CSS 430 A
Operating Systems
Course type: Face-to-Face

Evaluation Delivery: Online
Evaluation Form: A
Responses: 44/44 (100% very high)

Taught by: Yusuf Pisan
Instructor Evaluated: Yusuf Pisan-T Prof

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	College Decile
3.7	**2**
(0=lowest; 5=highest)	(0=lowest; 9=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: 5.7
(1=lowest; 7=highest)

SUMMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	DECILE RANK Inst	DECILE RANK College
The course as a whole was:	44	25%	34%	34%	2%	5%		3.8	2	3
The course content was:	44	25%	34%	32%	5%	5%		3.8	2	3
The instructor's contribution to the course was:	43	26%	30%	30%	14%			3.7	1	2
The instructor's effectiveness in teaching the subject matter was:	44	25%	27%	30%	16%	2%		3.6	1	2

STUDENT ENGAGEMENT

Relative to other college courses you have taken:	N	Much Higher (7)	(6)	(5)	Average (4)	(3)	(2)	Much Lower (1)	Median	DECILE RANK Inst	DECILE RANK College
Do you expect your grade in this course to be:	44	9%	23%	16%	36%	9%	5%	2%	4.4	1	3
The intellectual challenge presented was:	44	30%	48%	7%	16%				6.1	8	8
The amount of effort you put into this course was:	44	25%	39%	14%	23%				5.9	6	5
The amount of effort to succeed in this course was:	44	30%	45%	7%	18%				6.0	7	7
Your involvement in course (doing assignments, attending classes, etc.) was:	44	16%	34%	25%	25%				5.5	3	3

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: 9.9 Hours per credit: 2 (N=42)

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
		14%	17%	14%	21%	12%	12%	2%		5%	2%

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

Class median: 6.8 Hours per credit: 1.4 (N=42)

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
2%	12%	24%	19%	19%	12%	10%					2%

What grade do you expect in this course?

Class median: 3.5 (N=42)

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
29%	21%	21%	14%	5%	5%	2%						2%		

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

(N=43)

In your major	A core/distribution requirement	An elective	In your minor	A program requirement	Other
74%	21%			5%	

STANDARD FORMATIVE ITEMS

	N	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Very Poor (0)	Median	DECILE RANK Inst	DECILE RANK College
Course organization was:	44	32%	25%	32%	11%			3.8	2	3
Clarity of instructor's voice was:	43	30%	26%	40%	5%			3.7	1	1
Explanations by instructor were:	42	29%	31%	26%	14%			3.8	2	2
Instructor's ability to present alternative explanations when needed was:	44	25%	32%	27%	11%	5%		3.7	1	2
Instructor's use of examples and illustrations was:	44	34%	20%	27%	14%	2%	2%	3.7	1	1
Quality of questions or problems raised by the instructor was:	44	25%	27%	30%	16%	2%		3.6	1	2
Student confidence in instructor's knowledge was:	44	39%	30%	27%	2%	2%		4.1	2	2
Instructor's enthusiasm was:	43	28%	44%	21%	5%	2%		4.0	2	2
Encouragement given students to express themselves was:	44	36%	32%	32%				4.1	2	3
Answers to student questions were:	44	30%	36%	23%	9%	2%		3.9	2	2
Availability of extra help when needed was:	44	36%	25%	30%	7%	2%		4.0	2	2
Use of class time was:	44	30%	27%	32%	11%			3.8	2	2
Instructor's interest in whether students learned was:	44	27%	39%	25%	7%	2%		3.9	1	2
Amount you learned in the course was:	44	32%	36%	20%	9%	2%		4.0	3	4
Relevance and usefulness of course content were:	44	36%	34%	16%	11%	2%		4.1	3	3
Evaluative and grading techniques (tests, papers, projects, etc.) were:	44	30%	34%	20%	11%	5%		3.9	2	3
Reasonableness of assigned work was:	44	43%	34%	20%	2%			4.3	4	5
Clarity of student responsibilities and requirements was:	44	39%	39%	18%	5%			4.2	3	4

