

# CS 2150-002 Program & Data Representation - Spring 2017

ENGR (18581)

INSTRUCTORS: Bloomfield, Aaron S. (asb2t)

Respondents: 113 / Enrollment: 135

Summary: CS 2150-002 Program & Data Representation - Spring 2017 (18581)	
<b>Overall Course Rating</b> CS-2150-002 Mean 4.06 CS-2150-002 Std Dev 1.18 CS-2150-002 Response Count 563  SEAS, 2000-level courses Mean 4.01 SEAS, 2000-level courses Std Dev 1.04 SEAS, 2000-level courses Response Count 20529	<b>Overall Instructor Rating</b> INSTRUCTOR: Bloomfield, Aaron S. Mean 4.52 Std Dev 0.76 Response Count 786  SEAS, 2000-level courses Mean 4.29 SEAS, 2000-level courses Std Dev 0.86 SEAS, 2000-level courses Response Count 31834

~ QUESTIONS AND DETAILS ~ ~ ANSWER MATRICES ~

<b>1. What is your major (and whether you are declared or not)?</b> ~ Question Type: Multiple Choice ~ contributed by Bloomfield, Aaron S. (asb2t)	Results for CS-2150-002, Bloomfield, Aaron S.									
	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 the BA CS (NA)	A SEAS major that is not listed above (NA)	A major outside the SEAS school not listed above (NA)
	113	53 (46.90%)	25 (22.12%)	22 (19.47%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	10 (8.85%)	3 (2.65%)
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 the BA CS (NA)	A SEAS major that is not listed above (NA)	A major outside the SEAS school not listed above (NA)	
113	53 (46.90%)	25 (22.12%)	22 (19.47%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	10 (8.85%)	3 (2.65%)	

<b>2. How many credits should this course be worth? Please add your comments here.</b> ~ Question Type: Short Answer ~ contributed by Bloomfield, Aaron S. (asb2t)	Results for CS-2150-002, Bloomfield, Aaron S.									
	Total	Individual Answers								
	112	See below for Individual Results								

4. The labs are well structured but also unreasonably difficult

4 - the labs take 6 - 10 hours every week, plus 3 hours of lecture.

Although this course is worth 3 credits, I think it should be worth at least 4, mainly for the amount of work it requires to be successful.

This course should be worth at least 4 credits. We have 3 lecture periods and a required lab outside of the lectures so obviously it should be at least 4 credits. Plus the amount of required work we have to do for this class should take us to at least 4-6 credits. The pre-lab, in-lab, and post-lab can easily be 3 full blown homework assignments that we would get in any other engineering course, which is very overwhelming which leads my opinion to be that this class should be worst case scenario 4 credits.

4! This should really be four! There are three lectures and a lab. Plus The homework load is beyond any four credit classes i have taken.

I believe this class should be worth 4 credits because there is a significant amount of work that is required for the labs.

4 - 3 for lecture, 1 for lab

Three credits is reasonable but the course was pretty time consuming for only a three credit class but we do go into the class expecting that.

This course should be worth at least 4 credits. Way too much work considering its only 3 credits. There are labs each week divided into 3 parts, which takes a lot of time

4-5. Considering a course is supposed to have 3 hours outside of work/ credit, I would say most people spend between 10-15 hours on labs.

4. This is far and away the most time-intensive course I have taken. Requires at least 12 hours outside of class per week, but often requires more. Those hours outside class plus 150 minutes of lecture PLUS 75 minutes of lab per week means this class is at least 16 hours of everyone's time per week, which is simply not fair.

4 credits, because it is a class that requires a lot of effort.

4 or more. The homework load was very intense and though I learned a lot having other homework throughout the week made this class a real struggle time wise. I tend to pride myself on being very effective with time management and have done well with it in the last three semesters I've been here but this class along with the others I was taking took me to my limit a few times during the semester. Everything still got done but some things were a small bit late.

At least 4 credit, since the lab is aside from the lecture another huge time commitment and we actually learns a lot from accomplishing the lab. The hours spent on this course for me is way more than my other 3 credit classes in general.

3 for lecture, 3 for lab.

I want to say this course should be worth 4 credits because of the time that is required. However, this wouldn't really accomplish anything because it doesn't change the required courses you still have to take. Because of this, I think it should stay at 3 credits.

4, this course takes more time than any 3 or 4 credit course I have taken, but it is not excessive.

Mentioned this in the other section but this class should be worth 4 to 5 credits. Make the class 3 credits and the labs 2 credits. We spend so much time it's ridiculous that it's only 3.

Definitely 4. The amount of outside work makes this class way more than a 3 credit class. Plus, there's a lab section which contains actually difficult assignments in addition to the usually 8 hours of outside homework. It needs to be 4 credits.

