

MATH 2700 008
Linear Algebra and Vector Geometry
Course type: Face-to-Face

Evaluation Delivery: Online
Evaluation Form: A
Responses: 24/58 (41% moderate)

Taught by: Ignat Soroko
Instructor Evaluated: Ignat Soroko-Other

Overall Summative Rating represents the combined responses of students to the four global summative items and is presented to provide an overall index of the class's quality:

Median
4.9
(0=lowest; 5=highest)

Challenge and Engagement Index (CEI) combines student responses to several *IASystem* items relating to how academically challenging students found the course to be and how engaged they were:

CEI: 4.8
(1=lowest; 7=highest)

SUMMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median
The course as a whole was:	24	75%	17%	8%				4.8
The course content was:	24	79%	17%	4%				4.9
The instructor's contribution to the course was:	24	79%	17%	4%				4.9
The instructor's effectiveness in teaching the subject matter was:	24	79%	17%	4%				4.9

STUDENT ENGAGEMENT

	N	Much Higher (7)	(6)	(5)	Average (4)	(3)	(2)	Much Lower (1)	Median
Relative to other college courses you have taken:									
Do you expect your grade in this course to be:	24	38%	21%	17%	25%				5.9
The intellectual challenge presented was:	24	25%	21%	33%	21%				5.4
The amount of effort you put into this course was:	24	25%	21%	33%	21%				5.4
The amount of effort to succeed in this course was:	24	25%	12%	42%	21%				5.2
Your involvement in course (doing assignments, attending classes, etc.) was:	24	33%	29%	25%	12%				5.9

On average, how many hours per week have you spent on this course, including attending classes, doing readings, reviewing notes, writing papers and any other course related work?

Class median: 5.0 Hours per credit: 1.7 (N=24)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
	12%	50%	17%	17%	4%						

From the total average hours above, how many do you consider were valuable in advancing your education?

Class median: 5.2 Hours per credit: 1.7 (N=24)

Under 2	2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-17	18-19	20-21	22 or more
	25%	29%	38%	8%							

What grade do you expect in this course?

Class median: 3.7 (N=24)

A (3.9-4.0)	A- (3.5-3.8)	B+ (3.2-3.4)	B (2.9-3.1)	B- (2.5-2.8)	C+ (2.2-2.4)	C (1.9-2.1)	C- (1.5-1.8)	D+ (1.2-1.4)	D (0.9-1.1)	D- (0.7-0.8)	E (0.0)	Pass	Credit	No Credit
42%	38%	8%	12%											

In regard to your academic program, is this course best described as:

(N=23)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
39%	22%		17%	22%	

STANDARD FORMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median
Course organization was:	24	71%	25%	4%				4.8
Clarity of instructor's voice was:	24	58%	25%	17%				4.6
Explanations by instructor were:	24	62%	29%	8%				4.7
Instructor's ability to present alternative explanations when needed was:	24	67%	25%	8%				4.8
Instructor's use of examples and illustrations was:	24	67%	29%	4%				4.8
Quality of questions or problems raised by the instructor was:	24	71%	25%	4%				4.8
Student confidence in instructor's knowledge was:	24	71%	21%	8%				4.8
Instructor's enthusiasm was:	24	83%	12%	4%				4.9
Encouragement given students to express themselves was:	24	75%	17%	8%				4.8
Answers to student questions were:	24	67%	25%	8%				4.8
Availability of extra help when needed was:	24	71%	17%	12%				4.8
Use of class time was:	24	71%	21%	8%				4.8
Instructor's interest in whether students learned was:	24	67%	25%	8%				4.8
Amount you learned in the course was:	24	67%	29%	4%				4.8
Relevance and usefulness of course content were:	24	58%	29%	12%				4.6
Evaluative and grading techniques (tests, papers, projects, etc.) were:	24	67%	25%	8%				4.8
Reasonableness of assigned work was:	24	75%	8%	17%				4.8
Clarity of student responsibilities and requirements was:	24	79%	17%	4%				4.9

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STANDARD OPEN-ENDED QUESTIONS

Was this class intellectually stimulating? Did it stretch your thinking? Why or why not?

1. This was a new type of math for me, I definitely think about numbers differently after taking this class, and if offered I would like to take more math classes, but I probably won't take any outside my major
2. Yes, this class taught me a new aspect of mathematics that I had never covered before. The class was generally interesting and doing the math was fun, especially when you know what you are doing because the teacher has explained well.
3. Yeah
4. yes
5. Yes. Had to learn the concepts in deep.
6. Nothing
7. Yes this class was intellectually stimulating because it of the complex use of vectors and matrices.
8. no.
9. Yes, there were lots of practice examples.
10. Yes, this class was intellectually stimulating.
11. Yes this class is fantastic for comp sci majors trying to understand matrices and interconnected graphs.
12. Yes
13. I genuinely enjoyed being in Dr. Soroko's class. His teaching style is very engaging and adequately teaches the concepts.
14. yes and yes because there were a lot of concepts that essentially boiled down to the basics taught in the first week or so.
15. Yes! Because this class is the high level calculus where we were introduced to matrix and how to apply them in different cases.
16. Yes. It covered new topics that really peaked my interest in math and made me want to learn and listen.
17. Yes.

What aspects of this class contributed most to your learning?