CSS 430 A
Operating Systems
Course type: Face-to-Face

Evaluation Delivery: Online
Evaluation Form: A
Responses: 44/44 (100% very high)

Taught by: Yusuf Pisan
Instructor Evaluated: Yusuf Pisan-T Prof

STANDARD OPEN-ENDED QUESTIONS

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

1. This class was intellectually stimulating; although there was some overlap with css422, a class I had already taken in the past, it was more involved in regards to programming projects and relevance to what we were reading in the textbook.

3. Yes this class is essential to understanding computers and made me think on a lower level then I am used to.

4. Yes, the concepts were difficult and I had to spend a lot of time to understand certain topics

5. Yes it was, I think just the overall concepts took a while to grasp and being able to connect the projects with the concepts in class improved my ability to comrephend the material.

6. This class was difficult in general. It is as difficult as everyone in the major warned me.

8. Yes and yes. It was interesting learning about operating systems but the hardware concepts were iffy.

9. Yes a lot of interesting questions and topics.

10. yes, highly.

11. Yes, the class was intellectually stimulating especially the projects I like how the teacher provided starter code so that we are not super lost but not enough that the lab is practically done for us.

12. The class was intellectually challenging, but I often struggled to follow the material. It did stretch my thinking, especially with concepts like scheduling, memory management, and concurrency, but the difficulty mostly came from trying to understand the lectures rather than the content itself.

13. Yeah some things were cool to understand

14. Yes, this class was intellectually stimulating, as it covered complex OS topics and required a lot of thought for the assignments.

16. I liked this class was one of the most advanced classes ive taken

17. I think so. I definitely think the slides could be laid out better and the assignments given a second look, but overall pretty good.

18. Yes, introduced what goes on under the hood of modern OSes

19. Yes, it tied back to previous courses was good for review.

21. This class's content was stimulating; however, the presentation and engagement of it were somewhat lacking. I can agree that they are important concepts and would love to have a clear grasp of them, but a lot of it is becomes self-study, something I'd attribute to engagement.

22. It was fine. Just a lot of memorizing.

23. Yes, it was intellectually stimulating. I learned many important concepts about Operating Systems. These concepts aided my understanding of the computing infrastructure as a whole.

24. This class was intellectually stimulating. It required me to really stretch my problem solving skills, spend lots of time analyzing the material, and do additional research to understand the content that was presented.

25. Yes. We covered a very large amount of material and we were expected to have a very good comprehensive understanding of everything covered.

26. It was intellectually stimulating, it introduced a lot of new concepts that are important to know as a baseline, a lot of materials were covered.

28. i believe it was intellectually stimulating because it taught me concepts that I did not know before. The projects were challenging and the exams were difficult. The class required me to spend time studying and reinforcing ideas.

30. Yes it was stimulating, making me think about how operating systems work in depth, and figuring out it conceptually.

32. IT was very interesting class in lot of ways, it gave knowledge of "under the hood" of computer operations

33. Yes we had to think about how operating system really do all the work with communicating to the hardware.

What aspects of this class contributed most to your learning?

1. The practical programming projects were a major contributor to my learning in this course. Simply reading the textbook only gave me theoretical knowledge and, at times when practical examples were shared, they never really stuck in my brain. This gap was filled by the programming projects assigned.

3. In class excersizes. These kept me on topic and focused in class making the homework much easier, as I already had example code and experience wirting core functionalities.

4. The in class activities/exercises

5. I would say the projects and homeworks contributed the most, I think some presentations were difficult to follow conceptually but being able to actually apply my knowlede somewhere was helpful. I will say though the in-person excercises could sometimes be helpful, other times very confusing.