3 - This class is a lot of work, but I don't think it's unreasonable for a 3 credit class.

Lectures:3 Labs: 2 Total: 5

3-4 credits is pretty reasonable, even though there is a lab section, the class has no homework other than those assigned to the lab section, so it kind of cancels out.

4 at least; I spent HOURS outside of class just for the pre-lab.

4 at least. This course sucks all your time and finding time for other technically rigorous classes is nearly impossible. perfection in 2150 leaves no time for anything else. mediocrity brings a better chance in other courses.

4 credits. There are APMA courses that are four credits and I put more work into this course than I did in any of my other courses that I have taken so far.

It should be worth 4 credits

5 credits

Realistically, 4. I know some people say like 6 because there's so much work, but that's ridiculous. There are three 1-hour lectures and one 75-minute lab a week, which is almost the definition of 1 4 credit class. A class 4 days a week should not be 3 credits.

At least 5

6. I spent at least 20 hours a week on 2150 lol

Probably 4 due to level of work done in the class.

200

3

3

3

3

3

3

3

3

1

4. Lab work add extra credit hour.

5

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4 would be justifiable given the workload and breadth of material.

I think should worth at least 4 credits. I feel the time and amount of work put on the labs is a lot to only be a 3 credit course

3- it is not an unreasonable amount of time required for a 3 credit class, so I do not think it should be worth any more than it currently is.

4. Please god make it 4 for the rest of the poor souls that have to take this course

4 to 5 credits. I would say 5 would be good.

This class should be worth 4 credits. We spend way to much time on the labs for it to only be 3. I think that the only lab I was able to do in the given 75 minutes was Lab 12.

I think it should be worth more than 3. I've taken APMA courses that were worth 4 credits and certainly done less work. I think it would be reasonably to expect the level of work that CS 2150 does if it is a 4 credit class.

More than 3

4 - I spent roughly 12 hours outside of class for each lab (including prelab, inlab, postab) every week. Some labs, Hash and Huffman Code, took longer while others were shorter. Also had about 4 to 5 hours of in class time per week.

4 - this class is incredibly difficult and incredibly rewarding. I learned a ton but it should be worth four credits for how hard it is

4 credits. The labs in cs2150 are very time consuming and require a lot of time outside of lab to finish, with the exception of 2 or 3 in-labs. And this does not include the often even more time consuming pre and post labs. This class has a lab and takes up more time than any APMA 4 credit class or any chemistry or physics lab I have taken and I believe most students would agree.

5 credits. I spend at least 12 hours on this course every week.

This should be worth at least 4 credits, considering the amount of effort one has to put in each week into labs. Alas, the CS department will never change that because of administrative issues.

At least 4. I love this course partially because we could get deeper into topics. However, the result of the depth acquired during this course is that it takes up a lot of time.

5 I know that 5 credits is not allowed, but I can honestly say I spent an average of around 13 hours a week on this course. It was very difficult, but extremely worthwhile and may have been the most informative class I have taken at UVA. I have learned more in this class than any other class I have ever taken. But as stated above, this comes with a very high cost in the form of a lot of hours per week being dedicated to this course.

Either stay at 3 or maybe 4. The labs change in difficulty, so it's hard to say for certain, but if a student has another big class (e.g. a language class), suddenly scheduling got harder and doing the labs was a balancing act. That being said, none of the labs or materials felt like busy-work.

6½ I spent more than 10 hrs per week for labs

3-4

3.5 as there is quite a bit of work surprisingly enough that I don't think its a 3 credit course but not quite a 4

I think this course being worth 3 credits is appropriate.

4 to 5

at least 4 credits

5 credits The labs are very hard, but it is manageable If I had more time to do it

4. The lecture and lab should combine for 4 (3 and 1 respectively).

4, I spent a lot of hours every week on labs, and since there is a lab section associated with this class, this course could easily be worth 4 credits

4!! We met 4 times a week, and the labs felt like an additional class. This class took up so much more time than every single one of my other 3 credit classes. It is definitely worth more than 3 credits.

4. I think it would be reasonable for this class to be 4 credits because of the lab period. While yes, the in-lab is supposed to be done during the lab-period, more often than not it ended up being additional homework.

I believe that this course should be worth 4 credits, because of the amount of work that is required for it, and the fact that it meets for nearly 4 hours a week, instead of 2 and a half hours, like most 3 credit classes.

4 Credits. Phenomenal course, but definitely the most time I've ever spent on a course (10 hours outside of class time).

4 - This is due to the lab assignments

3. This class required a lot of work but it was not unreasonable. I thought it was a good amount of work for a 3 credit course.

This course should easily be at least 4 credits. The most time I've ever spent on a class.

