~ ANSWER MATRICES ~
~ QUESTIONS AND DETAILS ~	~ ANSWER MAIRICES ~ 4
	4
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	4
	4
	4 credits (+9000)
	3 hours in class + about 1 hour in lab = 4 credit hours
	4. This class is a TON of outside work.
	4, it was very difficult and required a lot of time.
	3 credits is reasonable, though having 4 or 5 credits would be a good fit if there is ever an "honors" version of the course.
	I think a case could be made for this course being 4-6 credits due to the intense work load.
	With the amount of work load and concepts learned over the semester, the course could easily qualify as 4.0 credit course.
	5. This course is a ton of work
	4. Effectively 3 assignments a week, with 3 lectures and one assignment being done during a lab. Even though the labs are "bundled" into 3 parts, they are sometimes unrelated and take up significant time.
	3. There are 2.5 lecture hours and the labs take on average 1 hour. This is roughly 3.5 hours, so 3 credits is fair.
	I spent well over 15 hours a week on this course, sometimes over 30 hours. Along with the lecture and discussion, this course should be 4 credits minimum.
	5. This course is a ton of work in terms of in class and out of class time spent.
	15
	I think it should be worth 4 credits. It doesn't makes sense that some APMA courses which require significantly less effort should be worth 4 credits while 2150 is a 3 credit course
	4 this course was a lot of work more then many other 4 credit courses I've taken and definitely more than all the other 3 credit cs classes I've taken.
	I mean, it is techinically four hours a weekSo I suppose four?
	4, Definitely more work than a typical three credit class. More work than 4 credit APMA classes as well.
	4. There is SO much work in preparing for each of the labs I think the course could easily be 4 credits.
	4 at least, it meets three times a week plus a lab section with a prelab inlab and postlab due every week. I had to work over Thanksgiving and had a prelab and inlab due the last week of school when I should be studying for exams
	It seems good. Probably 4 considering the amount of time I spent on this stuff, but I mean 3 works. Its fair either way
	4 credits. The difficulty and lab definitely worth 4 credits. I have taken other 4-credit classes. But this class is busier then those ones.
	2500000
	6 I spent at least like 20 hours a week for this class

3 or probably 4 lots of work, learned a lot

	CS 2150-001 Program & Data Representation - Fall 2015
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	This class should be worth at least 4 credits. I find myself spending over 15 hours a week on this class alone, and for it to be worth only 3 credits is quite shocking.
	4. Because the amount of work required is not justified at 3 credits.
	Ha, a little more than 3. On that note, this class should be split up into two separate semester long courses. The subjects taught are valuable and essential, but there just is not enough time to truly learn it all. Instead, I propose replacing 2110 with the 1st half of this class, then having a more in depth 2nd semester. Same subjects, if not more, just with more understanding and skills learned.
	ITS ABSOLUTELY RIDICULOUS THAT THIS IS A THREE CREDIT CLASS. It should at minimum be 6 credits. I am currently signed up 17 credits. The amount of effort i put into these 3 credits is equivalent or greater than the other 14 credits.
	I'm inclined to say that this workload is the equivalent of 5 credits. I could afford to take a lighter load this semester in order to make this class a priority, which I believe was absolutely necessary (I put in over 30 hours to this class one week), so I would say it's a bit unfair to expect a "full" course load to be 15 credits when taking this course. At the same time, I appreciate how, at 3 credits, my grade has a more limited effect on my GPA, and I think to make the course credits properly reflect the time needed to put in to the course would mean a drastic increase that would maybe be too heavily weighted in people's GPAs (at least too heavily for people to be happy with it).
	4. Please. Please 4. This is not a 3 credit class. It's so much work and takes so much time, plus when lab is included there are five weekly hours of class time. So four. Four credits.
	3 but I feel like lab should be a separate credit itself
	4! Definitely 4. Its shocking that its only 3.
	If we spend 3 hours outside of class for each credit, I would say 4 or 5 because I would spend around 12 hours on this class normally, 15 hours on a challenging lab.
	3 for the class, 2 for the lab. Such an incredible amount of effort needed in this class that it is very unfair to only provide 3 credits worth.
	4 3 for the lecture, 1 for the lab section
	Probably 4 credits. 3 hours of lecture, 2 in lab and, for me about 2 hours for both pre and post lab for almost every week is 9 hours of work for one class every week. I know that they say we should study 2 hours for every hour in class, but we all know no one does this in reality, so a class that actually forces us to do so really takes up that much more time and feels like a lot for a 3 credit class.
	This class should be at least 4 or 5 credits, based on the amount of work required outside of class.
	5. 3 homeworks per week??
	Consider the workload, I think 4 credits may be more appropriate.
	The lecture should be worth 3 credits and the lab should be worth 2 additional credits.
	5. No seriously, I'm not kidding. I guess you guys would be ok with raising it to 4, but it's A LOT of work. Spent well over 15 hours a week on this material, and it still feels like not enough time. It's so difficult and rigorous.
	I spend 10 hours each week So maybe 5 credits!? At least 4! But NOT 3!
	At least 5, if not more.
	6. I literally did more work in this class than my four other classes combined.
	HAHA, atleast 4!
	I think 3 is fine, but it is definitely close to being 4.
	Combined with the class, I would put this at 4 credits worth of work, with the pre, in, and post every week. It is a lot.
	I'd say 4. The course is waaaayyy more work than "4 credit hours", but if classes were weighted accurately for work, this would be like 8 credit hours, and I just don't want to ever take a class with that heavy of a weight on my gpa. 4 is fine.
	4 credits. I did more work for this class than any other classes I took this semester (I am a physics major, so that includes all of my other physics courses, which require a lot of work already). It is a substantive and fundamental course that covers a lot of material. My introductory physics courses are worth 4 credits, this course should also be worth 4 credits.
	4 - it is more work then the following 4 credit classes that I've taken: Differential Equations Calc classes Embedded Systems Performance in Africa - IoI that is ACTUALLY 4 credits

3 or 4. probably 4 due to the amount of work.

