ECON 487 A
Data Science For Strategic Pricing
Course type: Face-to-Face

Evaluation Delivery: Online
Evaluation Form: B
Responses: 37/53 (70% high)

Taught by: Jacob S Lariviere, Lukas Hager
Instructor Evaluated: Lukas Hager-Grad TA

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:

Combined Median	Adjusted Combined Median
4.8	4.8

(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: 5.6
(1=lowest; 7=highest)

SUMMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	Adjusted Median
The course as a whole was:	37	70%	19%	11%				4.8	4.8
The course content was:	37	68%	27%	5%				4.8	4.7
The instructor's contribution to the course was:	37	78%	16%	5%				4.9	4.9
The instructor's effectiveness in teaching the subject matter was:	37	70%	24%	5%				4.8	4.8

STUDENT ENGAGEMENT

Relative to other college courses you have taken:	N	Much Higher (7)	(6)	(5)	Average (4)	(3)	(2)	Much Lower (1)	Median
Do you expect your grade in this course to be:	35	11%	26%	23%	31%	3%	6%		4.9
The intellectual challenge presented was:	35	40%	37%	9%	11%	3%			6.2
The amount of effort you put into this course was:	35	43%	20%	14%	20%			3%	6.1
The amount of effort to succeed in this course was:	35	34%	29%	20%	14%	3%			6.0
Your involvement in course (doing assignments, attending classes, etc.) was:	35	37%	26%	26%	9%		3%		6.0

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: 10.3 Hours per credit: 2.1 (N=35)

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
	3%	9%	14%	17%	17%	11%	14%	11%	3%		

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

Class median: 8.3 Hours per credit: 1.7 (N=35)

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
	6%	17%	20%	17%	11%	14%	11%				3%

What grade do you expect in this course?

Class median: 3.6 (N=34)

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)	F (0.0)	Pass	Credit	No Credit
9%	59%	18%	3%	3%	6%								3%	

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

(N=34)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
74%	3%	15%			9%

STANDARD FORMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	Relative Rank
Course organization was:	35	69%	14%	14%	3%			4.8	6
Sequential presentation of concepts was:	35	63%	29%	9%				4.7	8
Explanations by instructor were:	35	69%	26%	6%				4.8	10
Instructor's ability to present alternative explanations when needed was:	35	66%	26%	9%				4.7	15
Instructor's use of examples and illustrations was:	35	71%	20%	9%				4.8	11
Instructor's enhancement of student interest in the material was:	35	80%	14%	6%				4.9	1
Student confidence in instructor's knowledge was:	35	83%	11%	6%				4.9	14
Instructor's enthusiasm was:	35	80%	17%	3%				4.9	16
Clarity of course objectives was:	35	80%	14%	6%				4.9	2
Interest level of class sessions was:	35	69%	20%	11%				4.8	3
Availability of extra help when needed was:	35	63%	23%	9%	6%			4.7	18
Use of class time was:	35	71%	20%	6%	3%			4.8	7
Instructor's interest in whether students learned was:	35	69%	29%	3%				4.8	17
Amount you learned in the course was:	35	71%	11%	17%				4.8	4
Relevance and usefulness of course content were:	35	80%	14%	6%				4.9	5
Evaluative and grading techniques (tests, papers, projects, etc.) were:	35	69%	14%	14%	3%			4.8	9
Reasonableness of assigned work was:	35	69%	11%	17%	3%			4.8	12
Clarity of student responsibilities and requirements was:	35	69%	17%	14%				4.8	13

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STANDARD OPEN-ENDED QUESTIONS

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

1. Yes. Definitely had my head spinning from time to time.

3. Yes. Double ML is hard.

4. Yes. Both the work of the professor and TA are excellent and challenging.

5. Could be better if more examples were provided when doing homework.

6. Yes.

9. Yes

10. yes

11. Yes this class was very interesting and presented new ways of looking at data sets. Challenging us to find the story, the why something is happening and being able to communicate that effectively.

12. Quite a stretch and stimulation. I've never taken ECON class before and so I've realized the importance of basic knowledge.