Three credits

I understand why engineers need this course to be 3 credits so they don't go over the credit limits, but I think there should be an option to take this class for anywhere from 3 to 6 credits. I'm doubling in Commerce and CS and this class takes twice as much time as my other four classes combined. I know there are classes where you can decide how many credits you want it to be so I think that option should be available for between 3 and 5 or 3 and 6.

Probably 4 credits. This class is a large stepping stone and seems to be the basis for the CS curriculum with a lot of work

I think its ok for it to be worth what it currently is.

4 because of lab

3 - it seems like the correct number of credits

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

3.5

This course should definitely be worth 4 credits because of the amount of work assigned and the level of commitment it requires.

This course should be worth 3 or 4 credits. It is a lot of work for a three credit course.

4 credits

4 credits

This course should be at least 4 credits. The assignments take a lot of time to complete, and it would help if there was a little bit more time in class to go over concepts and ideas and give some more insight and help into the material.

3, because most of the work for the class is based on labs so it wouldn't make sense to have the lab portion counted separately.

It needs to be bumped up to 4. I spent way too much time on this class to have only receive 3. I spent significantly time in APMA classes that were worth 4. We also meet 4 times a week, which adds to this argument. Thats how many times many APMA classes met that were four. Same with chem ... lecture was 3 credits... lab was an additional 1 (just saying).

4. Requires that much work and you learn a ton of material (that's all very relevant and important for our CS future).

**3. Please list any comments (pro or con) about the teaching assistants here. These results will be passed onto the TAs so that they also have some feedback from the course evaluations.**

~  
Question Type: Short Answer

~  
contributed by Bloomfield, Aaron S. (asb2t)

Results for CS-2150-002, Bloomfield, Aaron S.

Total	Individual Answers
97	See below for Individual Results

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

(answers to this question redacted since they are not about the primary instructor)

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

(answers to this question redacted since they are not about the primary instructor)

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

(answers to this question redacted since they are not about the primary instructor)



~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

**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-2150-002								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
113	4.71	0.51	83 (73.45%)	27 (23.89%)	3 (2.65%)	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)
4105	4.37	0.74	1992 (48.53%)	1723 (41.97%)	262 (6.38%)	77 (1.88%)	23 (0.56%)	28 (0.68%)

**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-2150-002, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
113	4.22	0.97	55 (48.67%)	34 (30.09%)	15 (13.27%)	5 (4.42%)	2 (1.77%)	2 (1.77%)

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)
4561	4.16	0.96	1912 (41.92%)	1735 (38.04%)	447 (9.80%)	241 (5.28%)	96 (2.10%)	130 (2.85%)

**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-2150-002								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
112	3.45	1.42	37 (33.04%)	24 (21.43%)	14 (12.50%)	24 (21.43%)	12 (10.71%)	1 (0.89%)

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)
4114	4.10	1.01	1658 (40.30%)	1707 (41.49%)	322 (7.83%)	280 (6.81%)	128 (3.11%)	19 (0.46%)

**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 CS-2150-002								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
113	4.65	0.71	83 (73.45%)	24 (21.24%)	3 (2.65%)	2 (1.77%)	1 (0.88%)	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)
4102	4.13	0.95	1611 (39.27%)	1555 (37.91%)	457 (11.14%)	202 (4.92%)	80 (1.95%)	197 (4.80%)

**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 CS-2150-002								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
113	3.09	1.21	8 (7.08%)	7 (6.19%)	18 (15.93%)	9 (7.96%)	5 (4.42%)	66 (58.41%)

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)
4109	3.49	1.20	650 (15.82%)	894 (21.76%)	684 (16.65%)	374 (9.10%)	221 (5.38%)	1286 (31.30%)

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

**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-2150-002, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
113	4.64	0.72	82 (72.57%)	26 (23.01%)	1 (0.88%)	3 (2.65%)	1 (0.88%)	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)
4535	4.09	0.96	1730 (38.15%)	1866 (41.15%)	500 (11.03%)	254 (5.60%)	103 (2.27%)	82 (1.81%)

**10. The instructor was knowledgeable about the subject matter.**

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
112	4.83	0.46	96 (85.71%)	14 (12.50%)	1 (0.89%)	1 (0.89%)	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)
4551	4.56	0.67	2836 (62.32%)	1365 (29.99%)	176 (3.87%)	37 (0.81%)	26 (0.57%)	111 (2.44%)

**11. The instructor was well prepared for class.**

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
113	4.74	0.48	86 (76.11%)	25 (22.12%)	2 (1.77%)	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)
4550	4.42	0.77	2416 (53.10%)	1620 (35.60%)	273 (6.00%)	86 (1.89%)	42 (0.92%)	113 (2.48%)