	CS 2150-001 Program & Data Representation - Fall 2015
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	At least 4 this class took up so much time
	8. It was that much work.
	This should be a 4 credit class. I am currently enrolled in ECE 2630 which is a 4 credit class and I have done almost 10 times as much work in this class than that one.
	3. I could see the argument to 4, as we put in ${\sim}5$ hours of class time every single week, but I think 3 is fine.
	This course should be worth AT LEAST FOUR. I spent too much time and cried too many tears to only earn 3 credits for this.
	4. i spent a lot of hours on the homework for this class, and seeing as the class meets for 4 hours a week i don't understand why it is 3 credits and not 4 like some of the other cs classes.
	4 credits. With three lectures a week, plus a lab, this should definitely be worth 4 credits. Also the workload is more in line with my other 4 credit classes.
	4because lab is 1:35
	Definitely more than 3. This class was far and away more work than any class I have taken here. With three lectures, one lab, and probably what averaged to about 10 hours a week outside of class, it should at least be 4 credits.
	This class should be worth at least 4 credits. I'm enrolled in a 4 credit course right now and it was much less work than 2150.
	Maybe 4 as it does take a lot of time
	Lecture + lab hours totals around 5 hours per week. Definitely should not only be 3 credits due to course load.
	It really should be worth 4 (especially because it is so much work and there is a lab)
	It should really be worth at least 4 because of the lab section.
	4. So much more work than any other class.
	4 - 5 hours in class total between lecture and lab, and a lot of homework. Very valuable course, but time commitment is too large for a 3 hour class.
	4, but I could also see it counting for 5 credits. I spent so much time on this class, and often forgot that it was only 3 credits.
	The lab should be 1 credit for a total of 4
	4 - I think the number of hours needed to get labs done every week really amount to more work than a 3 credit class
	4 credits. Due to the work load and weekly commitment
	Is 8 too many to ask for?? Seriously I don't think I've ever put this much work into one class. I was only enrolled in 14 credits this semester and still felt crunched for time because of the labs. Not a complaint though, because I enjoyed every minute of it.
	It's totally ridiculous that this class is not 4 credits. The labs take forever to complete.
	Definitely 4 credits. As a third year, you've taken enough courses that you can begin to make the distinction between 3-credit course and a 4-credit course and this class just screams 4-credit course to me. The amount of hours you have to put into the course to do well in it is significantly more than what a 3-credit course would usually require.
	more than 4
	At least 3, although 4 would be preferable as this course pretty much defines the computer science major.
	I'd say 3 is a good medium. It's definitely a course that's worth 4, but considered how bad some of the average grades are before the curve, I'd rather it count less than more.
	I think it would be 2 for lab, and 3 for lecture, separating lab grades from lecture grades. Or I think Labs should take up more % of grade since it takes up infinite amount of time compared to other parts of this class.
	4 (the labs hould be one credit)
	4. Or it needs more support at 3. But right now the hardest class in CS is providing the least help to students.

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	I think that this class should be worth more credits than it currently is (3). The amount of work and just the scale of everything we cover at leasts warrants 4 to 5 credits.
	4, sense the you have to show up for a lab I think it should count as 4
	4, definitely more work than any other 3 credit class I've taken so far.
	Probably 8. But actually, it should definitely be 4 since it involves spending 4 hours per week in the classroom and has a heavy workload.
	4 (with the lab)
	4 credits. 3 for the lecture and 1 for the lab. I have done more work in this class than I did for my 4 credit calculus classes.
	4- I think the lab work takes a lot of extra time, especially compared to some science lab courses which are worth 4 credits
	3, maybe more. I always say the work isn't too bad because it is fun, but when I enumerate the hours, it kinda hurts my soul.
	In my opinion, 4 credits. It consumed as much or more time than any 4 credit course I've taken.
	4. Duh. There is a mandatory laboratory component as well as significant work at home. There is absolutely no reason it should just be 3 credits. More than 4 would probably be bit excessive though
	5 credit course. i easily spent 20-30 hours a week on this course. it consumed my livelihood.
	At least 6 credits to be reasonable. But 17 credits would be more realistic. The amount of time spent on this course amounted to more than a 6 credit course. Increasing the credits of this course would be more representative of the amount of time and energy required. It is unreasonably to make a 50 min class three times a week plus a 1.5 hour lab a week, not to mention the hours spent outside of class working on labs, only 3 credit hours. My work in my other classes are compromised because of the time spent in this class
	Four credits. This was, by far, the most time consuming courses I have taken here. I've taken two four credit classes here and this one took more than double the time per week than they did
	4h of lecture/lab per week + 10-15h of work outside of lecture/lab. 5 credit-hours probably is a fair reflection of the workload involved here.
	4, a lot of work
	7, so much work. It's at least twice workload as other courses
	4. This class covers quite a broad range of material and requires a lot of time outside of the classroom
	as many as possible since it takes more time than all my other class combined. at least 6 credit. you don't even give out credit for the lab.
	4. It is definitely way more work than 3 credit hours.
	4 credits
	At least 4 credits.
	4. The weekly lab work takes up a lot of time.
	4. Without a doubt, 4.
3. The course addressed technically	Results for CS-2150-001

3. 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

Re	esults for	CS-2150-0	01						
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	183	4.76	0.47	142 (77.60%)	38 (20.77%)	3 (1.64%)	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)
3306	4.38	0.73	1632 (49.36%)	1375 (41.59%)	216 (6.53%)	55 (1.66%)	17 (0.51%)	11 (0.33%)