6. Recorded lectures and practice quizzes

8. Projects

9. The projects were very contributing.

10. in class examples,

11. I really liked the labs and homework assignments as well as the in-person assignments they really helped me.

12. The programming projects contributed the most to my learning because they forced me to apply the concepts in a hands-on way. Those assignments helped things make more sense than the lectures did.

13. The lecture slides were really helpful and zoom classes. Really liked the test structure as well.

14. Homework and projects contributed most to my learning since I was able to spend more time soaking in concepts that way.

15. The lectures.

16. The best section s of this calss were the project

17. The assignments and in class activities.

19. The in class activities contributed a lot by going through coding problem, although later in the course there were fewer coding problems and more abstract problems to solve

21. The exams, I think. Studying and cramming for them, I learned more than I really learned in the classroom. Also, concepts that were described using the board or some use of interactive visuals was really useful.

22. Hw assignments.

23. The projects and the textbook reading contributed the most to my learning.

24. The lectures, readings, homework assignments, and projects all contributed the most to my learning.

25. In-class exercises involving coding or working out problems step-by-step.

26. Honestly the homework assignments and the in class activities helped reinforce conceptual ideas, as a low stakes way of practicing what we learned

28. I think the projects were the most challenging yet contributing to my learning.

30. The practice examples in class let me visualize certain examples really well - FIFO practice etc.

32. Curiosity

33. The review quizzes.

What aspects of this class detracted from your learning?

1. Given that it is an 8-10pm class, the lectures were a bit difficult to sit and listen to. Near the start of the quarter, I remember we had practical exercises mixed in with the lecture but as the quarter progressed, they waned.

3. Lack of class excersizes. We stopped doing these as much and my engagement within the class plummeted. Especially because this was a late class and staying focused was hard for everyone, it is a shame we stopped doing coding excersizes.

4. Some concepts were dove into without having enough context. sometimes we did exercises on things that I didn't really understand. I think it would have been helpful to spend more time on the concepts before doing coding exercises.

5. Again sometimes the in-class exercises were a bit confusing but overall helpful, I would also say some lectures threw way too many terms without me being able to really understand how or what theyre being used for.

6. timing of the class.

9. I think the long class periods could be a little struggle.

10. none

11. The teacher used AI to create study guides for the midterms that were not helpful at all. They often had repeated questions as well as questions that did not prepare us for the tests.

12. What detracted from my learning was that the lectures mainly read directly from the slides, with little use of the whiteboard or real-world examples. Without visual walkthroughs or deeper explanations, it was hard to grasp the more abstract OS concepts.

13. Nothing really.

14. Although the instructor tried to incorporate in-class activities as much as possible, there would still be lectures that were non-interactive and consisted of the instructor just going through the slides. This made the class less engaging, and the switch to synchronous remote learning on one of the days did not help, since I learn better in class.

15. N/A.

16. The aspects that detracted were some of the classes which ended up being lecture only would appreciate more inclass activities

17. I think I'd like more in class exercises and for the assignments to be clearer and a little more challenging. The class felt very front heavy assignment wise.

19. I found that the history portion of computers which while useful in giving context, wasn't super helpful and distracted us from what may have potentially been on the exam

21. Mostly just lack of engagement and a lack for checks of understanding.

22. N/A

23. The in-class time was detracting from my learning. Slides were hard to follow, and the information presented in class was the same as what was on the slides. Thus, the in-class time could have been spent more effectively and generally felt like a waste of time.

24. There was a lot of content to cover and it was difficult to really get a full grasp of everything. Some things I thought were easier to understand than others, more specifically the content covered up to the mid-term. It felt like the class moved rather quickly after the mid-term, and more time might have been needed to cover the vast amount of material in memory, virtual memory, file systems, and file systems implementation.

25. Very long and dense lectures, minimal break times and activities, and lots of reading and studying at home to keep up with all of the concepts.

26. At times the class was very lecture heavy and not the most interactive, but there aren't a lot of ways to avoid that because there are so many concepts to cover

28. I think the lectures can sometimes be too word heavy that some more of the in-class quizzes or exercises can be beneficial and better for my learning.