1. The teacher was very effective at teaching course material, he was also very nice
2. The homework assignments and related quizzes. Additionally, the in-class lectures that basically covered everything you need to know.
3. Problem Solving
4. the lectures and the homeworks
5. Lectures and assignments
6. Nothing
7. The aspects of this class that contributed the most to my learning was the lectures. The lectures were very good and the professor was the best professor I have had in UNT.
8. understanding vocabulary for existing concepts
9. Doing examples in class.
10. The lectures and the homework.
11. The matrix math contributed the most.
12. The weekly lectures were nice and I learned a lot
13. The weekly quizzes, which were a great way to evaluate if I was properly learning the concepts.
14. the professor and the homework
15. The Homework tool (MyLab) and Pearson Textbook
16. The examples that the professor used probably helped me the most due to the fact that it gave me the best understanding of what we were supposed to be doing with the knowledge that he explained.
17. All

What aspects of this class detracted from your learning?

1. I can't think of anything specific that detracted from my learning, maybe just that the class is somewhat obscure so finding answers to questions online outside of classtime could be a bit challenging.

2. 1 hour and 20 minutes of math may be a lot, so it felt like a lot of information all at once that I had to review after, but that is okay.
3. Nothing
5. Nothing
6. Nothing
7. There were no aspects of this class that detracted from my learning.
8. nothing
9. Only the fact that it was an evening class.
10. none.
11. Nothing.
12. Nothing
13. None of it
14. nothing
15. None
16. There were no aspects that detracted me from learning in this class.
17. None

What suggestions do you have for improving the class?

1. Maybe offer more for test reviews, I felt prepared for each test, but I would have liked to have had more practice before taking them.
2. The class is really lecture heavy, so maybe going a little slower or doing more "do it on your own" examples in class. Dr. Soroko does these occasionally and I think incorporating them more would be nice to make sure the students are understanding as we go.
3. Nothing
5. Can tell to learn more from the ebook
6. Nothing
7. Some suggestions that I have for improving the class is the the notes be posted online on canvas which could help with people who miss one class.
8. nothing.
9. This class was great.
10. none.
11. The only suggestion I have is that it be taken either before or after CSCE 2100, the math is similar so it gets quite confusing.
12. I have no suggestions, Dr. Soroko is an amazing professor he is very good at doing his job.
13. Nothing, keep it exactly the way it is
14. stay funny
15. None
16. None! This was a really great class and the professor did a really good job at making sure we knew what we were doing and that we knew everything that we needed to know.
17. None

IASystem Course Summary Reports summarize student ratings of a particular course or combination of courses. They provide a rich perspective on student views by reporting responses in three ways: as frequency distributions, average ratings, and either comparative or adjusted ratings. Remember in interpreting results that it is important to keep in mind the number of students who evaluated the course relative to the total course enrollment as shown on the upper right-hand corner of the report.

Frequency distributions. The percentage of students who selected each response choice is displayed for each item. Percentages are based on the number of students who answered the respective item rather than the number of students who evaluated the course because individual item response is optional.

Median ratings. IASystem reports average ratings in the form of item medians. Although means are a more familiar type of average than medians, they are less accurate in summarizing student ratings. This is because ratings distributions tend to be strongly skewed. That is, most of the ratings are at the high end of the scale and trail off to the low end.

The median indicates the point on the rating scale at which half of the students selected higher ratings, and half selected lower. Medians are computed to one decimal place by interpolation.¹ In general, higher medians reflect more favorable ratings. To interpret median ratings, compare the value of each median to the respective response scale: *Very Poor, Poor, Fair, Good, Very Good, Excellent (0-5); Never/None/Much Lower, About Half/Average, Always/Great/Much Higher (1-7); Slight, Moderate, Considerable, Extensive (1-4)*.

Comparative ratings. IASystem provides a normative comparison for each item by reporting the decile rank of the item median. Decile ranks compare the median rating of a particular item to ratings of the same item over the previous two academic years in all classes at the institution and within the college, school, or division. Decile ranks are shown only for items with sufficient normative data.

Decile ranks range from 0 (lowest) to 9 (highest). For all items, higher medians yield higher decile ranks. The 0 decile rank indicates an item median in the lowest 10% of all scores. A decile rank of 1 indicates a median above the bottom 10% and below the top 80%. A decile rank of 9 indicates a median in the top 10% of all scores. Because average ratings tend to be high, a rating of "good" or "average" may have a low decile rank.

Adjusted ratings. Research has shown that student ratings may be somewhat influenced by factors such as class size, expected grade, and reason for enrollment. To correct for this, IASystem reports **adjusted medians** for summative items (items #1-4 and their combined global rating) based on regression analyses of ratings over the previous two academic years in all classes at the respective institution. If large classes at the institution tend to be rated lower than small classes, for example, the adjusted medians for large classes will be slightly higher than their unadjusted medians.

When adjusted ratings are displayed for summative items, **relative rank** is displayed for the more specific (formative) items. Rankings serve as a guide in directing instructional improvement efforts. The top ranked items (1, 2, 3, etc.) represent areas that are going well from a student perspective; whereas the bottom ranked items (18, 17, 16, etc.) represent areas in which the instructor may want to make changes. Relative ranks are computed by first standardizing each item (subtracting the overall institutional average from the item rating for the particular course, then dividing by the standard deviation of the ratings across all courses) and then ranking those standardized scores.

Challenge and Engagement Index (CEI). Several IASystem items ask students how academically challenging they found the course to be. IASystem calculates the average of these items and reports them as a single index. *The Challenge and Engagement Index (CEI)* correlates only modestly with the global rating (median of items 1-4).

Optional Items. Student responses to instructor-supplied items are summarized at the end of the evaluation report. Median responses should be interpreted in light of the specific item text and response scale used (response values 1-6 on paper evaluation forms).

¹ For the specific method, see, for example, Guilford, J.P. (1965). *Fundamental statistics in psychology and education*. New York: McGraw-Hill Book Company, pp. 49-53.