

Systems Security (Fall 2024)

Instructor: **Onarlioglu, Kaan**

Subject: **CY**

Catalog & Section: **3740 01**

Course ID: **13112**

Objectives:

Enrollment: **25**

Responses Incl Declines: **15**

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.	15	60%	4.8	4.4	4.4	5.0	5.0	5.0
Online interactions with my instructor created a sense of connection in the virtual classroom.	15	60%	4.6	4.3	4.2	5.0	5.0	5.0
Online course interactions created a sense of community and connection to my classmates.	15	60%	4.5	4.2	4.1	5.0	5.0	4.0
I had the necessary computer skills and technology to successfully complete the course.	15	60%	4.9	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.	15	60%	4.7	4.4	4.5	5.0	5.0	5.0
Required and additional course materials were helpful in achieving course outcomes.	14	56%	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.	15	60%	4.9	4.4	4.3	5.0	5.0	5.0
Out-of-class assignments and/or fieldwork were helpful for learning.	15	60%	5.0	4.5	4.3	5.0	5.0	5.0
This course was intellectually challenging.	15	60%	4.9	4.4	4.3	5.0	5.0	5.0
I learned a lot in this course.	15	60%	5.0	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.	15	60%	5.0	4.7	4.6	5.0	5.0	5.0
The instructor used class time effectively.	15	60%	4.9	4.6	4.4	5.0	5.0	5.0
The instructor clearly communicated ideas and information.	15	60%	4.9	4.5	4.4	5.0	5.0	5.0
The instructor provided sufficient feedback.	15	60%	4.7	4.4	4.3	5.0	5.0	5.0
The instructor fairly evaluated my performance.	15	60%	4.9	4.5	4.5	5.0	5.0	5.0
The instructor was available to assist students outside of class.	15	60%	4.8	4.5	4.5	5.0	5.0	5.0
The instructor facilitated a respectful and inclusive learning environment.	15	60%	5.0	4.6	4.6	5.0	5.0	5.0
The instructor displayed enthusiasm for the course.	15	60%	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?	15	60%	5.0	4.6	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 (28 comments)

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

- Kaan truly cares about the course and students. He has a full-time job, so he's here by choice. Challenges (homeworks) are very fun and engaging. It's a perfect example of well-executed hands-on learning through (semi-guided) creative problem solving. We get plenty of time to do them.
- Kaan is incredibly passionate and caring. I loved his enthusiasm and how he tried to help students without just giving out the answers
- It clear that Kaan enjoys teaching the content he provides by looking at the quality of his examples. He goes in depth into each subject matter and makes sure it is clear to follow. He has a mastery over the field so students can fully express their questions and stay engaged. Other than that, the content is fun anyways so it's easy to stay focused and attempt the hard homework/challenge.
- Always very well prepared.
- Outside class support was always available. I had a piazza question answered at 4am once within 9 minutes. Beyond this the lectures were super informative and perfectly supplemented the homework. We had to learn more for the homework than what was taught in class but this was on purpose and it was never overbearing. This is the most I have learned in a class that will actually apply to my future jobs.
- Kaan is clearly super enthusiastic about security and wants to see all of his students do well. He clearly outlines all lectures and challenges and gives students many opportunities to go above and beyond in the course. Exams are clear and relevant to the topics covered in class and require students to apply knowledge of security principles and topics. He covers topics you will see in security interviews, which I have not seen from any other security class (yet) at Northeastern. Overall, this was an extremely interesting and academically challenging course that covers a broad range of topics and attacks.
- Very passionate and strongly opinionated about the subject matter. Challenges force you to learn. Hard to use outside resources so you're forced to figure it out. As someone with no security background, I still found it manageable and very fun.
- Clear lecturer, very encouraging, enthusiastic, knowledgeable, has a fun attitude, fun course content, homework really makes you learn. In general, though all of the content was more or less familiar, the homework provided a really new perspective on those topics.
- Kaan is an absolutely amazing instructor. Northeastern is truly lucky to have him here. He shows a great enthusiasm for cyber security, and the content of the course is just so unique that I knew I had to take it the minute I heard about it. The challenges were the absolute best. I really enjoyed the product key keygen challenge, especially since I spent an ungodly amount of time reversing it before going "wait... the keygen code is in here already..." Overall, I think I learned more from this course than any other course I've taken in cyber security. (Also Kaan is just a cool guy, so that has to be worth something)
- Kaan is a great and enthusiastic teacher, and an experienced industry veteran in this topic. Students will learn a lot from him. Notably, he is good at conveying the big picture themes and nuances in cybersecurity. Overall I'm glad I took his course as my cybersecurity elective, even though it was harder than Foundations.

