# CS 4240-1 **Principles of Software Design** - Fall 2009

*ENGR (34208)*

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

Respondents: 26 / Enrollment: 45

## Summary: CS 4240-1 Principles of Software Design - Fall 2009 (34208)

**Overall Course Rating**

CS-4240-1 Mean 3.86
CS-4240-1 Std Dev 1.03
CS-4240-1 Response Count 130

| Difference from Category Mean, Expressed in Category Standard Deviations | |
| --- | --- |
| | -0.14 |

SEAS, 4000-level courses Mean 3.98
SEAS, 4000-level courses Std Dev 0.93
SEAS, 4000-level courses Response Count 8790

**Overall Instructor Rating**

*INSTRUCTOR:* Bloomfield, Aaron S.
Mean 4.40
Std Dev 0.72
Response Count 180

| Difference from Category Mean, Expressed in Category Standard Deviations | |
| --- | --- |
| | 0.26 |

SEAS, 4000-level courses Mean 4.16
SEAS, 4000-level courses Std Dev 0.92
SEAS, 4000-level courses Response Count 14115

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

### 1. The subject matter was challenging.
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Question Type: Likert
~
*contributed by Dean of the School of Engineering and Applied Science*

Results for CS-4240-1

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 4.04 | 0.66 | 5 (19.23%) | 18 (69.23%) | 2 (7.69%) | 1 (3.85%) | 0 (0.00%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1761 | 4.02 | 0.83 | 488 (27.71%) | 896 (50.88%) | 255 (14.48%) | 77 (4.37%) | 17 (0.97%) | 28 (1.59%) |

### 2. The objectives of the course were clearly stated and accomplished.
~
Question Type: Likert
~
*contributed by Dean of the School of Engineering and Applied Science*

Results for CS-4240-1

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 4.15 | 0.88 | 9 (34.62%) | 14 (53.85%) | 2 (7.69%) | 0 (0.00%) | 1 (3.85%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1759 | 4.08 | 0.89 | 604 (34.34%) | 824 (46.84%) | 209 (11.88%) | 86 (4.89%) | 26 (1.48%) | 10 (0.57%) |

### 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-4240-1

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 3.88 | 1.03 | 7 (26.92%) | 13 (50.00%) | 3 (11.54%) | 2 (7.69%) | 1 (3.85%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1755 | 4.04 | 0.92 | 561 (31.97%) | 868 (49.46%) | 183 (10.43%) | 101 (5.75%) | 36 (2.05%) | 6 (0.34%) |

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

### 4. The homework assignments helped me learn the subject matter.
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Question Type: Likert
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*contributed by Dean of the School of Engineering and Applied Science*

**Results for CS-4240-1**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 26 | 3.81 | 1.13 | 8 (30.77%) | 10 (38.46%) | 4 (15.38%) | 3 (11.54%) | 1 (3.85%) | 0 (0.00%) |

**Results for SEAS, 4000-level courses**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 1756 | 4.02 | 0.94 | 523 (29.78%) | 700 (39.86%) | 222 (12.64%) | 84 (4.78%) | 35 (1.99%) | 192 (10.93%) |

### 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-4240-1**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 26 | 3.07 | 1.28 | 2 (7.69%) | 3 (11.54%) | 7 (26.92%) | 0 (0.00%) | 3 (11.54%) | 11 (42.31%) |

**Results for SEAS, 4000-level courses**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 1759 | 3.55 | 1.09 | 170 (9.66%) | 319 (18.14%) | 231 (13.13%) | 90 (5.12%) | 48 (2.73%) | 901 (51.22%) |

### 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-4240-1, Bloomfield, Aaron S.**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 26 | 4.35 | 0.56 | 10 (38.46%) | 15 (57.69%) | 1 (3.85%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Results for SEAS, 4000-level courses**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 2014 | 4.04 | 0.96 | 679 (33.71%) | 888 (44.09%) | 243 (12.07%) | 94 (4.67%) | 58 (2.88%) | 52 (2.58%) |

### 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-4240-1, Bloomfield, Aaron S.**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 26 | 4.73 | 0.45 | 19 (73.08%) | 7 (26.92%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Results for SEAS, 4000-level courses**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 2022 | 4.46 | 0.74 | 1121 (55.44%) | 684 (33.83%) | 110 (5.44%) | 34 (1.68%) | 13 (0.64%) | 60 (2.97%) |

