

# CS 2150-108 Program & Data Representation - Fall 2016

ENGR (20122)

INSTRUCTORS: Bloomfield, Aaron S. (asb2t)

Respondents: 20 / Enrollment: 37

Summary: CS 2150-108 Program & Data Representation - Fall 2016 (20122)	
<b>Overall Course Rating</b> CS-2150-108 Mean 3.98 CS-2150-108 Std Dev 1.06 CS-2150-108 Response Count 100  SEAS, 2000-level courses Mean 4.04 SEAS, 2000-level courses Std Dev 1.01 SEAS, 2000-level courses Response Count 16316	<b>Overall Instructor Rating</b> INSTRUCTOR: Bloomfield, Aaron S. Mean 4.34 Std Dev 0.78 Response Count 140  SEAS, 2000-level courses Mean 4.26 SEAS, 2000-level courses Std Dev 0.88 SEAS, 2000-level courses Response Count 23269

~ QUESTIONS AND DETAILS ~ ~ ANSWER MATRICES ~

<p><b>1. The course addressed technically rigorous subject matter consistent with the course objectives.</b></p> <p style="text-align: center;">~ Question Type: Likert ~ <i>contributed by Dean of the School of Engineering and Applied Science</i></p>	<table border="1"> <thead> <tr> <th colspan="9">Results for CS-2150-108</th> </tr> <tr> <th>Total</th> <th>Mean</th> <th>Std Dev</th> <th>Strongly Agree (5)</th> <th>Agree (4)</th> <th>Neutral (3)</th> <th>Disagree (2)</th> <th>Strongly Disagree (1)</th> <th>Not Applicable (NA)</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>4.50</td> <td>0.51</td> <td>10 (50.00%)</td> <td>10 (50.00%)</td> <td>0 (0.00%)</td> <td>0 (0.00%)</td> <td>0 (0.00%)</td> <td>0 (0.00%)</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="9">Results for SEAS, 2000-level courses</th> </tr> <tr> <th>Total</th> <th>Mean</th> <th>Std Dev</th> <th>Strongly Agree (5)</th> <th>Agree (4)</th> <th>Neutral (3)</th> <th>Disagree (2)</th> <th>Strongly Disagree (1)</th> <th>Not Applicable (NA)</th> </tr> </thead> <tbody> <tr> <td>3263</td> <td>4.38</td> <td>0.72</td> <td>1578 (48.36%)</td> <td>1403 (43.00%)</td> <td>185 (5.67%)</td> <td>56 (1.72%)</td> <td>19 (0.58%)</td> <td>22 (0.67%)</td> </tr> </tbody> </table>	Results for CS-2150-108									Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	20	4.50	0.51	10 (50.00%)	10 (50.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	Results for SEAS, 2000-level courses									Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	3263	4.38	0.72	1578 (48.36%)	1403 (43.00%)	185 (5.67%)	56 (1.72%)	19 (0.58%)	22 (0.67%)
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<p><b>2. The instructor used methods other than/in addition to traditional lectures (for example, active learning, in-class problems, collaborative learning, in-class discussion) effectively in this course.</b></p> <p style="text-align: center;">~ Question Type: Likert ~ <i>contributed by Dean of the School of Engineering and Applied Science</i></p>	<table border="1"> <thead> <tr> <th colspan="9">Results for CS-2150-108, Bloomfield, Aaron S.</th> </tr> <tr> <th>Total</th> <th>Mean</th> <th>Std Dev</th> <th>Strongly Agree (5)</th> <th>Agree (4)</th> <th>Neutral (3)</th> <th>Disagree (2)</th> <th>Strongly Disagree (1)</th> <th>Not Applicable (NA)</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>4.53</td> <td>0.52</td> <td>8 (40.00%)</td> <td>7 (35.00%)</td> <td>0 (0.00%)</td> <td>0 (0.00%)</td> <td>0 (0.00%)</td> <td>5 (25.00%)</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th colspan="9">Results for SEAS, 2000-level courses</th> </tr> <tr> <th>Total</th> <th>Mean</th> <th>Std Dev</th> <th>Strongly Agree (5)</th> <th>Agree (4)</th> <th>Neutral (3)</th> <th>Disagree (2)</th> <th>Strongly Disagree (1)</th> <th>Not Applicable (NA)</th> </tr> </thead> <tbody> <tr> <td>3328</td> <td>4.08</td> <td>1.03</td> <td>1337 (40.17%)</td> <td>1229 (36.93%)</td> <td>373 (11.21%)</td> <td>184 (5.53%)</td> <td>108 (3.25%)</td> <td>97 (2.91%)</td> </tr> </tbody> </table>	Results for CS-2150-108, Bloomfield, Aaron S.									Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)	20	4.53	0.52	8 (40.00%)	7 (35.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	5 (25.00%)	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)	3328	4.08	1.03	1337 (40.17%)	1229 (36.93%)	373 (11.21%)	184 (5.53%)	108 (3.25%)	97 (2.91%)
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~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

