

Systems Security (Spring 2024)

Instructor: **Onarlioglu, Kaan**  
 Subject: **CY**  
 Catalog & Section: **3740 02**  
 Course ID: **34149**  
 Objectives:

Enrollment: **66**  
 Responses Incl Declines: **35**  
 Declines: **0**

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.	35	53%	4.8	4.5	4.4	5.0	5.0	5.0
Online interactions with my instructor created a sense of connection in the virtual classroom.	35	53%	4.9	4.4	4.2	5.0	5.0	5.0
Online course interactions created a sense of community and connection to my classmates.	35	53%	4.8	4.3	4.1	5.0	5.0	4.0
I had the necessary computer skills and technology to successfully complete the course.	35	53%	4.8	4.5	4.6	5.0	5.0	5.0

Note: 5:Strongly Agree; 4:Agree; 3:Neutral; 2:Disagree; 1:Strongly Disagree; -1: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.	35	53%	4.9	4.5	4.5	5.0	5.0	5.0
Required and additional course materials were helpful in achieving course outcomes.	35	53%	4.9	4.4	4.4	5.0	5.0	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.	35	53%	4.9	4.3	4.3	5.0	5.0	5.0
Out-of-class assignments and/or fieldwork were helpful for learning.	35	53%	4.9	4.5	4.3	5.0	5.0	5.0
This course was intellectually challenging.	35	53%	4.9	4.3	4.3	5.0	5.0	5.0
I learned a lot in this course.	35	53%	4.9	4.5	4.4	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.	35	53%	4.9	4.6	4.6	5.0	5.0	5.0
The instructor used class time effectively.	35	53%	4.9	4.4	4.4	5.0	5.0	5.0
The instructor clearly communicated ideas and information.	35	53%	4.9	4.5	4.4	5.0	5.0	5.0
The instructor provided sufficient feedback.	35	53%	4.8	4.4	4.3	5.0	5.0	5.0
The instructor fairly evaluated my performance.	35	53%	4.8	4.5	4.4	5.0	5.0	5.0
The instructor was available to assist students outside of class.	35	53%	5.0	4.6	4.4	5.0	5.0	5.0
The instructor facilitated a respectful and inclusive learning environment.	35	53%	4.9	4.6	4.6	5.0	5.0	5.0
The instructor displayed enthusiasm for the course.	35	53%	5.0	4.7	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?	35	53%	4.9	4.5	4.5	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 (75 comments)

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

- 1 Office hours and professor's online communication were good.
- 2 Kaan is the best - funny, knowledgeable, and creates super super fun challenges. If you are at all interested in security take this class with Kaan
- 3 Kaan is knowledgeable, responds quickly to questions, and is overall a likable guy. His lectures are pretty good—he presents the ideas well and his slides are easy to follow. The challenges
- 4 Kaan is the best professor you'll have at Northeastern and Systems Security will be the best cybersecurity class you'll ever take at Northeastern. The amount of practical skills and relevant knowledge you pick up in this class is immeasurable. So much of what Kaan teaches you appears in your cybersecurity co-op interviews. Even if it doesn't, you can talk about the challenges you've completed and topics you've learned in his class and it will definitely help you stand out to your interviewer. I've never felt more accomplishment from a class than Systems Security, as the unique CTF-structure really makes the homework fun (a novel concept).
- 5 Extremely knowledgeable and an engaging lecturer
- 6 Kaan consistently put student education first and showed his passion in the classroom. He made students engaged in novel topics and created a wonderful learning environment.
- 7 Kaan is really passionate about this class and it shows. The challenges he makes are fun and challenging and are a good indicator of how much we have learned during this course. He also was an enthusiastic professor and he made class enjoyable, which is difficult to do for a 3 hour class.
- 8 Incredible lecturer, showed clear knowledge and love for cybersecurity, and was funny in a way that felt understanding of the students that were taking the course.
- 9 Kaan made this class very engaging and he was very knowledgeable of all the topics.
- 10 Kaan is a bona fide force of nature when it comes to teaching security. He keeps lectures entertaining and engaging, whether you already know the material, find it well paced, or are struggling to keep up. He does a good job fielding questions from the class and wants to make sure everyone understands everything. That being said, make sure to speak up if there is something that is unclear, or he might just breeze past it. He also puts an insane amount of effort into the backend infrastructure for the course challenges, which are each a delightful technical puzzle to figure out.
- 11 Makes the long lecture very engaging
- 12 Kaan is incredibly passionate and knowledgeable. Genuinely one of the most well put together and entertaining classes I've ever taken. WOW I had so much fun.
- 13 Great job making long lectures more engaging.
- 14 Everything, knowledgeable, funny, relatable, easy to talk to, challenged us
- 15 You can tell he KNOWS the material and is VERY passionate about it; Always mixes humor into his lectures which makes a night class less exhausting; Held office hours weekly and was very responsive to questions
- 16 Kaan is one of the best instructors I ever had. Genuinely passionate about the content he is teaching. This course he teaches is a reflection of Kaan the professor, Kaan the researcher, and Kaan the Akamai architect. He manages to teach a very interesting angle to systems and cybersecurity that I couldn't find in any other classes at Northeastern.
- 17 Kaan is incredible! Lecture (albeit long, it is a 3hr block night class) was always super fun and such a vibe. HWs are CTF style challenges and are all or nothing (no arguing/worrying about points and partial credit--you complete them or you don't and you can keep trying as many times up to the deadline. This is something I REALLY APPRECIATED and thought was super effective). Though some topics personally weren't my thing, all of the demos, examples, and explanations were useful and even though there was a learning curve to some thing, I really learned a lot. Re long lectures, if you remind him, he'll give you 5-10 minute breaks.