### 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-4240-1, Bloomfield, Aaron S.**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 26 | 4.65 | 0.49 | 17 (65.38%) | 9 (34.62%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

**Results for SEAS, 4000-level courses**

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 2016 | 4.27 | 0.85 | 906 (44.94%) | 768 (38.10%) | 180 (8.93%) | 61 (3.03%) | 24 (1.19%) | 77 (3.82%) |

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

**9. The instructor (not Teaching Assistants) was accessible for individual assistance.**
~
Question Type: Likert
~
contributed by Dean of the School of Engineering and Applied Science

Results for CS-4240-1, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 26 | 4.24 | 0.83 | 11 (42.31%) | 10 (38.46%) | 3 (11.54%) | 1 (3.85%) | 0 (0.00%) | 1 (3.85%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 2016 | 4.14 | 0.94 | 772 (38.29%) | 735 (36.46%) | 238 (11.81%) | 72 (3.57%) | 44 (2.18%) | 155 (7.69%) |

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

Results for CS-4240-1, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 25 | 3.80 | 1.00 | 6 (24.00%) | 11 (44.00%) | 6 (24.00%) | 1 (4.00%) | 1 (4.00%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 2016 | 4.08 | 0.88 | 657 (32.59%) | 901 (44.69%) | 260 (12.90%) | 81 (4.02%) | 29 (1.44%) | 88 (4.37%) |

**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-4240-1, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 26 | 4.62 | 0.50 | 16 (61.54%) | 10 (38.46%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 2012 | 4.27 | 0.83 | 870 (43.24%) | 824 (40.95%) | 159 (7.90%) | 50 (2.49%) | 28 (1.39%) | 81 (4.03%) |

**12. As a teacher, this instructor was better than most others in this School.**
~
Question Type: Likert
~
contributed by Dean of the School of Engineering and Applied Science

Results for CS-4240-1, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 25 | 4.40 | 0.65 | 12 (48.00%) | 11 (44.00%) | 2 (8.00%) | 0 (0.00%) | 0 (0.00%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) | Not Applicable (NA) |
|---|---|---|---|---|---|---|---|---|
| 2019 | 3.86 | 1.08 | 658 (32.59%) | 660 (32.69%) | 414 (20.51%) | 141 (6.98%) | 76 (3.76%) | 70 (3.47%) |

**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-4240-1

| Total | Less than 1 (NA) | 1 - 3 (NA) | 4 - 6 (NA) | 7 - 9 (NA) | 10 or more (NA) |
|---|---|---|---|---|---|
| 26 | 0 (0.00%) | 2 (7.69%) | 11 (42.31%) | 9 (34.62%) | 4 (15.38%) |

Results for SEAS, 4000-level courses

| Total | Less than 1 (NA) | 1 - 3 (NA) | 4 - 6 (NA) | 7 - 9 (NA) | 10 or more (NA) |
|---|---|---|---|---|---|
| 1761 | 167 (9.48%) | 666 (37.82%) | 599 (34.01%) | 205 (11.64%) | 124 (7.04%) |

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| ~ 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-4240-1

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 26 | 3.96 | 0.87 | 6 (23.08%) | 15 (57.69%) | 4 (15.38%) | 0 (0.00%) | 1 (3.85%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 1752 | 4.02 | 0.96 | 602 (34.36%) | 750 (42.81%) | 261 (14.90%) | 103 (5.88%) | 36 (2.05%) |

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

Results for CS-4240-1

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 26 | 4.00 | 0.89 | 7 (26.92%) | 14 (53.85%) | 4 (15.38%) | 0 (0.00%) | 1 (3.85%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 1757 | 4.04 | 1.01 | 652 (37.11%) | 737 (41.95%) | 208 (11.84%) | 100 (5.69%) | 60 (3.41%) |

**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-4240-1, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 24 | 4.29 | 0.55 | 8 (33.33%) | 15 (62.50%) | 1 (4.17%) | 0 (0.00%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 2012 | 4.11 | 0.83 | 692 (34.39%) | 968 (48.11%) | 268 (13.32%) | 58 (2.88%) | 26 (1.29%) |

**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-4240-1, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 26 | 4.35 | 0.63 | 11 (42.31%) | 13 (50.00%) | 2 (7.69%) | 0 (0.00%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 2017 | 4.14 | 0.90 | 811 (40.21%) | 822 (40.75%) | 279 (13.83%) | 75 (3.72%) | 30 (1.49%) |

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

Results for CS-4240-1, Bloomfield, Aaron S.

