# CS 2150-106 **Program & Data Representation** - Spring 2016

*ENGR (20175)*

INSTRUCTORS: **Bloomfield, Aaron S. (asb2t)**

Respondents: 33 / Enrollment: 45

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## Summary: CS 2150-106 Program & Data Representation - Spring 2016 (20175)

**Overall Course Rating**

CS-2150-106 Mean 4.25
CS-2150-106 Std Dev 1.10
CS-2150-106 Response Count 159

| Difference from Category Mean, Expressed in Category Standard Deviations | |
|---|---|
| | 0.20 |

SEAS, 2000-level courses Mean 4.05
SEAS, 2000-level courses Std Dev 1.00
SEAS, 2000-level courses Response Count 16344

**Overall Instructor Rating**

*INSTRUCTOR:* Bloomfield, Aaron S.
 Mean 4.62
 Std Dev 0.66
 Response Count 221

| Difference from Category Mean, Expressed in Category Standard Deviations | |
|---|---|
| | 0.42 |

SEAS, 2000-level courses Mean 4.24
SEAS, 2000-level courses Std Dev 0.89
SEAS, 2000-level courses Response Count 23150

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

### 1. 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-2150-106**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 32 | 4.72 | 0.52 | 24 (75.00%) | 7 (21.88%) | 1 (3.12%) | 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) |
|---|---|---|---|---|---|---|---|---|
| 3272 | 4.38 | 0.72 | 1590 (48.59%) | 1389 (42.45%) | 213 (6.51%) | 38 (1.16%) | 23 (0.70%) | 19 (0.58%) |

### 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.
~
Question Type: Likert
~
*contributed by Dean of the School of Engineering and Applied Science*

**Results for CS-2150-106, Bloomfield, Aaron S.**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 32 | 4.30 | 0.95 | 15 (46.88%) | 7 (21.88%) | 3 (9.38%) | 2 (6.25%) | 0 (0.00%) | 5 (15.62%) |

**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) |
|---|---|---|---|---|---|---|---|---|
| 3312 | 4.06 | 1.01 | 1289 (38.92%) | 1237 (37.35%) | 411 (12.41%) | 213 (6.43%) | 83 (2.51%) | 79 (2.39%) |

### 3. 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-2150-106**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 32 | 3.38 | 1.60 | 12 (37.50%) | 6 (18.75%) | 2 (6.25%) | 6 (18.75%) | 6 (18.75%) | 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) |
|---|---|---|---|---|---|---|---|---|
| 3267 | 4.09 | 1.00 | 1294 (39.61%) | 1392 (42.61%) | 265 (8.11%) | 204 (6.24%) | 104 (3.18%) | 8 (0.24%) |

| ~ 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-2150-106

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 32 | 4.71 | 0.53 | 23 (71.88%) | 7 (21.88%) | 1 (3.12%) | 0 (0.00%) | 0 (0.00%) | 1 (3.12%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3265 | 4.17 | 0.91 | 1286 (39.39%) | 1278 (39.14%) | 318 (9.74%) | 136 (4.17%) | 54 (1.65%) | 193 (5.91%) |

**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-2150-106

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 31 | 4.15 | 0.99 | 7 (22.58%) | 1 (3.23%) | 5 (16.13%) | 0 (0.00%) | 0 (0.00%) | 18 (58.06%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3268 | 3.55 | 1.15 | 487 (14.90%) | 718 (21.97%) | 548 (16.77%) | 245 (7.50%) | 138 (4.22%) | 1132 (34.64%) |

**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-2150-106, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 31 | 4.79 | 0.50 | 23 (74.19%) | 4 (12.90%) | 1 (3.23%) | 0 (0.00%) | 0 (0.00%) | 3 (9.68%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3310 | 4.03 | 1.01 | 1205 (36.40%) | 1358 (41.03%) | 379 (11.45%) | 231 (6.98%) | 89 (2.69%) | 48 (1.45%) |

**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-2150-106, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 32 | 4.81 | 0.48 | 23 (71.88%) | 3 (9.38%) | 1 (3.12%) | 0 (0.00%) | 0 (0.00%) | 5 (15.62%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3310 | 4.55 | 0.68 | 2032 (61.39%) | 1025 (30.97%) | 133 (4.02%) | 30 (0.91%) | 21 (0.63%) | 69 (2.08%) |

**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-2150-106, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 32 | 4.72 | 0.68 | 20 (62.50%) | 4 (12.50%) | 0 (0.00%) | 1 (3.12%) | 0 (0.00%) | 7 (21.88%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3305 | 4.35 | 0.83 | 1673 (50.62%) | 1190 (36.01%) | 257 (7.78%) | 84 (2.54%) | 41 (1.24%) | 60 (1.82%) |

| ~ 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-2150-106

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 32 | 4.26 | 0.86 | 15 (46.88%) | 10 (31.25%) | 5 (15.62%) | 1 (3.12%) | 0 (0.00%) | 1 (3.12%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3272 | 3.85 | 1.05 | 854 (26.10%) | 1198 (36.61%) | 490 (14.98%) | 235 (7.18%) | 104 (3.18%) | 391 (11.95%) |

**10. The grading policy was fair.**
~
Question Type: Likert
~
*contributed by Dean of the School of Engineering and Applied Science*

Results for CS-2150-106, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 31 | 4.29 | 0.66 | 11 (35.48%) | 14 (45.16%) | 3 (9.68%) | 0 (0.00%) | 0 (0.00%) | 3 (9.68%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3311 | 4.12 | 0.90 | 1224 (36.97%) | 1466 (44.28%) | 377 (11.39%) | 158 (4.77%) | 49 (1.48%) | 37 (1.12%) |