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

- 18 Might be the course I've learned the most in. The course is jam-packed with content that is very useful to any aspiring CS or security student. It's also a breath of fresh air the way the challenges work (when you're done, you're done, no waiting for grades or doing write-ups or anything, you either got it or you didn't with infinite attempts). And of course, Kaan is a great professor with tons of knowledge who runs a tightly-made course. I suggest reading the syllabus on Kaan's website (onarlioglu dot com).
- Be warned though: the class is very difficult. A great course, but not one to be taken lightly, even if the hour count average here on TRACE suggests it might not be that difficult. Challenges are, well, challenging, and require office hours for most students. Exams require a lot of studying. Average grade on the midterm was around a 63. But that is also misleading- you very much CAN get an A, due to a large standard deviation (lots of students did very well on the exam, some came unprepared and did extremely poorly dropping the average), and the fact that you don't need to average an A on the exams to get an A (again, if you complete a challenge, that's an automatic 100, so they help your average a lot). And do NOT miss class. You can't afford to with so much content per lecture (since this class is always a 3 hour night slot)
- 19 Kaan is extremely passionate about the course material and is great at making it engaging and relatable. Truly a 10/10 lecturer with a great sense of humor.
- 20 Very energetic and enjoyable lectures (even despite the late time slot). Almost always available via piazza.
- 21 kaan rocks.
- 22 Kaan is probably the best professor khoury has to offer. his strengths:  
1. always available on piazza  
2. good lecturing style  
3. job relevant challenges  
4. interesting content
- 23 Kaan is very pragmatic and relates all of his course topics to the real world which I very much appreciated
- 24 He's very approachable! You can go up to him after class or during the breaks and he'd be down to have a genuine conversation with you. He's also really engaging, which is a must have if your class is like 3 hours long on a Thursday night. Other strengths include, his teaching style and the challenges he dishes out to us. Rooted in practicality and quite challenging, especially if you're not exposed to this beforehand. But you come out of each challenge a stronger and more resilient person I think.
- 25 Really strong curriculum and good pacing
- 26 Prof. Onarlioglu is a wonderful professor who truly has a great understanding of the material he teaches and knows how to pass that knowledge on to his students. The lectures were super engaging, all of the assignments delightful, teaching real world skills that feel like little puzzles. Kaan is a man of many strengths and it makes for an amazing class.
- 27 Enthusiasm and passion for the topics
- 28 Very hands-on and practical while also providing some theory
- 29 On Piazza until 5 am
- 30 He was definitely really well versed in his field, and made class very intriguing and fun.
- 31 - funny guy  
- supa smart  
- passionate about what he does  
- makes 3 lecture hour sessions fun :)  
- really sets the bar high for other professors. (if you boot him, NEU is doomed fr)

