

Systems Security (Fall 202310)

Instructor: **Onarlioglu, Kaan**
 Subject: **CY**
 Catalog & Section: **3740 01**
 Course ID: **14006**
 Objectives:

Enrollment: **17**
 Responses Incl Declines: **14**
 Declines: **1**

Questions to Assess Students' Online Experience

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean	Univ. Mean	Course Median	Dept. Median	Univ. Median
Online course materials were organized to help me navigate through the course week by week.	13	76%	4.8	4.1	4.0	5.0	5.0	5.0
Online interactions with my instructor created a sense of connection in the virtual classroom.	13	76%	2.1	3.2	3.2	0.0	4.0	4.0
Online course interactions created a sense of community and connection to my classmates.	13	76%	1.8	3.0	3.1	0.0	4.0	4.0
I had the necessary computer skills and technology to successfully complete the course.	13	76%	3.8	4.0	4.2	4.0	4.0	5.0

Note: 5:Strongly Agree; 4:Agree; 3:Neutral; 2:Disagree; 1:Strongly Disagree; 0:N/A;

Course Related Questions

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean	Univ. Mean	Course Median	Dept. Median	Univ. Median
The syllabus was accurate and helpful in delineating expectations and course outcomes.	13	76%	4.5	4.3	4.5	5.0	5.0	5.0
Required and additional course materials were helpful in achieving course outcomes.	13	76%	4.6	4.2	4.3	5.0	4.0	5.0

Note: 5:Strongly Agree; 4:Agree; 3:Neutral; 2:Disagree; 1:Strongly Disagree;

Learning Related Questions

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean	Univ. Mean	Course Median	Dept. Median	Univ. Median
In-class sessions were helpful for learning.	13	76%	4.8	4.1	4.3	5.0	4.0	5.0
Out-of-class assignments and/or fieldwork were helpful for learning.	13	76%	4.7	4.3	4.2	5.0	4.0	4.0
This course was intellectually challenging.	13	76%	4.8	4.2	4.2	5.0	4.0	4.0
I learned a lot in this course.	13	76%	4.8	4.4	4.3	5.0	5.0	5.0

Note: 5:Strongly Agree; 4:Agree; 3:Neutral; 2:Disagree; 1:Strongly Disagree;

Instructor Related Questions: Kaan Onarlioglu

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean	Univ. Mean	Course Median	Dept. Median	Univ. Median
The instructor came to class prepared to teach.	13	76%	4.9	4.7	4.6	5.0	5.0	5.0
The instructor used class time effectively.	13	76%	4.8	4.4	4.4	5.0	5.0	5.0
The instructor clearly communicated ideas and information.	13	76%	4.8	4.4	4.4	5.0	5.0	5.0
The instructor provided sufficient feedback.	13	76%	4.5	4.2	4.3	5.0	5.0	5.0
The instructor fairly evaluated my performance.	13	76%	4.6	4.5	4.4	5.0	5.0	5.0
The instructor was available to assist students outside of class.	13	76%	4.8	4.6	4.4	5.0	5.0	5.0
The instructor facilitated a respectful and inclusive learning environment.	13	76%	4.9	4.7	4.6	5.0	5.0	5.0
The instructor displayed enthusiasm for the course.	13	76%	4.8	4.6	4.6	5.0	5.0	5.0

Note: 5:Strongly Agree; 4:Agree; 3:Neutral; 2:Disagree; 1:Strongly Disagree;

Instructor Effectiveness: Kaan Onarlioglu

Question	Number of Responses	Response Rate	Course Mean	Dept. Mean	Univ. Mean	Course Median	Dept. Median	Univ. Median
What is your overall rating of this instructor's teaching effectiveness?	13	76%	4.9	4.5	4.4	5.0	5.0	5.0

Note: 5:Almost Always Effective; 4:Usually Effective; 3:Sometimes Effective; 2:Rarely Effective; 1:Never Effective;

Instructor Related Questions: Kaan Onarlioglu (26 comments)

Q: What were the strengths of this course and/or this instructor?

1 Kaan is very passionate in security and teaching its concepts, and it comes across in his lectures. They're always informative and fairly easy to understand, and he will answer any questions you have about the material. The nighttime timeslot isn't the most ideal, but Kaan makes it worthwhile.

2 Has industry experience, most if not all of the course content is original and not repurposed from elsewhere

3 Very enthusiastic instructor that expects a lot from his students. Very passionate about the subject.

4 Kaan is extremely knowledgeable and very passionate about the subject. He invests a lot of time into his students and frequently stayed after for office hours until 9 or 10pm even after having finished what was likely a long work day at Akamai (where he works by day).

The course content was very *very* relevant I felt. In particular, the content we covered detailing *system* failures as opposed to component failures was interesting. That safety and security are emergent properties of a complex system is great food for thought.

It was also interesting to see Kaan's perspective both as a researcher and in industry. I liked hearing about the research that he participated in, both from the recent past and long ago.