**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-2150-106, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 32 | 4.67 | 0.55 | 19 (59.38%) | 7 (21.88%) | 1 (3.12%) | 0 (0.00%) | 0 (0.00%) | 5 (15.62%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3303 | 4.36 | 0.78 | 1597 (48.35%) | 1328 (40.21%) | 199 (6.02%) | 75 (2.27%) | 29 (0.88%) | 75 (2.27%) |

**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-2150-106, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 31 | 4.77 | 0.51 | 21 (67.74%) | 4 (12.90%) | 1 (3.23%) | 0 (0.00%) | 0 (0.00%) | 5 (16.13%) |

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) |
|---|---|---|---|---|---|---|---|---|
| 3299 | 4.23 | 0.87 | 1417 (42.95%) | 1290 (39.10%) | 334 (10.12%) | 119 (3.61%) | 40 (1.21%) | 99 (3.00%) |

**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-2150-106

| Total | Less than 1 (NA) | 1 - 3 (NA) | 4 - 6 (NA) | 7 - 9 (NA) | 10 or more (NA) |
|---|---|---|---|---|---|
| 32 | 0 (0.00%) | 2 (6.25%) | 4 (12.50%) | 10 (31.25%) | 16 (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) |
|---|---|---|---|---|---|
| 3272 | 237 (7.24%) | 1150 (35.15%) | 1191 (36.40%) | 413 (12.62%) | 281 (8.59%) |

| ~ 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-2150-106**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 32 | 4.75 | 0.51 | 25 (78.12%) | 6 (18.75%) | 1 (3.12%) | 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) |
|---|---|---|---|---|---|---|---|
| 3261 | 4.19 | 0.89 | 1379 (42.29%) | 1349 (41.37%) | 352 (10.79%) | 134 (4.11%) | 47 (1.44%) |

**15. Overall, this was a worthwhile course.**
~
Question Type: Likert
~
*contributed by Office of the Provost*

**Results for  CS-2150-106**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 32 | 4.72 | 0.52 | 24 (75.00%) | 7 (21.88%) | 1 (3.12%) | 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 | 0.97 | 1341 (41.17%) | 1271 (39.02%) | 403 (12.37%) | 169 (5.19%) | 73 (2.24%) |

**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-2150-106, Bloomfield, Aaron S.**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 32 | 4.53 | 0.92 | 23 (71.88%) | 5 (15.62%) | 3 (9.38%) | 0 (0.00%) | 1 (3.12%) |

**Results for  SEAS, 2000-level courses**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 3300 | 4.29 | 0.78 | 1444 (43.76%) | 1504 (45.58%) | 248 (7.52%) | 73 (2.21%) | 31 (0.94%) |

**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-2150-106, Bloomfield, Aaron S.**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 32 | 4.44 | 0.88 | 21 (65.62%) | 5 (15.62%) | 5 (15.62%) | 1 (3.12%) | 0 (0.00%) |

**Results for  SEAS, 2000-level courses**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 3303 | 4.28 | 0.81 | 1512 (45.78%) | 1345 (40.72%) | 336 (10.17%) | 84 (2.54%) | 26 (0.79%) |

**18. Overall, the instructor was an effective teacher.**
~
Question Type: Likert
~
*contributed by Office of the Provost*

**Results for  CS-2150-106, Bloomfield, Aaron S.**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 31 | 4.52 | 0.93 | 22 (70.97%) | 5 (16.13%) | 3 (9.68%) | 0 (0.00%) | 1 (3.23%) |

**Results for  SEAS, 2000-level courses**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 3317 | 4.18 | 0.96 | 1481 (44.65%) | 1257 (37.90%) | 348 (10.49%) | 148 (4.46%) | 83 (2.50%) |

*The information in this document is private and confidential.  Please handle accordingly.*

| ~ QUESTIONS AND DETAILS ~ | ~ ANSWER MATRICES ~ |
|---|---|

**19. Please make any overall comments or observations about this course:**
~
Question Type: Short Answer
~
*contributed by Office of the Provost*

| Results for CS-2150-106 | |
|---|---|
| Total | Individual Answers |
| 16 | *See below for Individual Results* |

The downside to this course was how sad the labs made me feel, and they discouraged me from feeling like I have adequately learned the material because some of them didn't seem to be relevant to anything and were just unnecessarily hard.

learned a lot good course.

same comments as made in lecture evaluation

I addressed some points about the lab time in my course evaluation of the lecture, but I must say that some of the TAs were fabulous! Professor Bloomfield was never in lab so I feel that I don't have enough information to answer many of these questions, seeing as I was enrolled in Professor Floryan's lecture.

Great course with a great professor. I learned a lot of valuable material. I don't understand why this class is 3 credits when it should clearly be 4.

I'm curious how this evaluation is different from the other CS 2150 evaluation for Professor Floryan - or more accurately, what this one is for since I had Floryan and not Bloomfield as my professor.

Kinda early some days but that's what I get for doing the early lab

N/A

This needs to be made a 4 credit class. It is definitely worthwhile taking but the amount of time it requires is far more than most 3 credit classes.

n/a

This is my favorite course so far at UVA. The workload was greater than that of other classes but it was definitely worth the knowledge that I gained over the course of one semester. The only things I didn't like were that there were too many lab reports and also some seemingly outdated material like Objective C.

yeah

Hard work, but it pays off!

Class was hard as hell.

Should be a 4 credit class

This class took hours of my time outside of the classroom. I spent several nights without sleep so that I could work on a lab that I started the evening before, planning on it taking 6 hours and it taking 15. I would have code that would theoretically works, but because of one error had a seg fault, and because I was unable to figure out why, would receive a zero for 15 hours of work. This happened to me several times. I would love to see the partial credit portion of this class be revamped and more reasonable.