**4. 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-2150-108								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	4.53	0.61	11 (55.00%)	7 (35.00%)	1 (5.00%)	0 (0.00%)	0 (0.00%)	1 (5.00%)

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)
3260	4.25	0.86	1394 (42.76%)	1239 (38.01%)	304 (9.33%)	112 (3.44%)	36 (1.10%)	175 (5.37%)

**5. 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-2150-108								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	3.17	1.27	2 (10.00%)	3 (15.00%)	3 (15.00%)	3 (15.00%)	1 (5.00%)	8 (40.00%)

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)
3264	3.52	1.13	567 (17.37%)	928 (28.43%)	689 (21.11%)	343 (10.51%)	156 (4.78%)	581 (17.80%)

**6. 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-2150-108, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	4.33	0.69	8 (40.00%)	8 (40.00%)	2 (10.00%)	0 (0.00%)	0 (0.00%)	2 (10.00%)

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)
3317	4.10	0.96	1307 (39.40%)	1315 (39.64%)	373 (11.25%)	206 (6.21%)	60 (1.81%)	56 (1.69%)

**7. 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-2150-108, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	4.62	0.50	10 (50.00%)	6 (30.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	4 (20.00%)

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)
3324	4.57	0.65	2044 (61.49%)	1025 (30.84%)	115 (3.46%)	32 (0.96%)	13 (0.39%)	95 (2.86%)

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

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-108, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	4.67	0.49	10 (50.00%)	5 (25.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	5 (25.00%)

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)
3325	4.41	0.76	1713 (51.52%)	1238 (37.23%)	194 (5.83%)	60 (1.80%)	27 (0.81%)	93 (2.80%)

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

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

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-108								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	3.84	0.83	4 (20.00%)	9 (45.00%)	5 (25.00%)	1 (5.00%)	0 (0.00%)	1 (5.00%)

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)
3262	3.81	1.09	813 (24.92%)	1066 (32.68%)	481 (14.75%)	254 (7.79%)	115 (3.53%)	533 (16.34%)

**10. The grading policy was fair.**

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-108, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	3.60	1.14	4 (20.00%)	8 (40.00%)	6 (30.00%)	0 (0.00%)	2 (10.00%)	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)
3326	4.10	0.91	1217 (36.59%)	1455 (43.75%)	385 (11.58%)	168 (5.05%)	54 (1.62%)	47 (1.41%)

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

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-108, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	4.44	0.63	8 (40.00%)	7 (35.00%)	1 (5.00%)	0 (0.00%)	0 (0.00%)	4 (20.00%)

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)
3328	4.34	0.82	1626 (48.86%)	1246 (37.44%)	227 (6.82%)	93 (2.79%)	37 (1.11%)	99 (2.97%)

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

Question Type: Likert

contributed by Dean of the School of Engineering and Applied Science

Results for CS-2150-108, Bloomfield, Aaron S.								
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Not Applicable (NA)
20	4.41	0.62	8 (40.00%)	8 (40.00%)	1 (5.00%)	0 (0.00%)	0 (0.00%)	3 (15.00%)

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)
3321	4.23	0.88	1437 (43.27%)	1293 (38.93%)	334 (10.06%)	99 (2.98%)	54 (1.63%)	104 (3.13%)

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

Question Type: Multiple Choice

contributed by Office of the Provost

Results for CS-2150-108					
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
20	1 (5.00%)	1 (5.00%)	3 (15.00%)	5 (25.00%)	10 (50.00%)

Results for SEAS, 2000-level courses					
Total	Less than 1 (NA)	1 - 3 (NA)	4 - 6 (NA)	7 - 9 (NA)	10 or more (NA)
3270	202 (6.18%)	850 (25.99%)	1360 (41.59%)	545 (16.67%)	313 (9.57%)

~ QUESTIONS AND DETAILS ~

~ ANSWER MATRICES ~

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

Question Type: Likert  
 ~  
 contributed by Office of the Provost

Results for CS-2150-108							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
20	4.60	0.50	12 (60.00%)	8 (40.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)

  

Results for SEAS, 2000-level courses							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
3257	4.22	0.89	1459 (44.80%)	1290 (39.61%)	320 (9.82%)	144 (4.42%)	44 (1.35%)

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

Question Type: Likert  
 ~  
 contributed by Office of the Provost

Results for CS-2150-108							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
20	4.50	0.61	11 (55.00%)	8 (40.00%)	1 (5.00%)	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)
3257	4.12	0.98	1391 (42.71%)	1201 (36.87%)	411 (12.62%)	177 (5.43%)	77 (2.36%)