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

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
112	3.83	1.11	32 (28.57%)	47 (41.96%)	18 (16.07%)	6 (5.36%)	7 (6.25%)	2 (1.79%)

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)
4099	3.80	1.09	1041 (25.40%)	1389 (33.89%)	648 (15.81%)	314 (7.66%)	154 (3.76%)	553 (13.49%)

**13. The grading policy was fair.**

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
112	4.01	1.02	38 (33.93%)	52 (46.43%)	12 (10.71%)	5 (4.46%)	5 (4.46%)	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)
4551	4.15	0.89	1755 (38.56%)	1949 (42.83%)	504 (11.07%)	192 (4.22%)	66 (1.45%)	85 (1.87%)

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

**14. The instructor responded adequately to in-class questions.**

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-002, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
112	4.59	0.59	72 (64.29%)	34 (30.36%)	6 (5.36%)	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)
4550	4.38	0.77	2272 (49.93%)	1759 (38.66%)	272 (5.98%)	84 (1.85%)	47 (1.03%)	116 (2.55%)

**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-2150-002, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
111	4.64	0.54	74 (66.67%)	34 (30.63%)	3 (2.70%)	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)
4536	4.27	0.84	2019 (44.51%)	1799 (39.66%)	387 (8.53%)	136 (3.00%)	53 (1.17%)	142 (3.13%)

**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-2150-002					
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
113	0 (0.00%)	2 (1.77%)	11 (9.73%)	38 (33.63%)	62 (54.87%)

Results for SEAS, 2000-level courses					
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
4111	350 (8.51%)	1186 (28.85%)	1536 (37.36%)	614 (14.94%)	425 (10.34%)

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

Question Type: Likert

contributed by Office of the Provost

Results for CS-2150-002							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
113	4.68	0.63	84 (74.34%)	24 (21.24%)	4 (3.54%)	0 (0.00%)	1 (0.88%)

Results for SEAS, 2000-level courses							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
4103	4.18	0.91	1750 (42.65%)	1673 (40.78%)	423 (10.31%)	188 (4.58%)	69 (1.68%)

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

Question Type: Likert

contributed by Office of the Provost

Results for CS-2150-002							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
113	4.64	0.66	79 (69.91%)	30 (26.55%)	2 (1.77%)	1 (0.88%)	1 (0.88%)

Results for SEAS, 2000-level courses							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
4103	4.13	0.97	1727 (42.09%)	1575 (38.39%)	492 (11.99%)	216 (5.26%)	93 (2.27%)

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

**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-2150-002, Bloomfield, Aaron S.							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
112	4.62	0.54	73 (65.18%)	36 (32.14%)	3 (2.68%)	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)
4540	4.32	0.73	1985 (43.72%)	2147 (47.29%)	303 (6.67%)	71 (1.56%)	34 (0.75%)

**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 CS-2150-002, Bloomfield, Aaron S.							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
113	4.32	0.85	58 (51.33%)	38 (33.63%)	13 (11.50%)	3 (2.65%)	1 (0.88%)

Results for SEAS, 2000-level courses							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
4547	4.34	0.78	2250 (49.48%)	1760 (38.71%)	412 (9.06%)	91 (2.00%)	34 (0.75%)

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

Question Type: Likert

contributed by Office of the Provost

Results for CS-2150-002, Bloomfield, Aaron S.							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
113	4.64	0.64	79 (69.91%)	29 (25.66%)	4 (3.54%)	0 (0.00%)	1 (0.88%)

Results for SEAS, 2000-level courses							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
4560	4.22	0.93	2094 (45.92%)	1729 (37.92%)	469 (10.29%)	168 (3.68%)	100 (2.19%)

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

Question Type: Short Answer

contributed by Office of the Provost

Results for CS-2150-002	
Total	Individual Answers
79	See below for Individual Results

Expo Markers.

solid course

The class is overhyped in the sense that EVERYONE said the course would be a time suck and was very difficult. it's a challenging and time intensive course, sure, but it was not that bad. Definitely not the worst class I've been in in terms of work load... and I also thought the material was all extremely relevant. So no qualms from me.

I have heard horror stories about 2150 since coming to UVA. I tailored my schedule this semester so that I would have time to adequately prepare for this class and do all the labs. I think this was a good decision, because 2150 is a ton of work. I learned a great deal of information, and I think this course serves as a solid gateway into other CS topics (it sets up Comp Arch, Algo, and OS pretty nicely). I don't have much negatives to say, because I knew what to expect from this class and was able to manage my time effectively. Perhaps increasing the credit limit to 4 would be a good decision considering the vast amount of information that is covered. Bloomfield is an awesome professor, and certainly one of my favorites that I have had at UVA. I am taking his defense against the dark arts course next semester, and I hope that it is taught in a similar structure because it works for me.

none really

Very rigorous but learned a lot

Should probably be a skip test for this course, students can learn IBCM relatively quickly.