~ QUESTIONS AND DETAILS ~				~ ANS	WER MATR	ICES ~			
4. The instructor used methods other	Results for	CS-2150-0	001, Bloomf	ield, Aaron S	S				
than/in addition to traditional lectures (for example, active learning, in-class problems, collaborative learning, in-	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
class discussion) effectively in this course.	183	4.26	0.88	83 (45.36%)	71 (38.80%)	15 (8.20%)	6 (3.28%)	3 (1.64%)	5 (2.73%)
Question Type: Likert	Results for	SEAS, 20	00-level cou	rses					
contributed by Dean of the School of Engineering and Applied Science	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	3456	4.07	1.01	1361 (39.38%)	1355 (39.21%)	382 (11.05%)	218 (6.31%)	101 (2.92%)	39 (1.13%)
5. There was a reasonable level of effort	Results for	CS-2150-	001						
expected for the credit hours received. Question Type: Likert	Total	Mean	Std Dev	Strongly Agree	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree	Not Applicable
contributed by Dean of the School of Engineering and Applied Science	182	3.48	1.47	(5) 69 (37.91%)	33 (18.13%)	18 (9.89%)	41 (22.53%)	(1) 21 (11.54%)	(NA) 0 (0.00%)
I I I I I I I I I I I I I I I I I I I	Desults for	0540.00	00 1						
	Results for Total	Mean	00-level cou Std Dev	rses Strongly	Agree	Neutral	Disagree	Strongly	Not
				Agree (5)	(4)	(3)	(2)	Disagree (1)	Applicable (NA)
	3312	4.14	0.94	1315 (39.70%)	1478 (44.63%)	250 (7.55%)	179 (5.40%)	79 (2.39%)	11 (0.33%)
6. The homework assignments helped	Results for	CS-2150-0	001				1		
me learn the subject matter. Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
contributed by Dean of the School of Engineering and Applied Science	182	4.64	0.58	123 (67.58%)	51 (28.02%)	6 (3.30%)	1 (0.55%)	0 (0.00%)	1 (0.55%)
	Results for	SEAS, 20	00-level cou	rses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	3297	4.26	0.85	1442 (43.74%)	1324 (40.16%)	274 (8.31%)	106 (3.22%)	42 (1.27%)	109 (3.31%)
7. The textbook increased my	Results for	CS-2150-0	001						
understanding of the material. Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
contributed by Dean of the School of Engineering and Applied Science	183	3.22	1.20	11 (6.01%)	18 (9.84%)	22 (12.02%)	11 (6.01%)	(1) 7 (3.83%)	114 (62.30%)
	Results for	SEAS 20	00-level cou	reoe					
	Total	Mean	Std Dev	Strongly Agree	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree	Not Applicable
	3296	3.54	1.20	(5) 655 (19.87%)	839 (25.46%)	638 (19.36%)	301 (9.13%)	(1) 206 (6.25%)	(NA) 657 (19.93%)
8. The course material was well	Dooutte fee	00 0150	001, Bloomf	iold A araa (>				
organized and developed.	Total	Mean	Std Dev	Strongly	Agree	Neutral	Disagree	Strongly	Not
Question Type: Likert				Agree (5)	(4)	(3)	(2)	Disagree (1)	Applicable (NA)
contributed by Dean of the School of Engineering and Applied Science	183	4.52	0.74	114 (62.30%)	57 (31.15%)	6 (3.28%)	5 (2.73%)	1 (0.55%)	0 (0.00%)
	Results for	SEAS, 20	00-level cou	rses					
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
	3431	4.17	0.91	1412 (41.15%)	1432 (41.74%)	349 (10.17%)	166 (4.84%)	53 (1.54%)	19 (0.55%)

~ QUESTIONS AND DETAILS ~				~ ANS	WER MATR	ICES ~				
9. The instructor was knowledgeable	Results for	· CS-2150-0	001, Bloomfi	eld, Aaron S	S.					
about the subject matter. Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicab (NA)	
contributed by Dean of the School of Engineering and Applied Science	182	4.80	0.43	147 (80.77%)	33 (18.13%)	2 (1.10%)	0 (0.00%)	0 (0.00%)	0 (0.00%	
	Doculto for		00-level cou	~~~~						
	Total	Mean	Std Dev	Strongly	Agree	Neutral	Disagree	Strongly	Not	
				Agree (5)	(4)	(3)	(2)	Disagree (1)	Applical (NA)	
	3441	4.57	0.67	2186 (63.53%)	1039 (30.19%)	144 (4.18%)	30 (0.87%)	17 (0.49%)	25 (0.73%	
10. The instructor was well prepared	Results for	· CS-2150-0	001, Bloomfi	eld, Aaron S	S.					
for class.	Total	Mean	Std Dev	Strongly Agree	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree	Not Applica	
Question Type: Likert \tilde{c}	181	4.78	0.50	(5) 145	34	1	0	(1)	(NA) 0	
and Applied Science				(80.11%)	(18.78%)	(0.55%)	(0.00%)	(0.55%)	(0.00%	
	Results for	SEAS, 200	00-level cou	rses						
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applical (NA)	
	3446	4.43	0.76	1889 (54.82%)	1238 (35.93%)	197 (5.72%)	65 (1.89%)	31 (0.90%)	26 (0.75%	
11. I received adequate preparation	Results for	· CS-2150-0	101							
from the prior courses in the	Total	Mean	Std Dev	Strongly	Agree	Neutral	Disagree	Strongly	Not	
curriculum to be successful in this course.				Agree (5)	(4)	(3)	(2)	Disagree (1)	Applica (NA)	
Question Type: Likert	181	3.57	1.28	51 (28.18%)	54 (29.83%)	32 (17.68%)	23 (12.71%)	16 (8.84%)	5 (2.76%	
contributed by Dean of the School of Engineering and Applied Science	Results for SEAS, 2000-level courses									
una Appliea Science	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applica (NA)	
	3293	3.97	0.98	939 (28.52%)	1185 (35.99%)	454 (13.79%)	166 (5.04%)	75 (2.28%)	474 (14.399	
12. The grading policy was fair.	Results for	CS-2150-0	001, Bloomfi	eld Aaron S	3					
Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applica (NA)	
contributed by Dean of the School of Engineering and Applied Science	181	4.13	0.91	70 (38.67%)	80 (44.20%)	19 (10.50%)	9 (4.97%)	3 (1.66%)	0 (0.00%	
			00-level cou		Agroo	Noutral	Diagarag	Strongly	Not	
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applica (NA)	
	3443	4.19	0.88	1416 (41.13%)	1492 (43.33%)	322 (9.35%)	146 (4.24%)	52 (1.51%)	15 (0.44%	
13. The instructor responded	Results for	CS-2150-0	001, Bloomfi	eld Aaron S	3					
adequately to in-class questions. Question Type: Likert	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree	Not Applica	
contributed by Dean of the School of Engineering	183	4.67	0.59	131	46	5	0	(1) 1 (0.55%)	(NA)	
and Applied Science		I		(71.58%)	(25.14%)	(2.73%)	(0.00%)	(0.55%)	(0.00%	
	Results for	SEAS, 200	00-level cou	rses						
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applica (NA)	
	3442	4.36	0.81	1743	1317	215	96	39	32	