**16. 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-2150-108, Bloomfield, Aaron S.							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
19	4.37	0.68	9 (47.37%)	8 (42.11%)	2 (10.53%)	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)
3314	4.33	0.72	1491 (44.99%)	1519 (45.84%)	238 (7.18%)	48 (1.45%)	18 (0.54%)

**17. 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-2150-108, Bloomfield, Aaron S.							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
20	4.20	0.70	7 (35.00%)	10 (50.00%)	3 (15.00%)	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)
3316	4.29	0.85	1609 (48.52%)	1221 (36.82%)	361 (10.89%)	89 (2.68%)	36 (1.09%)

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

Question Type: Likert  
 ~  
 contributed by Office of the Provost

Results for CS-2150-108, Bloomfield, Aaron S.							
Total	Mean	Std Dev	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
20	4.45	0.60	10 (50.00%)	9 (45.00%)	1 (5.00%)	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)
3324	4.17	0.98	1494 (44.95%)	1214 (36.52%)	388 (11.67%)	136 (4.09%)	92 (2.77%)

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

~  
Question Type: Short Answer

~  
contributed by Office of the Provost

Results for CS-2150-108	
Total	Individual Answers
11	See below for Individual Results

More time for lab please!

Honestly too much work expected out of the lab section -- This class took more time than any other class I've ever taken and I'm not sure the time commitment and sacrifice was worth it/justified.

Look at the other section.

Even though it was an extremely difficult class, I believed that I learned a great deal. However, this class did help me realize that I need to possibly rethink my major. This is not through any fault of the professor. In fact, the professor taught the material very well. I do wish, however, that more time was taken in class to go over some of the labs both before and after. I think that I sometimes went in clueless about how to do some of the things the labs required and then after the labs, still did not know how to do some of it.

I learned a lot

This lab section, taught exclusively by the teaching assistants, is very dependent on self-discipline. However having a personal time-slot to ask TAs questions about the course are very helpful. Some labs were questionable in presence, such as the two x86 labs (which should've been condensed into one), but overall the labs effectively taught me how to implement the concepts from the lecture.

This is the lab??? The evaluation questions above are organized poorly.

n/a

The grading policies in this course seemed to be actively trying to screw students over (frivolous regrade, inlab submissions needing to be from the inlab computer, unfair exam questions worth a tenth of the exam grade). Good professors and TAs but this course needs a grading overhaul.

(I wrote this same evaluation for the other course evaluation for this class): This class was required a lot of time and work. I found myself coding most of the week and not having much free time weekday evenings. Weeks without a lab left in me a weird feeling that I was forgetting to do something crucial. Many of the labs (especially the prelabs) were difficult and required an understanding of the material that (at times) I felt I did not have. This was due to the difficulty of implementing code as opposed to simply understanding concepts from class. This issue became less serious as the weeks went on. After a while the difficulty was solely based off the difficulty of the problems the lab asked to solve not based on a lack of understanding of the concepts. TA office hours had the potential to be very helpful but it was difficult to ask more than one question to a TA since they could not spend a long time on each individual and it was very unlikely to be visited again since the queues were so large. After a while, the labs seemed extremely difficult without help from a TA but the only guaranteed time to see a TA would be inlab but by then the prelab would be late. It also seemed unfair that the Huffman coding lab was over Thanksgiving break because the inlab (which I found to be most difficult and ended up submitting late) was done at home without TA office hours. I found x86 (the concept) difficult because the code written in the lecture slides was different from the code generated with the -S command which was different from the assembly code we wrote/source code (ex. vecsum.s). All these codes seemed to be completely different and I could not understand what was actually important to x86 and what wasn't or what was different about 64 bit from 32 bit (besides register names/size). The lab for x86 was difficult (lab reports) because the assembly code generated with the -S command was long and complicated. When this was done with optimization, the code was simpler and resembled code we wrote/source code (vecsum.s). Although I do understand the possible abuse, I still found the frivolous regrade policy scary and a turn-off to submitting regrades even when I genuinely felt as though I deserved points. Lab 1 talks about different ways to set up a Unix environment but I do not think it mentions SSH (or maybe I missed it or read over it). I did not learn about SSH till the first x86 inlab - when a TA told me about it - and it would have been really helpful if I knew about it because my first x86 prelab was having issues compiling (I was using a Mac). Despite my numerous complaints and seemingly endless frustration, I did learn a lot from this class, both concepts and actual, effective code. Although I spent two semesters in Java classes, after this class, I could probably write more code in C++ than Java.

Very difficult course but learned an exceptional amount from it.