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

- 1 Some bonuses are "very" cryptic, even if they aren't mandatory
- 2 more cats.
- 3 nothing as of now - maybe a warning sign saying that this class is not a cakewalk and will require good technical skills, critical thinking and perseverance.
- 4 I think he made it seem a bit scarier than it had to be. But I was so worried about this class at the beginning of the semester that it put me off tackling some of the work. Not to say that it is easy, but it is very manageable if you get ahead of it.
- 5 It would've been nice to know your grade throughout the semester. Yes, you can calculate it yourself, but I was worried that I might be calculating incorrectly...
- 6 Honestly I would have appreciated some more prep for quiz/exam questions but that's mostly me coping with not doing the best on the final.
- 7 Some of the black-box challenges became a little frustrating when I hit a brick wall and could not figure out what was wrong because I received no feedback, but that's also just the nature of black-box challenges and a realistic simulation of problems in the real world.
- 8 Earlier class time
- 9 Less binary exploitation (am biased as I hate it)
- 10 There were some challenges posed that seemed to heavily rely on previous knowledge that halted a lot of people. I feel like providing a few extra hints could help this a lot. It might also be nice if the professor could monitor self-reported time on challenges to properly adjust their difficulty. Without previous experience, this class is quite challenging.
- 11 Ditch bonus2 (only joking, it's a skill issue on my end)
- 12 Lectures got very dry
- 13 Maybe have a lab component to this course so that students can get used to the various tools and ways of thinking needed to solve the challenge.
- 14 In-person office hours, but this was not possible this semester`
- 15 N/A. This is one of the best courses I have taken at Northeastern, hands down.
- 16 I personally wish we could gone more in depth to a lot of things, but I think the other people in the class weren't up to it :P More bonuses! Also, a centralized place for resources may be nice... just a general "here are a TON of links and things you can use" (although this wasn't really needed and tbh googling and figuring things out really fits the vibe of the course anyways, it just may make it easier for students who aren't fully 100% ready for the course)"
- 17 Thought it was good.
- 18 I really don't know it's an amazing class. Maybe make the class a year long
- 19 Maybe showed more examples during lecture and slowed down during demos/examples; I wouldn't know where to start for challenges sometimes and couldn't find the examples in lecture or it was too quick or the example was a bit hard to understand
- 20 None, Kaan cooked!
- 21 Nothing really--More memes?>.)
- 22 Sometime in the back and in the recordings, it was hard to hear him.

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

- 23 I know this wasn't Kaan's fault, but this class needs office hours in a physical location. Have the TAs meet people in Snell or the Khoury lab if that's what it takes. But it needs those office hours.
- 24 - a lil too speedy lecturing, fingers, eyes, and ears could not keep up

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

- 1 all is good for now.
- 2 Kaan really cares about people learning the tasks and material
- 3 N/A
- 4 Unintentionally expanded on it in the first step whoops.
- 5 The Hall of Fame is an amazing concept and something that I hope will stay around as it's such a unique way to administer homework and probably the most entertaining way I've seen so far. I like that Kaan also gives us breaks at every hour-interval as those are crucial to maintaining focus during a 3-hour lecture. I also liked all the time he devoted to office hours & how responsive he was on Piazza, answering my frantic questions at even 2 and 3 AM.
- 6 This was one of my favorite classes I have taken
- 7 He's a passionate nerd that knows his field inside and out. He helps students understand the course content in-depth with challenges that require practical application of the material taught in class. He is reachable, quick to respond, gives great aid to those finding material difficult, and his massive intellect shows when teaching. Take any class taught by him. System Security wouldn't be System Security without Kaan as the teacher.
- 8 Adequate
- 9 N/A
- 10 His lectures are very enthusiastic, engaging and even funny sometimes. He is very aware of the students and would pause every now and then to make sure that we are understanding the material he is teaching.
- 11 Office hours were consistently available both within and outside class and were extremely helpful.
- 12 professor's lecture content reflected the knowledge needed in basic challenges and the challenges were still intellectually challenging
- 13 Everything was good
- 14 kaan is very cool and inclusive :3
- 15 Lecture blocks were long, but having office hours at the end were very helpful. Also, mixture between slides and in class demos were helpful.
- 16 --
- 17 Great at explaining and gives demos and great relevant examples (ie, examples where things we learn in class play out in real life, etc), and always opportunities to ask to slow down or clarify if needed.
- 18 He managed to make a 3 hour class actually fun and interesting, and I really liked how the challenges were basically different CTF that allowed us to actually apply the things we learned in class, and not just busywork. I definitely enjoyed the challenges, even the ones I didn't get. As for not being able to hear him sometimes, I think a mic would probably be beneficial.
- 19 No issues with inclusive learning.
- 20 - he so funny, matches my crackhead energy  
- kaan got big big brain, such a nerd-- no big ego too. JUST SMART! i love to see it.  
- dude cant get enough of security! look at all his research publications, public appearances at the security conferences, akamai lover. HE EATS RE challenges for breakfast.  
- the breaks go crazyyyyyy, birthday celebrations every class?... i think so  
- i can compare pros all day everyday-- kaan is GOAT  
- shawty sometimes goes so fast during lecture i get winded lol. could work on pacing a lil bit more.  
- kaan is my twin flame fr! this class was so fun. my asian brother made this learning opportunity unforgettable! GIVE KAAAN A RAISE OR WE RIOT!!!!