~ QUESTIONS AND DETAILS ~				~ ANS	WER MA	TRICES ~			
14. The instructor effectively used	Results for	CS-2150-0	01, Bloomf	eld, Aaron S	S.				
technology in support of the learning goals for this course.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutr (3)	al Disagre (2)	e Stron Disag (1)	
Question Type: Likert	179	4.66	0.66	129	41	4	() (0.500)	2	2
contributed by Dean of the School of Engineering and Applied Science				(72.07%)	(22.91%	6) (2.23%	%) (0.56%) (1.12	%) (1.12%)
	Results for	,							
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutr (3)	al Disagre (2)	e Stron Disag (1)	
	3423	4.21	0.88	1448 (42.30%)	1379 (40.29%	358 (10.46		54) (1.58	
15. The average number of hours per	Results for	CS-2150-0	01						
week I spent outside of class preparing for this course was:	Total		ss than 1 (NA)	1 - 3 (NA)		4 - 6 (NA)	7 - (N		10 or more (NA)
Question Type: Multiple Choice	182	(0 0.00%)	5 (2.75%	6)	35 (19.23%)	49 (26.9		93 (51.10%)
contributed by Office of the Provost	Results for	SEAS 200		reee					
	Total		ss than 1 (NA)	1 - 3 (NA)		4 - 6 (NA)	7 - (N		10 or more (NA)
	3303	(208 6.30%)	1182 (35.79%		1240 (37.54%)	41 (12.5	4	259 (7.84%)
16. I learned a great deal in this course.	Describe for		,	(, , , ,	(0.1.0.1,0)	((
Question Type: Likert	Results for Total	Mean	Std D			Agree	Neutral	Disagre	
contributed by Office of the Provost				Agr (5	5)	(4)	(3)	(2)	Disagree (1)
	179	4.77	0.45	6 14 (78.2		37 20.67%)	2 (1.12%)	0 (0.00%)) (0.00%)
	Results for	SEAS, 200	0-level cou	rses					
	Total	Mean	Std D	ev Stron Agr (5	ree	Agree (4)	Neutral (3)	Disagre (2)	e Strongly Disagree (1)
	3290	4.25	0.88	8 152 (46.4		1262 38.36%)	336 (10.21%)	115 (3.50%)	48 (1.46%)
17. Overall, this was a worthwhile	Results for	CS-2150-0	01						
course. Question Type: Likert	Total	Mean	Std D	ev Stroi Agr (5	ree	Agree (4)	Neutral (3)	Disagre (2)	e Strongly Disagree (1)
contributed by Office of the Provost	181	4.64	0.63		26	47 25.97%)	6 (3.31%)	1 (0.55%)	1
	Results for	SEAS, 200)0-level cou	rses					
	Total	Mean	Std D	ev Stroi Agr (5	ree	Agree (4)	Neutral (3)	Disagre (2)	e Strongly Disagree (1)
	3299	4.18	0.95		91	1203 36.47%)	377 (11.43%)	162 (4.91%)	66
18. The course's goals and requirements	Results for	CS-2150-0	01, Bloomf	eld, Aaron S	S.				
were defined and adhered to by the instructor.	Total	Mean	Std D	ev Stroi Agr (5	ree	Agree (4)	Neutral (3)	Disagre (2)	e Strongly Disagree (1)
Question Type: Likert contributed by Office of the Provost	183	4.62	0.63		25	50 27.32%)	6 (3.28%)	1 (0.55%)	1
	Results for	SEAS, 200	0-level cou	rses					
	Total	Mean	Std D	ev Stroi Agr (5	ree	Agree (4)	Neutral (3)	Disagre (2)	e Strongly Disagree (1)
	3436	4.38	0.71	`	51	1525 44.38%)	195 (5.68%)	44 (1.28%)	21

~ QUESTIONS AND DETAILS ~				~ ANSWER	MATRICES ~						
19. The instructor was approachable	Results for	CS-2150-0 <u>0</u> 1	, Bloomfield,	Aaron S.							
nd made himself/herself available to students outside the classroom.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)			
Question Type: Likert ~ contributed by Office of the Provost	183	4.23	0.93	88 (48.09%)	62 (33.88%)	23 (12.57%)	7 (3.83%)	3 (1.64%			
	Results for	SEAS 2000-	level courses								
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre			
	3445	4.30	0.81	1630 (47.31%)	1350 (39.19%)	348 (10.10%)	90 (2.61%)	27 (0.78%			
20. Overall, the instructor was an	Results for	CS-2150-001	, Bloomfield,	Aaron S.							
effective teacher.	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)			
contributed by Office of the Provost	183	4.62	0.63	125 (68.31%)	48 (26.23%)	9 (4.92%)	0 (0.00%)	1 (0.55%			
	Results for	SEAS. 2000-	level courses								
	Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strong Disagre (1)			
	3455	4.21	0.95	1632 (47.24%)	1232 (35.66%)	355 (10.27%)	166 (4.80%)	70 (2.03%			
. Please make any overall comments	Results for	CS-2150-001									
or observations about this course:	Total				ndividual Ans	swers					
Question Type: Short Answer	118			See be	elow for Ind	ividual Resu	ılts				
contributed by Office of the Provost											
	actually red they submi professor E science bu master all the This class data struct powerpoint A smaller of may not be experience I feel as the always a h one question I think it hos People car spending the	quired is very t long regrad Bloomfield dc t was not wo he labs, that was very har ures and how s to teach th class size wo possible. I bugh there w igh volume o pon within the lds true that a surely just o ne time to un	imbalanced, es, and havin les not care a rthwhile in tha only gives m d and time cc v to implemen e material. uld be nice. I feel I would h ere not resou f students at o three hours a the amount y depend on Go derstand con	Disuming for h t them. I just v But I understa ave been mor rces in which office hours au illotted for eac ou get out of t ogle to provid cepts were re-	aking off poir nksgiving, thi g of students ig progress is now many cre wish that the nd given our e successful we could get nd each stude h office hours his course de e coding exa ally worthwhil	hts from what e list goes on . I may have a not at all refl dits its worth, instructor use current facult in this course help for the h ent would pro a session. epends on hoo mples, but I fo e. Sure, I sp	students alre . On top of th learned a lot ected by the , but I learned a something y and resourd given a more nomework. Th bably only be w much you p ound that acti ent some day	ady have at, I felt lik in comput grade. If I a lot abo besides ju ces, that e persona ere was able to a out in. ually s up to 4			
	feel like it a Bloomfield last lecture Far too mu content for to have 21	at first though is actually re . That was A ch work is re students to I 50 split into t	t. eally awesome +. :) quired for this be expected to wo classes if	but I think I le e and I loved in course comp o master in su ALL of the con	t whenever he pared to other ich a short ar ntent is absol	e would get re CS courses. nount of time utely necessa	eally sassy lik There is just . It would be h ary for the ren	e with the too much petter suite naining			
	courses in with progra between th	the major. The major. The major with the major with the major with the major with the major. The major with the major with the major. The major with the major with the major with the major with the major. The major with the major withe major with the major with the major with the major with	nis course is g e college, not y CS classes	geared toward those studen and 2150 is c kload. Or bot	students wh ts who are w completely un	o have had lo orking hard to	ts of prior exp catch up. Th	perience ne gap			