The TA Simon was also very knowledgeable and helpful. He and Kaan worked well together IMO. Having all of the deadlines ahead of time helped me to plan out how to balance my other course loads as well which was useful. Allowing flexibility in the assignments is a good thing that should be keep

Lastly, the humor level was high.

5 Kaan is very knowledgeable in the field and invested in the learning and success of his students

6 Professor Onarlioglu truly cares about his students and seeing them succeed and learn. He is always there for you to help you succeed in his course through office hours and/or piazza.

7 Extremely effective professor in all ways. Can't really pick any bones with him.

- 8 Kaan is seriously great. He brings real experience out in the field into academia. Because the course focuses on the challenges, it gives you real experience with systems security and hacking. Plus, it was really fun.
- 9 Instructor is very knowledgeable in his field and combines academic and industry knowledge to give us the most applicable knowledge.
- 10 The course content felt relevant and modern. The difficulty of the challenges and bonuses was well-calibrated. The challenges were well-designed and were useful for applying some of the content discussed in the lectures.

Q: What could the instructor do to make this course better?

- 1 Add some more professor office hours outside of classtime
- 2 More demos during lecture which could help for getting started on challenges
- 3 Provide more guidance on the challenges. A lot of them are very open ended and I would spend hours chasing down solutions that did not help me learn and only served as a waste of time.
- 4 While running the risk that everyone hand in everything one day before the deadline, I think every assignment more or less could be due at the end of the semester. There are some assignments where I missed brag points that I know I could have picked up had I been able to go back when I had more time in the semester, or after I had thought about how to do it some more. It's a bit of an excuse for not having done them when I had the chance, but I would go back to them in the same way you can work on the bonuses all semester. Perhaps the brag points themselves could be due at the end of the semester like the bonuses are. That way, there's still an opportunity to go back to the brag points if you need to catch up on points for whatever reason (perhaps because you missed an assignment). Otherwise, everything was solid.
- 5 Provide opportunities for points outside of exams to show a student's understanding instead of solving a challenge. Having so many points in all-or-nothing challenges can make it difficult to get points in a timely manner, where you can't reliably spend a few hours on an assignment and get credit for your work.
- 6 Having more office hour timeslots would have been a little more helpful.
- 7 Maybe provide starter code for challenge1.
- 8 Continue to hold office hours outside of the normal class period.
- 9 Adjust some of the deadline structure, it felt a little loose and allowed things to pile up if you weren't disciplined from day 1.
- 10 I would have liked to have spent more time on virtualization and modern cloud infrastructure (from the perspective of a public cloud provider).

A short survey of "What do people want to get out of this class?" during the first lecture might have been useful for tailoring some of the course content. Almost the entire class was CS majors, but at times the course catered more to the (non-software-engineer) security professional perspective. I'm not sure what fraction of the class that represented, and would be interested to know.

Q: Please expand on the instructor's strengths and/or areas for improvement in facilitating inclusive learning.

- 1 Very good lecturer and very knowledgeable about the subject.
- 2 NA
- 3 The instructor is as inclusive as is possible.
- 4 Professor Onarlioglu has been one of the greatest professors I have had at my time at Northeastern. He was always prepared for class and was an excellent instructor. He was able to convey complex topics and ideas in an understandable manner for his students. Strongly recommend taking his class or any other class he teaches.
- 5 Very inclusive course but definitely would've been very difficult to take it online.
- 6 Kaan was very inclusive. Nothing more needing to be said here.

Questions to Assess Students' Online Experience (5 comments)

Q: Please comment on your experience of the online course environment in the open-ended text box.

- 1 Organized
- 2 Kaan recorded every lecture and offered lectures on Zoom if you had a conflict or were away for the week for example. He was very quick to post the video links on Piazza and the recording quality was very good (he had a custom mic he set up before each class which helped a lot I think)
- 3 Course was taught in person.

4 Cannot really take this class virtually.

5 Class was in person

Student Self-Assessment of their Effort to Achieve Course Outcomes (7 comments)

Q: What I could have done to make this course better for myself.

1 This semester, there weren't deadlines for each individual assignment, but deadlines for a group of projects before the midterm and the last day of class. Better spacing my work out over the semester would have made it easier to complete all of the more difficult challenges.

2 I could have utilized office hours more earlier on in the semester.

3 I feel I grasped most of the challenges fairly well, and while I certainly wasn't the best hacker in the class, I felt that overall I did well. I think that there could be even more bonus content, but at the same difficulty, if not with greater difficulty, than the bonuses offered. For example, a heap buffer overflow attack could have been an interesting challenge. I enjoyed the bonus content, even if I didn't get to finish most of it.

4 Request help for challenges sooner.

5 Work harder

6 Start the challenges earlier and stick to the schedule outlined by the professor.

7 Stick to completing one challenge a week. They ended up piling up towards the deadline.