### Questions to Assess Students' Online Experience (17 comments)

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

- 1 Responsive, respectful, and communicative on piazza and other platforms. Was very open to both course-related and tangentially related questions.
- 2 most stuff was offline so this question does not apply but there were lecture recordings available which helped me prepare for the final
- 3 IT was very helpful, took some learning but I love how warhead is setup
- 4 The materials were well-organized and made available quickly. The responses on Piazza were fast and helpful.
- 5 It was very much a change of pace compared to other classes, but a welcome and needed one! Having to get comfortable with the command line is a vital skill all CS majors ought to have.
- 6 The Hall of Fame became the Holy Grail for me during the Spring 2024 semester. I watched that site religiously and always felt a surge of pride when I saw my hacker number join the ranks of those who had completed a challenge o7
- 7 Everything was on Piazza or the challenge environment, was very easy to access everything
- 8 df12ee24172b7a635d8c98035840a214
- 9 Warhead rocks! Coolest online course interaction experience ever!
- 10 It was very good
- 11 Information and instructions were very clearly posted and made available in a timely manner
- 12 Amazing infrastructure
- 13 Provided good additional material too.
- 14 Always recorded lectures and had a zoom option for emergencies; Very responsive on Piazza
- 15 Questions on Piazza were answered really fast, and the responses were well thought out and helped me proceed with my assignments.

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

16 Things are well organized into folders within the course's linux environment ('warhead') and on Piazza

17 When i couldnt make it to class, kaan's recordings came in clutch on gawd!

**Student Self-Assessment of their Effort to Achieve Course Outcomes (21 comments)**

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

1 Start challenges \*early\* (even if confident).

2 worked harder towards the end. because of the combined workload of this semester plus the coop search, i was burnt out towards the end of march and that is when i could not finish the challenges 6-8.

3 Not let it get ahead of me, seriously, especially with the earlier challenges. Get to them before the midterm

4 Start. Challenges. Early.

5 Although I attended every class and mostly paid attention, I think I could've paid more attention, and that would've resulted in a few more points received.

6 Read up on the material more often instead of cramming it all in me day of quiz/exam

7 I wish I managed my challenges during the second half of the semester better, as that would have allowed me to devote more time to the bonuses. I managed to keep up the rate of 1 challenge/week for the beginning half of the semester but fell behind by one week on the second half, leaving me unable to complete two of the bonuses before the course finished. I also wished that I didn't miss one of Kaan's lectures because they are 3 hours of pure knowledge--but this was unavoidable as I was out-of-state.

8 Attended in person office hours

9 N/A

10 Manage my time better

11 Better plan my time around the office hours

12 I could have focused slightly more on reviewing the theory covered in class in order to better prepare for the exams. That being said, the exams serve as a great impetus to get you to go over the course material again, whether that be beforehand, or after the exam when you're wondering about the interesting questions.

13 Started challenges earlier

14 Not letting work pile up and going to more office hours.

15 Spend more time, if I was not taking 3 other classes and lab I would devote more time. Made me feel I am in the right place studying the right thing.

16 started challenges earlier; attended more office hours

17 The course load would have been way easier if I followed Kaan's advice and complete 1 challenge per week.

18 Definitely time manage since the challenges/hws can pile up

19 I definitely should've started on the challenges way earlier. Also, I think that I never really found the way I was supposed to study for the exams. I tried different techniques both times, but never really obtained the grade I was reaching for.

20 Pay better attention during the 3 hour lectures.

21 be a better test taker. kaan tells you whats gonna be on the exam-- fairly straightforward. it's a skill issue on my end. i (my test anxiety) was the problem....