Fantastic course. I've learned more in this course than in any other one I've taken at UVA. Prof. Bloomfield is incredibly knowledgeable and excellent at effective lecturing.

The hardest class I've ever taken - may even have to retake it. Worked at least 15 hours a week and still might not make a C-. Maybe take it down a notch, but it was important information.

Really interesting class. Bloomfield was a really good lecturer. Felt like I learned a lot

I see the need for the labs and their complexity, but this was a pretty big load.

Bloomfield is the best professor I've had at UVA. I actually enjoyed going to lecture because I knew that he would make me a better CS major in 50 minutes. I also love how he puts his recordings online; I re-listened to almost all of them for studying. Side note: he also is very approachable and eager to get to know his students. The labs absolutely helped me learn more, but I easily spent more than 10 hours a week on the harder labs. This class dominated everything else going on in my life. Overall, most worthwhile CS class I've taken so far, by a landslide.

Both Professors were great in teaching this course so were the TAs

Easily my favorite class at UVA, almost every assignment was worth while and not busy work. Prof. Bloomfield is also very qualified. My biggest complaint is how hard it was to get in touch with professors. I waited several times for an hour for office hours but never got to speak to anyone. If you are going to set grading deadlines, make it much more easier to talk to a professor about the grade you received. 10 days is not enough, especially when Professors don't respond emails. This also applies to test grades which was extremely frustrating. First, the grading guidelines were very vague. Second, my TA's comments were even more vague. Third, there was a strict regrade policy, so I did not want to submit unless I was sure Fourth, it was nearly impossible to make sure I should submit a regrade within a 10 day window By themselves, these things are not a big deal. But I don't think it is are fair at all when all of them are occurring.

This class was definitely challenging in the amount of work and the difficulty of the work, but it wasn't busy work. Despite the difficulty of the course, I learned a lot about programming and received a lot of information that is highly relevant to what I may be in contact with in the future.

Although this course was difficult and very time consuming, I believe that I have improved greatly as a CS student and my confidence has grown.

TOO MUCH WORK!

I really liked this class the only negative thing I have to say about it is the amount of time it took to complete the labs. I feel like if I only had to take this class I'd do really good but the fact that I had other classes that were also very demanding it made it hard to do as good.

This was a really great course. I'm sad Bloomfield isn't teaching it again. I'd recommend his section to the people I know that are incoming CS 1st and 2nd years. It's okay though, I'm taking DADA with Bloomfield next semester, plus I've heard Floryan is good as well.

This was hard, but worth it. I can honestly say I didn't learn a thing in 1110 or 2110, but I feel confident in my coding abilities after taking 2150. There were a few random aspects of lab that confused me for their inclusion in this course, however. Mainly - why did we have to use Doxygen? It's briefly mentioned in a tutorial, but never really even plays a major part in the lab. Also, consider decreasing grades for late penalties instead of a hard cutoff of 0 after a day or two late, sometimes there are conflicts with other classes and trying the balance the two can become nearly impossible.

On a scale from margarine to peanut butter (margarine being a disgrace to spreads, and peanut butter being a gift from the gods), I'd say this class was somewhere around a garlic hummus. It's not like a honey pecan cream cheese (where you get an enjoyable, sweet flavor with almost no benefit), but it's still got a nice flavor, and you come out feeling like you did something good for yourself.

The regrading policy is ridiculous. I submitted valid regrades on my first exam and I even confirmed with a TA in person as well as classmates, yet the person who regraded my exam ended up taking off over 7% points from my exam, giving me a failing grade for that exam. Clearly this is not a time issue either since the grader spent time essentially making fun of me for submitting regrades "they had no control over" even though I had valid and detailed comments.

I think there can be improvements such as for IBCM and Assembly since it was very hard to understand at first. Also, after lab 6, the material was harder, so I hope there could be easements with it

Professor Bloomfield is one of the best I have had so far. Give him a promotion or some kind of award, he's extremely well deserving.

I definitely learned a lot from this course, however it did consume my semester in way that a 3 credit course should not. Pretty please with sugar on top make this class 4 credits.