13. Yes.

14. Yes, I learn so much interesting way to play with codes.

15. I think this class is particularly valuable because it is one of the few classes in the Econ department that actually teaches practical knowledge

16. Lukas did a good job in explaining everything.

17. Yes, it presented subjects that were stimulating to the mind and enhanced my Economics knowledge, as well as programming, statistical and statistical skills.

18. Yes, it did a great job making these topics feel less out of touch and the practicality of the content was great.

19. Researching a lot of things on my own, and having a midterm helped me to better learn material

21. Yes it was very useful knowledge, one of the best classes I have taken

What aspects of this class contributed most to your learning?

1. CONTENT! I like to learn about new ways we can solve problems around us with data. I loved learning about RandomForest and XGBoost, Double ML.

3. The coding assignments

4. Real life example used and coding

5. Resume and DS techniques.

6. combining econ theory with ML concepts

8. Lukas was really really helpful and gave us a lof of chances to reach out.

9. homework solution

10. r

11. I think that grinding out the homeworks helped me to learn the coding aspect of the course, and the lectures helped with economic theory.

12. Class learning and self-learning

13. Hearing the homework answers from 2 perspectives

14. All aspects

15. Homework sometimes can be tough but they are also very good learning opportunities. I will say I learned most of the course content through coding homework.

16. Lukas's explanation is more clearer than the professor.

17. The homework assignments were great at getting the main subjects of the course across to its students.

18. I think that Lukas' avaliability for extra help on homeworks and homework review were the most helpful

19. Midterm prep sheet helped me to better learn different concepts

21. Lukas' contributions to teaching code

What aspects of this class detracted from your learning?

1. I didn't love the professor going over homeworks it was pretty obvious that it wasn't really a prepared part of it all and just kind of a filler.

3. The coding can be too hard to deal with for people who don't have a lot of experiences on coding.

4. no

5. A lot to process as someone new to programming and data science.

6. not enough focus on teaching the codes. I feel like I learned a lot, but at the same time, not enough practice to make me confident to say I really know those.

8. If I have to say it, the only thing I can think of is that having classes once a week sometimes got me to forget things. And the connection between lectures is weaker, but that is not a problem, since we have different materials each week.

9. Ambiguous of homework problem

10. too many abstract theories

11. There were times where I could not do some of the homework's and was completely lost and then the rest of the homework relied on the previous part.

12. Lack of knowledge.

13. N/A

14. None

16. nah.

17. The long class time is a bit too much for me and how I learn.

18. I felt that the low frequency of class time throughout the was difficult and also the homework lecture would sometimes feel disconnected

19. Having too much coding excersizes

21. NA

What suggestions do you have for improving the class?

1. I know this would be a lot for TAs to take on, but maybe having quiz section where people could go and learn how to really code things, because otherwise I spend hours just googling how to mutate() or how to use randomForest. I really liked the theory of it all, but I could have used a quiz section to go into the nitty-gritty of it.

2. If we could talk about more coding in class would be helpful. More office hours are helpful too.

3. in-time upload of files

4. no

5. More code examples and hints. More useful resources like what function we may need.

6. focus on teaching the actual codes more and less theory.

7. Sometimes I got stuck in the he assignments because I genuinely do not know how to do them

9. More guidance and demonstration of the coding part for students who have less coding experience. Lecture recording: more flexible and good to review!

10. more data sets, More examples of using the data

11. This course was very good. One suggestion could be to have some more hints for the homework but encourage people to try them without the hints first.

13. Since the course is once a week, maybe have the TA host a quiz section on a different day where they teach R skills. (DPLYR GGPLOT etc.)

14. None

15. The class is a bit too long as it only meets once every week and every session is 4 hours. sometimes It's hard for me to focus in the second half of the lecture. Would be better if there can be 2 meetings or more every week so that each lecture is shorter.

16. nah. Lukas is willing to help students.

17. Shorter class time, more classes.

18. I think that continuing with office hours and review sessions willl be the most helpful

19. Half coding and half theory

20. The instructor was really good. Maybe I would have been helpful to have virtual office hours, so that we could ask questions even if we could not come to in person office hours.

21. More code explanations before assigning homework

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.