	CS 2150-001 Program & Data Representation - Fall 2015
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	Overall amazing class where we all really have to sweat it out for 3 months but walk out having learned a great deal and feeling satisfied. There are 3 areas where I feel the class could improve: 1. Exams questions could have been a lot better. Some of them were so obscure and random. Asking questions like "give an example of code that would likely but not definitely cause a segmentation fault" just make me angry. 2. Lab descriptions could have been less wordy and more easy to understand. Just looking at some of the labs and understanding what the assignment actually was could be daunting. There were many cases where I felt long sentences and examples could have been entirely removed from the lab description. Just example output, a suggested step-wise procedure, and useful links organized in a fixed order would make things a lot better, rather than having to hunt through the long assignment to find the links and information that I actually need. 3. Professor Bloomfield could hold more office hours. 3 hours a week was not enough, as could be seen by how crowded the office hours used to get in Rice 403. One last suggestion: Allow everyone 3 unpenalized late days on labs over the course of the semester. Don't allow more than one on a given assignment, but in a class with 35 assignments, sometimes lab deadlines will clash with commitments from other classes. I had 2 midterms the week lab 9 was due and simply couldn't do it on time. Note that this wouldn't allow you to submit an assignment 48 hours late, only that you can submit it 24 hours late without losing the 2.5 points, 3 times in the semester.
	It's a ridiculous amount of work better suited to be split into two courses. We had a "course participation" grade that there ended up not really being a way to evaluate considering there were over two hundred people in the class. In addition the fact that your inability to complete one portion of the lab effects your ability to complete the rest of the lab is ridiculous considering the next part of the lab can be on a completely different subject, making it difficult to continue to learn. I also have difficulty understanding why, if labs are sequential we are not able to submit the prelab at the end of the week with the postlab for any amount of credit considering we are required to get it done to continue with the lab and may spend many hours on it. Also, when writing a paper for a student to cite sources and write up code that explains the subject it will take hours, so if you don't want the paper writing to take hours don't have students write code that goes with it.
	This class was some of the most work I've ever had to do, but it was very worthwhile and rewarding. Bloomfield is an amazing teacher, one who cares very deeply about making his class as good as possible. He treats students as partners and treats them with respect and responsibility. He explains all his actions and reasoning behind assignments, work, and test questions. His lectures are interesting and engaging. His homework assignments are hard, but deepened my understanding of programs and data like nothing else. He encourages people to ask questions and engages with the class, not an easy task in a 200 person lecture. I am constantly blown away by how much work he has put into this course.
	Prof. Bloomfield is very knowledgeable about the material and makes the effort to get to know his students' names.
	Bloomfield is a great professor, but this class is just way too much. Too much time, too much work, too much stress. Especially given the joke that CS2110 was, I definitely wish some of the material in this class was covered in 2110, and 2110 became a bit denser. Occaisionally small parts of homeworks were worth disproportionately large percents of grades, but this wasn't too bad. Biggest problem with the course, imo (other than the ridiculously excessive amounts of work) is that many of the assignments are long winded, and include a lot of information that isn't really necessary to complete the assignment, and all it would do was confuse me/waste my time trying to read/research/understand it. But overall Bloomfield is a stud, no doubt, and I'd love having him teach me other CS classes, but note that I said OTHER cs classes. 2150 is too stressful
	Some days this class was the bane of my existence. Professor Bloomfield's assignments were the also the cause of many sleepless nights. However, after finishing this class, I can honestly say that CS2150 is the most meaningful class that I have ever taken. Looking back on it, I have learned more in this class than all of my previous CS classes combined. Professor Bloomfield is the best instructor I have had at UVa.
	Hard class, lot of work, very interesting and fun.
	Thank you so much for teaching this, Bloomfield, this class was really well structured and taught me a lot. Keep it up!
	Very hard, but very worth it. I was lucky since my internship prepared me for this class, so I feel bad for everyone else who was even less prepared than me.
	N/A
	The course was a lot of work but I learned more in this class than probably any other class I've taken at UVA. The only complaint would be some of the lab assignments. Most of the lab assignments were worthwhile but there were a few that felt like they were just tossed in so that there was something to do for the pre/in/post-lab.
	I feel like I've become a better programmer and that I understand how computers work much better because of this class.

	00 2130-001 1 logram & Data hepresentation - 1 air 2013
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	Sweet class bros. I loved this class. I think I learned a lot and that although challenging for the first time, it was a fair class. The class is a data structures class and so the only suggestion I would have is to stick with that. I understand that the idea is to introduce a little of everything so you do the numbers in computers, and the machine code and assembly language, but I think it detracts from the point of the course. I believe it would be much more valuable to students to focus more on really hitting the data structures in more depth and spend more time on them. Let computer architecture handle the x86 and machine code. Maybe send the numbers stuff to discrete or just don't emphasize it so much. I think the importance of this class is for understanding what data structures you should use when, and so maybe some projects at the end for free choosing data structures or just practice problems would be helpful. Basically, I think you should help students more with their data structures and interviewing skills and less about trying to jam pack all this random stuff into the class. Overall, great class though, thanks! Sweet class Bros
	This was a really useful and helpful class that pushed me but I don't know how I could've done all the work if I was taking more than the minimum course credits.
	Bloomfield is a great professor, but this course has such a huge workload. CS 2110 did not prepare me at ALL for this. Either reduce the workload, add a curve, or give this class more credit hours.
	Really great class. If you put in the effort then you should've learned a lot and come away with a lot of knowledge.
	Without a doubt the best course I've taken at UVa so far. A few labs require a lot of work, but its definitely worth it. I learned so much from Bloomfield and this course.
	I thought this class was very difficult and time-consuming, but also very rewarding. Professor Bloomfield is an awesome lecturer!
	I feel that the course's lab section is a bit of a mummer's farce. The labs take the form of a weekly homework, and I think it would be better to just treat them as such. Forcing everyone to come to lab to request an extension and leave seems quite silly to me. If students need help from TAs, that's what office hours are for. In other words, I would just have three "problem sets" due each week. Alternatively, if the lab format is preferred, at the very least I believe that you should allow the labs to be worked on from home (similar to what you did for the Huffman encoding lab over Thanksgiving break). For those students who do not need any help from the TAs, the weekly chore of coming to class and submitting an extension is really quite pointless. Additionally, I think that the x86 labs' faux-research was by far the least enjoyable part of the course. I'm not saying that CS research is not fun, it is - but compiling code and looking at the output is not "discovering" anything. The point of research is to look forward, while this assignment was looking backward at known, google-able things. In an era where the utility of teaching CS students assembly is being called into question, I think that this assignment was entirely counter-productive. It accomplished nothing but crushing whatever interest in assembly I may have had. Finally, I think that I would replace the Traveling Salesman section of the Graphs lab with Dijkstra's or something more useful.
	The recordings of lectures are great, and I wish other professors would follow; however, they often become unintelligible when the professor walks away from the podium or when a student in the back asks a question. Could you use a wireless mic instead of the podium mounted one?
	Professor Bloomfield was one of the most enthusiastic and knowledgeable professors I've ever had. He was incredibly prepared, had a very audible voice, answered in-class questions extremely well (always repeated the question for the class to hear), had very well-structured lectures, and so much more. He was a marvelous teacher and I highly recommend him to people interested in taking this class.
	This is a tough one to evaluate. I have never learned more in a course than I did in this one. It was seamlessly run, thoroughly taught, and extraordinarily well structured. Prof. Bloomfield does a ridiculously good job with this course. I think the grading is a little harsh, but I don't have a final grade yet so I can't say if they later account for that at the end. CS 1110 was a great course and I just wish that I would have been able to take 2150 directly after finishing 1110 because I actually lost coding ability in 2110. I think the CS department should just be run by Prof. Bloomfield and Sherriff honestly. The only way this course could have been better is if I had a better background from 2110 so that I could have gotten more out of this class. Often times, because I did not have a great background, I found myself just trying to keep my head above water in this class instead of getting all I could out of the material. Lastly, I would like to say that the tests are not exactly the best form of assessments I have seen. Because there is not a lot of actual coding, it is often more indicative of how many hours you spent memorizing the lectures than how much coding ability you have gained.
	The Late penalty is very steep. There needs to be a 15 point hit or less not a 25% hit
	He's an good teacher, not bad, but definitely not the best. Lectures were not particularly engaging. Please remove IBCM and its lab and start the lectures about x86 earlier so people can actually rest during thanksgiving.
	Difficult course but worthwhile. Anyone with real interest in computer science would enjoy the course. The course is not user friendly which is where most of the issues arise. Saying that, I learned a ton in this course and I understand why it is the way it is.
	The fact that this class is less than 6 credit is complete BS.
	This was a very difficult yet rewarding class. I think it should be worth more credits in the future.
	Great teacher, very receptive during office hours, and doesn't try to sugar-coat things.

