

# MATH 2700 8 Linear Algebra and Vector Geometry Course type: Face-to-Face

Evaluation Delivery: Online Evaluation Form: B

Responses: 14/33 (42% 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:

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:

Median 4.7 (0=lowest; 5=highest)

**CEI: 5.7** (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:	14	64%	14%		7%	14%		4.7
The course content was:	14	50%	21%	7%	7%	14%		4.5
The instructor's contribution to the course was:	14	64%	7%		7%	21%		4.7
The instructor's effectiveness in teaching the subject matter was:	14	57%	14%		7%	14%	7%	4.6

## STUDENT ENGAGEMENT

										Much Higher			Avera	e		Much Lower	
Relative	to other c	ollege co	ourses you	have take	en:			I	N	(7)	(6)	(5)	(4)	(3)	(2)	(1)	Median
Do you e>	kpect your	grade in	this course	to be:				1	14	29%	29%	21%	21%				5.8
The intellectual challenge presented was:							1	14	57%	21%	21%					6.6	
The amount of effort you put into this course was:							1	14	36%	21%	29%	7%		7%		5.8	
The amount of effort to succeed in this course was:						1	14	43%	29%	14%		7%	7%		6.2		
Your invo	lvement in	course (	doing assig	nments, at	tending cla	asses, etc.)	was:	1	14	43%	21%	7%	29%				6.2
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?												(N=13)					
Under 2	<b>2-3</b> 8%	, ,	<b>4-5</b> 46%	<b>6-7</b> 31%	8-9	10-11		12-13 8%		14-15 8%	10	6-17	18	-19	20-21	22	or more
From the total average hours above, how many do you consider were valuable in advancing your education?												(N=13)					
Under 2	<b>2-3</b> 15%	, o '	<b>4-5</b> 46%	<b>6-7</b> 23%	8-9	10-11		12-13 8%		14-15 8%	1	6-17	18	-19	20-21	22	or more
What grad	What grade do you expect in this course? Class median: 3.7 (N=13)																
<b>A</b> ( <b>3.9-4.0</b> ) 46%	<b>A-</b> (3.5-3.8) 23%	B+ (3.2-3.4)	B (2.9-3.1)	в- (2.5-2.8) 15%	C+ (2.2-2.4) 8%	C (1.9-2.1) 8%	C- (1.5-1.8)	D+ (1.2-1.4	4)	D (0.9-1.1	D ) (0.7	- •0.8)	E (0.0)	Pas	ss C	redit	No Credit
In regard to your academic program, is this course best described as: (N											(N=13)						
A core/distributionIn your majorrequirement62%15%		An elective			In your minor 8%			A program requirement 15%					Other				



## STANDARD FORMATIVE ITEMS

	Excellent	Very Good	Good	Fair	Poor	Very Poor	
Ν	(5)	(4)	(3)	(2)	(1)	(0)	Median
Course organization was: 14	50%	29%	7%	14%			4.5
Sequential presentation of concepts was: 14	50%	29%		14%	7%		4.5
Explanations by instructor were: 14	36%	36%	7%		14%	7%	4.1
Instructor's ability to present alternative explanations when needed was: 14	43%	21%	7%	14%	7%	7%	4.2
Instructor's use of examples and illustrations was: 14	57%	14%	7%		21%		4.6
Instructor's enhancement of student interest in the material was: 14	43%	36%		7%	14%		4.3
Student confidence in instructor's knowledge was: 14	64%	14%	7%	7%	7%		4.7
Instructor's enthusiasm was: 14	50%	29%	7%	7%	7%		4.5
Clarity of course objectives was: 14	57%	14%	7%	7%	14%		4.6
Interest level of class sessions was: 14	57%	14%			14%	14%	4.6
Availability of extra help when needed was: 14	57%	7%	14%	7%	14%		4.6
Use of class time was: 14	57%	14%		21%	7%		4.6
Instructor's interest in whether students learned was: 14	57%	21%			21%		4.6
Amount you learned in the course was: 14	50%	21%	7%		21%		4.5
Relevance and usefulness of course content were: 14	64%	21%		7%	7%		4.7
Evaluative and grading techniques (tests, papers, projects, etc.) were: 14	57%	14%		14%	7%	7%	4.6
Reasonableness of assigned work was: 14	57%	14%	14%	7%	7%		4.6
Clarity of student responsibilities and requirements was: 14	57%	29%		7%	7%		4.6



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# STANDARD OPEN-ENDED QUESTIONS

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

1. Yes and yes. Linear algebra is a very interesting subject; the thinking or abstracting one does when learning the concepts is distinct from the kind of mental activity associated with ordinary algebra or calculus. The mathematical tools are easy to learn to use, but I think many people struggle with the subject conceptually.

2. This class stretched my thinking but was not intellectually stimulating. The professor read straight from the textbook and homework was not relevant to how the exams were set up.

3. The material was very stimulating, i wish i would of taken this course before some of my chemistry or differential equation courses since it would of made it much easier to understand.

4. Yes, the professor is a great teacher and really helped me think about the solutions.

5. It is stimulating. I feel like I can apply knowledge from previous courses into this one, and at the same time learn a lot of new things, so it does stretch my thinking.

6. Yes it was stimulating by increased class engagement and being such a nice and swell guy.

7. Yes, very.

8. The class was harder than it needed to be, because professor Soroko is not a very good instructor.

#### What aspects of this class contributed most to your learning?

1. The simple class structure and the instructor's openness to student inquiry. I very much appreciate the instructor's teaching style. I would guess that only about 30-40% of students enrolled in the course attended lecture consistently, so it felt like a small class. I think I learn best when questions/teaching/discussion occur in smaller (10-12 people) groups.

2. Practice problems on MyMath Lab

3. The professor was great in his explanations, notes and lectures. The test directly related to what he taught in class and the class was very enjoyable to attend.

4. The professor engagement

5. The professor's organization of the course content and homework assignment. The class notes are also posted and help is available when I need it. I'm grateful for that.

6. Class engagement, teachers notes online

7. The analytical thinking

#### What aspects of this class detracted from your learning?

2. The professor presented material straight from the textbook. None of the examples were of his own nor were they relevant to how his exams were set up. Overall, the material presented was not stimulating and the professor did not try to make sure students were learning either.

3. The class before us would move the tables in an odd pattern, we had to reorganize them so it would take time from lecture that we were eager to start since professor Soroko was great.

4. personal issues

5. I think the temperature in the class is a bit low. I shiver at times and it is distracting.

6. None

7. Nothing

#### What suggestions do you have for improving the class?

1. I think more computer-generated graphical examples could go a long way with helping students meaningfully understand the concepts taught in linear algebra.

2. The professor be more involved when teaching the material by making it more interesting. A math class should not focus on writing definitions or theorems as much as this one did. I spent more time writing out each definition or theorem than being taught how to solve the problem.

3. Continue to be great.

4. I think if the gap between the material and visually seeing it in my mind can be closed, then the course would be better. Some concepts are hard to imagine.

5. Not at all. This is my most rewarding class this semester, and shout out to my professor for being the among the most wonderful I know. I appreciate all I learn and all your help. I truly believe you have done all you could for my success in the class. I know I haven't been present recently due to a personal issue, but if I have the chance to, I will take you for Math again. Thank you so much, Mr. Soroko.

6. None

7. It is perfect



*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.<sup>1</sup> 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).

<sup>&</sup>lt;sup>1</sup> 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.