Overall this was a great course with wonderful staff. I loved having Professor Bloomfield and seeing Professor Floryan in office hours, but I have some complaints in regards to grading and access to professors via email or support requests. At the beginning of the course they specifically ask that you send support requests not emails because these will be responded to faster. That is not the case in any way. They are both equally slow and essentially get you no where. To get something done in this course you have to go straight to the professors, especially since a lot of the problems TAs cannot help with. So if you have classes during both professor's office hours you are essentially hosed. Also if you have a problem that is fairly dire that you need help with on a Tuesday or Thursday you are probably not getting help until Wednesday or Friday unless you are incredibly lucky. This failure to respond to emails or support requests quickly makes it hard to schedule appointments with professors for help. They ask that drop ins be used in emergencies only but that seems to be the best way to contact them actually. Grading in this class is mostly handled by TA's and it sometimes can be described as arbitrary. There are several instances where I think that I should have gotten credit and did not, there is a tool to handle this called regrading but it is not very efficient and sometimes contradicts what other TA's and the professors have said in regards to getting you points back. This would not be so bad if there wasn't a penalty for trying to get regrades or if you could just do the regrades with professors without having to go through that channel. It would also be better if the tests and homeworks lined up more. The homeworks and tests do not line up well. The homeworks are very valuable in regards to teaching and reinforcing material but the tests seem kind of random and focus on very specific things we covered in lecture but never revisited or reinforced with homework. It would also be better if there were either more tests or some other grade such as quizzes that could either prepare us better for or take the weight off some of our tests. Even just making something like that optional, ungraded prep work and then releasing the grading guidelines to people that took them would be very helpful.

Amazing class, learned a ton. Some things were more difficult than others so if it's a point of concern for a lot of students, it might be worth trying to find a new way to do it. Overall, great professor and really useful information.

Yayyyy 2150

CS2150 required a lot of work, and it put me through a lot of stress this semester, but I would definitely say this was a course worth taking. I wish that lectures did include some discussion of topics or some more concrete examples, but it's only 50 minutes long, so I can understand how adding new things into it might be difficult. Overall, this was great! :D

Bloomfield has made 2150 into a really amazing course. It's the course required as a pre-req for all upper level CS courses for good reason. The difference in knowledge and ability between CS students that have taken and have not yet taken this class is enormous. Some people call this class a "weed out" class, but they don't know what they're talking about. Real weed out classes guarantee that a certain percentage of the class will not pass (or do well enough to take subsequent courses), but Bloomfield makes it more than possible for every student to be successful. Others blame this class for making people drop the CS major, but if you don't enjoy the content of this class, then you probably shouldn't be a CS major anyway because it's not like there will be less coding in your future... A note to anyone unsure about taking this course, you should take it!!! A ton of arrogant CS kids will complain about how it's hell and completely impossible, but they're just being dramatic and insecure about their own incompetency. The amount of thought Bloomfield has put into the labs, the quality of his lectures, the fairness of his grades, the numerous TA and professor office hours make it possible for anyone to do well if they put the time in. Also, don't be put off by Bloomfield acting like he enjoys making students miserable in lecture when he asks, "Who isn't talking to me anymore?" (because of the difficulty of labs and exams) because he really doesn't. If you go to his office hours, you'll see that he's actually a really nice guy who cares about his students and loves teaching (not that he's teaching it anymore...) tldr; great course.

Sometimes I feel that there were not enough TAs during lab to answer all the questions of all the students. Sometimes I would have to wait 30 minutes to an hour to get help

Great Class. Great Instructor.

There was a lot of busy work in this class, for example many of the post lab reports were about filling space and did not provide any benefit to students.

Look, Bloomfield is a great professor, the class is extremely organized and structured, it covers a lot of solid material, but it takes way too much of everyone's time. I feel like professors/administrators don't this is just 1 of 5 classes, in addition to extracurriculars and other somewhat important things like sleep and exercise. This class needs to take it down a notch on the amount of homework.

Great course

Very difficult class that requires a LOT of time outside of the classroom. With that being said, I have learned more in this course than any other class I have ever taken. Bloomfield and Floryan are both great teachers and are probably two of the best professors at UVA. If you put in the work for this class, you will be fine and will learn a LOT about computer science.

2150 killed me.

Aaron Bloomfield is a very good instructor. He made the subject understandable and was efficient in delivering the information. I learned A LOT in this course and it has definitely increased my love for computer science. It's definitely not an easy class, but it's not the hardest class either... I just think it's very time consuming and needs a lot of time commitment an effort, a lot more than what a 3 credit class should be honestly. But overall my favorite CS class so far!

This is a great class and I enjoyed it. That being said, thank god I'm done with it.

This has been a very rewarding and worthwhile course, and one of very few where I am walking away feeling like I learned A LOT. A lot of work, but worth it.



Great Instructor. I hope there is more clear instruction on labs (overthink the material). wish to have easier test.