It is true what they say about CS2150. It is very tough but worth it.

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	CS 2150-001 Program & Data Representation - Fall 2015
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	Overall, I thought that the course was a very good course. It taught a lot of essential material, and the homework really helped solidify that material. The amount of work was at times overwhelming, but probably only because I'm a chemical engineer and have other core, technical courses as well.
	Wow, quite possibly one of the best teachers I have ever had. Exceedingly passionate, funny, ENTHUSIASTIC(ABOUT LIFE AND EVERYTHING), literally pours his heart and soul into this course and this man legit deserves a raise because whatever he's getting paid it's not enough.
	A great introductory course to program & data representation.
	This course is not too hard. It is too much work. It honestly isn't fair.
	Listen to the Aviatorcast. Bloomfield is cool give him more money!
	Learned a lot
	The course was well structured and covered a lot of material. It was a lot of work but at no point did I think it was unreasonable. I think it would be useful to cover Assembly language at the end instead of breaking up the C++ parts of the course, because it made the material seem disjointed. I also think it would have been more useful to cover IBCM after Assembly, and maybe to have assigned a more interesting or involved postlab problem for that lab (instead of one that could be done in less than 10 lines).
	This is the most time-intensive class I have ever taken. TAs, lecture recordings, Piazza, and being willing to work with friends/strangers in Thornton were key to getting my work done. Labs were effective ways to learn course material (though I'd note that reports had such unclear guidelines that it's likely I spent far more time on them than necessary in order to feel secure that I had covered everything - please make grading guidelines more clear in the future because it's a source of stress and lots of time used). I'd add that because homework covered georgicareas of lecture and took up so much time, it was difficult to find time to learn all of the material (especially what wasn't covered by labs) until exams got really close.
	I didn't like that Bloomfield doesn't take student emails. It makes it that much more difficult to get in touch with him
	Hardest class ever. Definitely will be worth it in the future. GPA is temporary, knowledge is eternal.
	The course should be 6 credits and the exam are pretty random. Yet the material are cool and useful stuff. Hard to get to professor and TAs outside class
	Good course, learned a lot
	Excellent course. The course content is well developed and while the homework assignments were difficult, the scope of the assignments were well within reason.
	Great class, I learned a ton, a little too much work, but most of it was reasonable except for BASH. Why? Just why? I had so many dumb errors. Everything else was solid.
	Literally the only qualm I have about this course is the amount of work per credit hour. I felt that there was no material that we couldn't grasp, everything from the labs to the slides were designed and organized remarkably efficiently, and I am certainly a much better computer scientist than I was a semester ago. Prof. Bloomfield is also a great lecturer who is quite good at explaining annoyingly technical concepts (I'm talking about you, x86). Having said that, it's a TON of work and 3 credit hours probably is not a fair evaluation of the effort required to succeed.
	Split the course into two halves: one where we learn C++ and a scripting language and go in-depth, the other where we learn "under the hood" stuff like x86 and IBCM. HAVE THE TA'S GRADE LABS SMARTER. PLEASE STOP DEDUCTING HALF CREDIT FOR PRINT STATEMENTS.
	Every lab was painful (it wasn't just the ones people said would be hardall of them were hard) and every exam made me scared for my future. But this class is so necessary as a foundation and Professor Bloomfield has done an amazing job with the curriculum and delivery.
	This course was definitely something else. I learned a lot and I'm proud of that, but there were times when life was miserable because of this class. That jump in learning curve is not something students are prepared for, and that should have been addressed in a better way. Definitely had to make trips to CAPS due to the anxiety and stress that this class caused. All that being said, this class is so useful in the long run. The things you learn are so applicable to the real world and you don't really get that from 1110 or 2110.
	Not as many resources as there should be for this class.
	Very nice computer science, 0xA/0xA would play again. I had fun, thank you for teaching an interesting class.
	GG
	This class is ridiculously hard, but it is all well worth it. Bloomfield is a phenomenal teacher and although he throws a ton of work on you, it is for the better in the end.