29. Using a high level class such as 430 to try out AI quiz generation didn't feel like the right choice and distracted students away from the actual study guide.

30. being 8p-10p made it hard, as im usually exhausted at this time, and dont want to be on campus that late.

32. Proffer's teaching approach was very surface level, just reading off the slides.I attended classes to know what topic did he covered and learned almost all of the concepts of the internet(You Tube).

33. Online class

What suggestions do you have for improving the class?

1. More practical exercises mixed in with lectures. this makes it so that students aren't sitting for 2 hours straight and never getting the chance to apply freshly learned knowledge

2. It feels like there are a lot more topics in Ex 1 than Ex 2

3. This class was great and well taught. Just a shame it became so difficult to stay focused towards the end of the quarter.

4. Add more interactive exercises throughout the class. Have a break time after an hour, lectures are pretty heavy and it can be difficult to pay attention.

5. I would say more quick in-class excercises at least in the beginning fo the quarter to get a good grasp on concepts, and later classes to have more time towards the end of class to spend on longer in-class exercises.

6. Maybe not offer an 8-10pm class for core requirements as it gets exhausting to attend a difficult core class that late in the evening.

7. Midterms/final less heavily weighted

8. Projects that help demonstrate OS concepts more, maybe working with an existing open source OS

9. More breaks during classes.

10. none

11. Add more practice exams and materials that aren’t created by AI, maybe old exams, to better prepare students for the tough midterms.

12. For improvement, I’d suggest more interactive explanations, using the whiteboard, drawing diagrams, working through examples step-by-step, and connecting topics to real OS behaviour. That would make the course much easier to understand and more engaging.

13. in panopto for the recordings if you could make the live, which i believe is an option, that would be awesome if someone missed class or couldnt actually come in person that day.

14. I suggest more in-class activities and group assignments going forward.

15. Making it online/hybrid.

16. more inclass activities

19. No suggestions

20. To manage the class in an easier and more engaging way, try to simplify the content by focusing on the main topics in detail.

21. Small, frequent checks for understanding like weekly or bi-weekly quizzes and in-class exercises would be very useful, that way, you can keep students on their toes and force them to keep learning. Also, just use the whiteboard often, because it also helps when it comes to understand thought process and how concepts connect to each other.

22. N/A

23. I suggest changing the projects slightly, for example, programming Sudoku was more about solving a Sudoku problem than actually using threads. The project could be shifted to include a timer for how long the puzzle took to verify correctness with and without threads that way the student can see the improvement time. Additionally, I think in-class time should be used to show better examples of the concepts. For example, child and parent processes should have had a much better demonstration and should have been explained in more depth. I feel many concepts needed to be shown in some kind of diagram to show the flow of the process or the concept, rather than just a text explanation.

24. I think finding a balance for the amount of time spent on each topic would help improve the class, especially since students are tested on all of the material. I'm not sure if this would mean some of the less important material might not be covered, or if it is covered briefly it should not be included on the tests. This was a challenging course, and I think more extra credit might have also been helpful, especially for students who did not fair well on the homework and tests.

25. More class activities to help keep students engaged, and less reliance on the textbook.

26. I think incorporating more in class activities throughout the quarter, not just the beginning of the course would help reinforce knowledge for students

27. The AI generated study guides weren't very helpful. I would much rather have more previous exams to look over.

28. Like I mentioned, more in-class exercises or quizzes may help me understand concepts and help pay attention better.

30. change time for class, but overall everything else was great

31. more coding exercises and examples. it's hard to tie concepts to applications without practical exercises.

32. The Professor should explain in depth on how and why of the concept rather than just covering what of the concept.This will help future students to be actively engaged in the class and be able to learn a lot in the class instead of spending countless hours searching internet for the right explanation of the given concepts.

33. More in class/take home activities

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.