Very challenging course but very interesting and important for future careers and courses

I put it in the other course evaluation

Before taking this course, I had heard from others that it is way too difficult. However, I found the class challenging but fair and I don't think there is any need to change how difficult it is. The hardest lab for me was lab two because I didn't have a strong knowledge of pointers and c++ in general, but after that everything made more sense and the rest of the labs were difficult but not overly difficult. I especially enjoyed IBCM. It was a great way to introduce the concept of machine language in a way that was easy to understand. Professor Bloomfield's lectures were some of the best I've had at UVA. They were always informative and interesting and he is clearly extremely knowledgeable and passionate about the material. This was the best class I have taken so far at UVA and I learned more than I have from any other course.

My favorite teachers are the ones who know what they are talking about and have a well structured schedule they stick to. This was one of those classes, likely a result of a decade of teaching the course. I definitely learned a lot in this class that I think will be important for my future career. I didn't feel like a real programmer until I got into using the console and Linux environment. I liked having access to all previous semesters' tests, although the usefulness of them is diminished by not knowing if you have the right answers. I didn't like the fact that doing well on the tests involves a bit of luck as only bits of specific things out of all the stuff we've learned shows up so you kind of have to hope you happened to recently brush up on the topics that showed up.

Great Class. Highly recommended for everyone. Bloomfield is one of the best teachers i've had.

2150 is my favorite course at Uva by far and A. Bloomfield is one of the best instructors I have had.

I learned so much in this course. It was a lot of work but the work was worth it. I wish postlabs would have been due on Friday at midnight instead of noon. I'm not sure why noon was chosen but it was a very inconvenient time.

Still aaaghghghuuuhhhhg

The class was amazing but too much work for the credit hours it's worth. It really needs to be 4 credits to accurately indicate the amount of work and learning involved. Overall, it's a great course though.

Honestly, this class took up an ungodly percentage of my time. The pre, in, and post labs were a weekly nightmare and I actually looked forward to exam weeks because I knew I wouldn't have lab that week. Sadly, I had to prioritize this class over all my others all the time and that led to a fall in my other class's grades. Yes, I learned a great deal in this course; yes, Aaron Bloomfield is incredible; yes, I will use this knowledge for the remainder of my schooling, but did that need to come at the expense of my sanity and time management? The class was greedy because the coordinators know they can make it so -- it's a pre-req for so many other courses, so they get to do whatever they want and people bend over backwards to get this work done. I wish they'd be a little more respectful of other people's commitments and then this course would be a 10/10 -- as it stands, I give it an 7.5/10

yo it was so hard haha

It was a good course but needs more time than what one would expect.

I really enjoyed having Bloomfield as a teacher. He was clear and enthusiastic and I will look for him to teach more classes in the future.

You're the best lecturer I've had (even better than Professor Lee Coppock, and he was amazing). I hope you continue to teach DOTDA or other upper level courses so I can sit in your class again.

Best CS class I have yet taken. The material was easily digested and TAs very helpful.

This is definitely a worthwhile course and it definitely confirms that CS is the major I want to pursue. I thought some of the labs were annoying with the lab write ups. I would much rather be programming than writing a 4 page lab report. Especially for the x86 assembly. I wish we programmed more in that rather than doing research questions for it. Overall, this is a worthwhile course with a lot of work involved. The tests are pretty hard and not much partial was given. I enjoyed doing the programming labs, but did not enjoy the tests.

This course gives a rigorous but fair amount of work that really teaches the subject material well

Great class, although at times it seemed to take way too much of our time and some things we'd do in lab were unnecessary in that they were things we'd never have to apply in the real world. However, great course and just wish Bloomfield/Flo had more OH

XD

Aaron Bloomfield is an excellent lecturer. The course was very well organized. I liked the row and column form of the lecture slides; it allowed me to have easy access to multiple different slides, one for each column. I liked how Professor Bloomfield would display an xkcd comic before class started. This provided incentive to try to get to class a little early in order to see the "comic of the day". I also really liked how lab 11 used Middle Earth place names.

This was a very difficult class in terms of workload but extremely worth it. I learned so much.

This has been said in course evaluations before, but I feel like I have learned more in this class than I have in any other class. It is one of the first classes where I am constantly finding ways to directly apply what I'm learning to the real world. Despite the amount of work required, this is easily my favorite class I'm taking this summer.

Phenomenal course.

This was a great course. It was a lot of work, but Professor Bloomfield lets students know this on the first day, so I was prepared. Only thing I would change would be to make it worth more credits.

This course was really tough but I think it was really rewarding. Some of the labs were obviously more challenging but finishing them and getting them to work was an amazing feeling!!!!!!! Office hours were good for the most part, although sometimes the wait was really long.. I'm not sure how practical this would be, but to streamline the office hours queue, it could be helpful to designate an area for people who have no idea where to start/are just getting started so that a TA can try to give a high-level explanation of how to go about the lab. That way, the TAs don't have to take a long time to explain how to do it several times to several different people. And people who are farther along with the assignment don't have to wait as long to get help.