	CS 2150-001 Program & Data Representation - Fall 2015
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	The most frustrating part of the course was when office hours would get swamped and after waiting for 40 minutes, you would get a TA who would tell you that you only have 5 minutes with them. For the first assembly prelab, I went to office hours Monday night to get help with understanding the concepts and after waiting a long time for a TA, the TA told me that they couldn't help me and had to leave since I didn't have specific enough questions and the queue was really long. So I was basically SOOL and it was frustrating because I couldn't get to earlier office hours due to other academic commitments. So next semester there should definitely be more TAs or more office hours to prevent too many students going to Monday night office hours and making it inefficient. Since we can't talk about code directly with other students, it made some prelabs almost impossible to get any help on. Also, I think it would be helpful if there were things that promoted group work, like if certain labs could be worked on in groups or study groups could be formed over Piazza or something. Since the lecture is so large, it's hard to really get to know other people in the class, and I feel that CS is one of those majors that group work can be really beneficial towards learning. The hardest part in my opinion was the assembly unit. I didn't feel like the connections between IBCM and assembly were made that clearly before really diving into assembly. For BS CS majors, it wasn't that bad of a transition because of CS 2330, but as a BA major (or non-CS major) it was very confusing at first. Overall though the material itself isn't that hard, it's actually finding enough time for the class that is difficult (especially if you have other large academic commitments over the weekend, since the prelabs tend to be the hardest part). Despite that, this class was extremely enjoyable and made me feel like I was finally becoming a legitimate CS major.
	Very difficult but worthwhile course.
	This is a hard class, but I really learn a lot and enjoy programming right now. I've watched some data structure lecture videos on coursera and OCW. However the experience in this class in totally different, class material is so well-structured and applicable. I love this course. If I'm not a fourth year, I would jump into a CS major directly after this class.
	I learned so much from this class. The only real critique I have is that some labs could have the instructions written better and the post labs were not useful. The core topic was taught in prelab and inlab. The postlab did not add anything meaningful beyond that. Professor OH were great. Bloomfield is cool.
	This class was so greatI learned a lot. Also, Professor Bloomfield is an amazing lecturer and a very friendly, approachable professor. However, I've never taken a class with such inconsistent grading. Before this class, I'd never submitted a regrade; for this class, though, I submitted one for every test. I continue to see inconsistencies with grading on testswhere one student receives full credit for an answer, but another gives the same answer and receives no credit.
	Very worthwhile course, but should be worth more than just 3 credits and should have way more TAs.
	Hard calss but well run. Learned a lot
	Great class. Would recommend to anyone.
	need to make the prelabs and postlabs less work to do
	I wish more professors were as organized in their material as Professor Bloomfield. He had clear goals for the course and it was very clear what he wanted us to get out of it. Very clear way of thinking and relaying the information which is a rarity in a lot of classes here.
	Although it was difficult at many times I feel that I have learned the most from this class as compared to any other class I have taken at UVa
	Lab over thanksgiving break was cruel. I had no time to do it which caused me to miss a super important lab and really hurt my grade.
	The labs could have been more clearly written. Besides thank, the TA's and professors were great!
	This course is worth more than 3 credits.
	great course. needs way more resources. there are so many of us and so few ta's and office hours. please please give more money to this class. they need it. the students need the help.
	Too much work for the amount of credits that are currently received. I was only enrolled in 12 credits this semester and was doing much more work than some of my colleagues who were taking 15. The previous classes in the CS curriculum do not prepare you for this class, which could be intentional, making it a weed out class. I have no problem with this, but sometimes the workload or concepts behind labs would be excessive to do in one week, especially with all of the other course work going on.
	Great course except the workload
	Tons of work, lots of self teaching is required (by design)
	The coursework for this class was insanely high - higher than any course I have taken at UVA thus far. However, I also learned much more in this class than the CS classes that came before in the curriculum. Although the course is difficult but doable, I would recommend shifting some of the content from 2150 to 2110 since 2110 did not cover that much material, while 2150 covered too much.

he did not communicate expectations for testing well

	CS 2150-001 Program & Data Representation - Pail 2018
~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	Should focus more on covering more data structures. I feel like we neither went in depth, nor in breadth. But still felt I learned a lot. And Bloomfield was a great professor. Maybe more data structures should be covered in CS2110 and then continued in CS2150.
	Thank you! Such a tough course but it was well worth it; I've never grown so much in 16 weeks before!
	Thanks for a great semester!
	I said strongly agree for most. I didn't strongly agree with several, and here is my reasoning: Material well-organized and developed: For the number of semesters this has been taught in a similar format there were way too many vague or poorly worded assignments; this seemed to be a common critique by students throughout the semester. For example, the Lab 4 in-lab asked for a cpp file to be submitted but it was VERY unclear what needed to be in it. I spent at least an hour trying to figure out stuff from the cpp file before a TA just told me it was fine to do it by hand. This was an issue as well on other labs and the first exam. Adequate preparation - I was well-prepared for the course but this was largely due to an internship I had last summer. 2110 should cover more material and possibly introduce students to the command line. I also think that Lab 1 (in this course) should include many many more tutorials and such. I mean, why not use that week as a chance to really get students used to linux and C++? Particularly it should get students used to pointers and the '->' operator which are used heavily in Lab 2. Grading Policy Fair - Some exam questions were graded very pickily (- is that a word) in such a way that I felt my understanding was not being tested well. For instance, for the question: 'Give 3 examples of queues' I responded: Any Line is a queue - marked incorrect because technically a line is a queue by definition and therefore this is just giving an alternate definition. A Grocery line was a valid answer>:(Also: the human digestive system - marked incorrect because technically the human body processes some foods faster than others and therefore is not strictly FIFO. You have to be s***ing me. Do I really not understand queues? You be the judge
	The time taken to do the labs was so much, it was hard to focus on other classes. Also, I think there should have been more time spent on Big-Theta, since it was a crucial topic in this course.
	If regrades could be returned earlier, that'd be nice.
	I definitely learned a lot from this course, but I think previous courses could have done a lot more to prepare me. It felt like being thrown in the deep end and figuring out how to doggy paddle. Not quite swimming, but more than floating.
	I thought the course was great, I feel like a much better computer scientist now.
	A sometimes ridiculous amount of work and the exams were very hard to prepare for just because of the sheer amount of information. That being said this was my favorite courses taken here so far. Bloomfield is fantastic and the amount I learned is obscene.
	more valuable than 2110 by a factor of 1000000000000
	This was the hardest class I've taken at UVA, but also one of my favorites. However, having us do a lab over Thanksgiving was a low blow. I would've rather have a homework assignment over fall break than over Thanksgiving.
	I think the late grading policy should be changed from hard cutoffs to gradual hourly decline up to the same cutoff values.
	If you could in any possible way NOT have a lab over Thanksgiving break, that would be wonderful. Because the lab over break was terrible. Or if it could be an easier lab. Also: FOUR CREDITS What everyone says is true. The class is super hard and time consuming, but you learn so much from it. And it's very well taught and organized, there's just so much material, and it isn't simple stuff so it's going to stay a crazy hard class.
	Good course good professor. Just need more OH
	This class was so much work. That being said, I learned so much through it that it was worth it. I only wish I had taken it in a semester that I did not have so much else going on in my major (MechE). One main complaint is that a lot of times there were so many documents in the github repo telling us what to do for each lab that it was often confusing what was desired for certain parts of the grading. The TAs would also usually be unsure of what exactly was required for certain specific aspects of the labs because it was confusing and they were not the graders. It would be nice to have more specific instructions for what exactly is desired for each lab. Also the lab over thanksgiving kinda sucked. I know that they want to get as much done as they can, but that one was a really difficult lab and it was not easy to complete it at home without the resources or office hours on Grounds. Otherwise I liked this class a lot.
	Great worthwhile course. Definitely the most I've ever learned in any class I have taken.
	labs were a lot of work, but lectures were really interesting and i learned a lot. professor bloomfield is a good lecturer. this class was very worthwhile.