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 26 | 4.23 | 0.71 | 9 (34.62%) | 15 (57.69%) | 1 (3.85%) | 1 (3.85%) | 0 (0.00%) |

Results for SEAS, 4000-level courses

| Total | Mean | Std Dev | Strongly Agree (5) | Agree (4) | Neutral (3) | Disagree (2) | Strongly Disagree (1) |
|---|---|---|---|---|---|---|---|
| 2018 | 4.08 | 0.96 | 760 (37.66%) | 851 (42.17%) | 258 (12.78%) | 99 (4.91%) | 50 (2.48%) |

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| ~ 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-4240-1 | |
|---|---|
| Total | Individual Answers |
| 13 | *See below for Individual Results* |

Lots to learn, and was challenging.  But was worthwhile, and professor was very accessible and did best with somewhat mundane course material in class.

I feel that some elements of the class were a bit superfluous (such as the readings), but overall I think this was a good course in software design.

Additional small HWs in addition to the project may be beneficial so that the project isnt such a daunting part of the final grade.

I liked the class but unfortunately the subject matter wasn't terribly interesting. The readings were also tedious and at times painful to get through. Despite this, I really enjoyed getting a chance to work on a group project and having free reign over what we could do. Seeing an idea my group had come to life is something I won't forget for a long time.

The lectures are not interesting.  The professor covered materials way too fast.  The grading is late.  I hate the documentation and design pattern part of the homework.

Mythical Man Month could be summarized in three slides without the junk. Grading was harsh on Test 1 and MMM quizzes (violated Amendment 8 of the Constitution).  Design Patterns could be useful in a very B/S industry environment to the details that we looked at in class, but I wouldn't go away with them entirely. Things like flyweight were really cool/useful concepts. More structured coding / project assignments would be better. Also required DP's on project were almost all b/s.  I would at least standardize what everyone worked on. Hopefully not Java/ C# though... python would probably be the best. I.e. PyGame + let people pick an existing project.

Best class taken at UVa. Felt very accomplished after completing the project. UML and MMM were a struggle but Bloomfield did a good job keeping them as interesting as possible.

I'm really glad I took this class

The class is very useful but not always spun that way during the learning of it.  Prject was so useful and a great learning experience but the tests and quizzes were pure memorization and graded too subjectivelly

Professor Bloomfield expects a lot, but we get a lot in return from taking a class by him.  Learned a lot, had a lot of fun, and did a lot of work.  Great class and great professor!

The course was well done but for the grades.  It took two months to get back an exam grade and HW took for ever to be graded.  This left me having no idea where I was in the course and not really able to know how to work, where to put in effort, what to improve upon for the future.

A lot of work, but that may be because of the project we chose to do.  MMM reading quizzes I felt were poor, I understand the relevance that MMM has in the computer world, but really at this point in time it's more of a "hey, look at the ideas this guy had way back when".  I'm pretty sure everyone understood every concept the book talked about before ever opening it up.  Basically because this class required so much work, as well as my other classes/job, I never felt like I had the time to get around to reading the chapters every week.  When they were discussed after the quiz, I knew ever concept that we went over, I just didn't know what was in each chapter.  So basically I did poorly on every MMM quiz yet I knew all the information in it by heart.  Overall, it was what I expected from a Bloomfield course: interesting, but a lot of work and fairly difficult tests.

I have taken 4 courses with Prof. Bloomfield. I understand that what we were supposed to learn was 23 design patterns. I know of them, have no idea how their useful in practical application. The homework was "make something cool." It had nothing to do with the tests, quizzes, or anything relavent to the tests in the other half of the class. Our project was impossible due to failure on one group member to contribute. I felt that I pushed most of the weight of the project while the other teammembers got all prepped for the exams, and that left me high and dry for the exams. I felt that this was a ridiculous course because the information was completely unuseful to the projects. I do not recommend this course to anyone. I believe Prof. Bloomfield is the best CS professor at UVA. His graphics class was amazing, this class was not. In this class he was able to teach this stuff to the best of his ability, but even that was not able to make up for the severe lack of information in this class. I'm sure he can come up with a better class than this. For the above reasons, and primarly to hopefully recover my GPA, I will not take another class with this professor to ensure that the catastrophe known as CS4240 will never happen again.

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