Bloomfield was a great teacher and lecturer. Sometimes the labs expected too much self-learning and the graders did not give adequate feedback on the labs to let you know if you learned the new material correctly or not.

The main issue that I have with this class is that I feel like I haven't learned that much considering how much time I spent on assignments (and how much time was expected). While I feel like I learned some, I feel like a lot of time was wasted trying to decipher the wall of text of instructions for the assignment on the class page and completing these assignments. I wish Bloomfield could write assignment instructions more concisely given how much he is against wordiness on homeworks and exams. Furthermore, I feel like I could've better learned the concepts in my own time, and I'm disappointed about this given how much people praise this class. I was also very frustrated by regrades done for the class. I generally did well on the exams; however, I did have my exams regraded and got points back on both. One thing that frustrated me was I feel like one of the reasons why some things were misgraded is because the TAs are expected to grade them quickly. From my understanding, TAs grade all of the exams in one sitting as quickly as possible. While I appreciate the fact that they are trying to get the grades back to us quickly, I would rather have TAs take their time to grade and return the grades later, which I think could help reduce some of the obvious misgrades I had on my exams. I also did not like the fact that one of the TAs doodled on my exam when grading, when they could have better spent that time grading the page correctly. Furthermore, I had to argue more than I thought I had to to get some points back on my exams. I think Bloomfield prides himself on having the "hardest" CS class at UVA and is reluctant to give points back for the sake of maintaining consistency in grading and the integrity of his grading guidelines. However, I wish he would be more receptive to correcting misgrades when I lost answers that were obviously correct instead of arguing that "everyone was graded harshly". Overall, I feel like I'm leaving this class feeling like I missed out on something.

Many of the test questions were ambiguous and looked for specific things that were kind of a jump from what it actually asked. This was probably accounted for in the curves, but it'd be preferable just to have clearer questions the first time around. This isn't a major complaint at all though. I learned a huge amount from this course!

Just go ahead and euthanize me, it'd be more merciful after this semester.

I have a great deal of respect for Professor Bloomfield and Floryan. They really do want everyone to understand the material and as Professors they both put a tremendous amount of time into this class. I hope they both know that it does not go un-noticed or un-appreciated because I noticed and appreciated all they did for me. The reputation of this class is true to form, it was a very difficult class but extremely valuable because of all that we learn. I liked the lectures with the slides because I like having something to refer to. I didn't really use the recordings because I almost always came to class so I have no comment on that. Lab was good because I had fabulous TAs in my section. I also liked that we had that access to help in a smaller environment. The only feedback I would give is to have more TAs in office hours at a time because the queue got up to 40 people very often and you could really only be helped once or twice which sometimes gets you no where. Thank you for a great and challenging semester!

I feel like there could easily be a part 2 to this course, which would be super cool/ worthwhile.

I learned so much from this class and it made me realize how much I enjoy CS!

Great course, honestly very similar to a CS course I took in my high school, just in C++ which made it more difficult. BUT this class is super disrespectful of your time and coming from the college, it just became very frustrating to not have the flexibility a lot of professors give for my other classes. Also I just feel like we didn't really learn enough to adequately complete the labs ourselves. And some of the post-lab components seemed very random, unrelated, and busy-work-like. And in-labs never could be finished during lab which was frustrating.

Overall, I felt that I have learned a lot and have a great understanding of the material presented in class. I do not feel that the tests are good indicators of who understood the material well, but more of who could memorize the outlier information that did not follow the pattern better.

This course was probably the only one that I actually enjoyed this semester because although it was very time consuming, it was so well designed and I learned so much.

This class was hard. I did not enjoy it. I don't even know if I feel accomplished now that it's over. However, there is no denying that I've learned a lot, however painful it was, so I guess that's good. Thanks Bloomfield.



~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

Very important class to take for CS students. Although I do feel like we could be taught more of the technical material along with the conceptual material in class just to better help us with the labs. I also felt a little bit rushed at times as we immediately went from one topic to another. For example I suddenly felt like we went from Hashes to Assembly. It just felt a little bit rushed at times especially for the material being as important as they are but otherwise it was a very worthwhile course.

I have never put as much work into a class as I did for this class. It should definitely be worth more than 3 credits, but that's OK. I learned a ton and I feel well-prepared for any CS class in the future. I feel like the reason I was able to do well in this class was because I planned to take it this semester with fewer credits than usual and alongside of classes that aren't as difficult. If I was taking any other hard classes this semester, I would not be as happy with this course, and I definitely would NOT be doing as well. Overall, I learned more than I have in any other class, and Prof. Bloomfield is an absolute LEGEND.