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	This class feels like it was high-quality three years ago, but has been given a bureaucratic shit sandwich and now everyone is taking a bite. I think everyone's doing the best they can, but this class has some major warts to address. First, the good: Great teacher. Bloom is not only knowledgeable but a good communicator. He knows the questions students typically have. The order in which subjects are taught is good. Some of the TA's are amazing. If I were starting this class anew, I would try to get help from each of them to find out who the really good ones are. The bad: Basically, the resources for this class suck. Bloomfield has little time and it is precious. For some stupid reason, he has disallowed tutoring for this class. The idea is to rely on tutors. The hours of availability are plenty but they won't be available. On average, I waited an hour to ask my question(s). They will be gone before you can figure out if you've understood them and correctly solved the problem. A common reply in this class is "get good at Googling," which is frustrating. It's a part of the business, sure, but Google is the only help I'm going to get, then why am I even at UVA? If you miss a class, you can see some sparse notes online, but you'll miss what he said in class. He does record, but unlike other CS teachers that wear the microphone, he leaves his on his desk and then speaks from twenty feet away. If you're the kind of person that feels nervous asking questions in big classrooms, bad news: this class is 250 people and growing. It looks like the class is finally getting broken up a little in the spring, but it's still a lot of people for a class that needs frequent discussion. The silver lining in this is that you can meet a lot of people and work together, which is the only way you're going to get consistent help over an hour or more. The lab grading is pretty harsh. For not doing 20% of a lab, you'll lose 40% of the grade. Assigning work over breaks is expected as well, which really should be prohibited by the universit
	I loved this course! 2150 was one of my favorite courses in the semester.
	the professor was engaging and funny during lectures.
	*More TAs *Spend time teaching Makefile. The tutorial was long-winded and hard to follow. *Revisit lab documentation and clarify instructions *More documentation to support each lesson *More time on time and space complexity (starting with the basics) *Provide a bit more guidance with labs; I wasted a good hour or two each week just trying to figure out how/where to start. *More in-class examples, if time permits
	I didn't actually go to the lectures so I don't really have much to say there. The material was very interesting though and I thought that the structure of the class was very conducive to learning a TON. That being said, I felt that 90% of the useful material was in the prelabs and that, usually, the postlabs were more of a tedious hassle than anything actually useful. The inlabs varied from quite good to somewhat silly, but in general I thought that if the material in the inlabs was just extended a bit and then the students were allowed to finish that later on then that would be much more useful than the postlabs as they are now. Overall, however, I thought this was a great class and (especially after all the horror stories about how hard it was supposed to be) was pleasantly surprised by how little effort I actually ended up needing to learn as much as I did.
	The recorded lectures' sound quality is very bad, and unpleasant (damaging) to hear, due to rapid constant volume changes.
	While one of the most difficult courses I have taken so far, CS2150 has been one of the more valuable ones as well. I learned more in this one semester of class than I have in all of my other CS classes combined. That being said, this should either be a 4 credit class, broken into two semesters, or have slightly less labs. There were times where the workload was extremely overwhelming with other classes. Additionally I have a suggestion about the labs. While labs are crucial for solidifying the information learned in lecture, I found myself spending more time working on the "extra" parts of the lab rather than the key bits of information. I wish things such as input were introduced in a lab earlier than hashlab, because that is one of the reasons that it was so difficult.
	Bloomfield was excellent
	great teacher
	Great class. Tons of work, which was all worth it in the end. Should be 4 credits
	Waaaaaaay too much work for the amount of credit received. All of the work was necessary, but the amount of credit earned was not at all equitable. We worked harder for the 3 credit lecture than any others, and had labs thrown on top of that.
	Most time intensive class I've ever taken but learned so much for it.
	It's okay to email more. It would be helpful.
	Bloomfield is a great professor, and this is a wonderful class. It was a bunch of work, but I felt the work was constructive and something to learn from, not just busy work.
	Professor Bloomfield has taught this class since the Mesozoic era, it is no surprise, therefore, that his is a well-oiled machine. He knows exactly what he is doing and does it.
	Professor Bloomfield's instruction makes the need to look for TA or Instructor assistance a very rare situation. Even when such a situation would happen, he was very approachable and was very flexible in accommodating for a student's inquiry.

~ QUESTIONS AND DETAILS ~	~ ANSWER MATRICES ~
	Great course overall - I learned a great deal but also realized how little I really understood about CS conceptually before this class. I would highly recommend to other students but I did pull two or three all nighters per week because of this class even with a 13 credit schedule (also because of this class).
	Amazing professor and an amazing course. I did not feel so much like a CS major until after completing this course.
	Beyond the core material, this class did a wonderful job teaching real-world skills and development tools such as Make, automated documentation, automated testing with scripts, debuggers, etc. I would love if a class was offered that concentrated on the use of these tools. I feel like my development workflow has become much more efficient after this class. I think that the class size is too large. Although Prof. Bloomfield always makes himself available, office hours are crowded and wait times are too long. There is no real solution to this other than adding another lecturer and reducing the class size. I occasionally missed some of the required parts of an assignment. This is most likely my own fault, but possibly could have been mitigated by moving more requirements up to the "Procedure" section of the lab documents. (e.g., In the Lab 8 in-lab, the Procedure section makes no mention of including assembly code. In the in-lab section of the document there is a sentence that starts with "Show and explain the assembly code" for the lab, but that sentence is about halfway through the in-lab section and as far as I can tell is the only mention that the document should actually contain assembly code. Although it is my fault for not reading the lab document more carefully, I could have possibly avoided this mistake with a clearer presentation). I think that including some versioning (e.g., git) into the curriculum would be helpful. I have overheard more than one student mention that they deleted their entire implementation and started from scratch. This is a problem that 1 think everyone has before they start using version control, and I believe that it should be taught as early as possible.
	Although it cost a lot of time for me doing labs and preparing for exams, I learned a lot from the course and I am really delighted that I have taken it. Professor is a very enthusiastic person and extremely helpful and patient in his office hour, I will definitely rate the course as one of the most valuable ones I have taken in UVa.
	Best course ever.
	The class was very hard and the labs take up so much time that there is not enough time to study and understand the materials.
	I loved the course but I think that the hardest challenge was the exams and the ambiguity of what will be covered. So much material and so few things asked on the exam