The course is challenging and demands high independent problem-solving and research skills, which is a great exercise for engineers. The challenges are very satisfying once you solve them, and you learn things that only come from practical exercise.
- The course provides a good overview of theory and plenty of hands on practice to use the theory and develop skills for cybersecurity

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

- The course itself is basically perfect. It is as difficult as you want it to be. The more you put in, the more you get out.

As for improvements, it could be at a more regular time (6-9PM is kind of stinky), but it's well worth it.
- Make bonus 2 solvable :")
- Provide more outside class resources to learn topics, so even after the class is over the students can continue learning. Have questions set up that will be like what we see on tests before we take tests.
- None.

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

- 5 I think the warhead server (where all course files are located) is a little inconvenient to grab challenge, videos, and slides from. It did teach me a lot about Linux/terminal usage, though.
- 6 My only gripe is that I wish there was more participation in class. Perhaps some forced participation because I would have also liked to hear from my classmates. I think Kaan can be very blunt sometimes with his answers and that might deter more reserved kids from speaking.
- 7 Have more general practice with applying the content to new situations, other than just in the homework or exams. Once or twice, we did class-wide collaborative practice with material we just learned, and I found that helpful. Also, providing more chances for collaboration in general, as I felt I didn't really get to know anyone else in the class, and sometimes felt lost on my own.
- 8 I would really like a debrief after the challenges are due. I know it's a little hard since the challenges don't change from semester to semester, and giving the answers away would be a bit risky, but there were a few challenges (and particularly brags) that really stumped me. I would love to have seen how these were supposed to have been done.
- 9 I felt that Kaan takes some background knowledge for granted that not every student may have - this course touches on a diverse mix of low-level programming, web dev, etc. In particular, inexperienced students have difficulty formulating questions about topics they don't know about, so there may be a communication barrier to keep in mind.

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

- 1 Kaan is good at explaining things. I didn't need too many things explained to me, but it was fun listening anyway.
ps: Mans lifts, very strong.
- 2 Kaan enjoys communication and interaction, so he makes it very easy for anyone to talk about class, homework, or other in-subject questions. Maybe 1n1 check ups through out the semester would be a solid idea.
- 3 Online Environment always up-to-date and organized.
Challenge structure of class is perfect for learning.
- 4 Clear communicator
Fast response times
Designed challenges with fair difficulty as related to the course.
Very creative in assignment development.
- 5 Knowledgeable, very helpful, immediate replies to questions outside of class time. Devoted to the subject matter and to teaching. Cares about his performance.
- 6 It was a little unclear that asking for help and doing some outside research for the challenges was encouraged, so maybe setting those expectations at the beginning would help. Also it would help if some general strategies for attacking the challenges (like beneficial thinking patterns like don't keep hammering at the same problem if you're stuck) were shared too.
- 7 I felt that the environment was inclusive.
- 8 The professor is energetic and entertaining while being very knowledgeable and experienced with practical uses of every skill taught in class.

Questions to Assess Students' Online Experience (7 comments)

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

- 1 All materials and challenges are available online. If you want, you could skip every in-person class that does not contain a quiz or exam.
I wouldn't recommend doing that, though.
- 2 N/A
- 3 Always incredibly organized and updated after lectures each week with class recordings and slides.
- 4 The course has us go through different real life code vulnerabilities within made programs and websites that we need to navigate. It not only teaches us how these vulnerabilities manifest in real life but is super fun.
- 5 Piazza is used for everything for everything challenge questions and administrative announcements. Linux server used to host course materials and assignments. You get used to it very quickly.
- 6 Instructors and TA's were very quick and responsive on Piazza, the material environment and method of submitting work is intuitively set up
- 7 We had a well set up server for assignments and Piazza.

Student Self-Assessment of their Effort to Achieve Course Outcomes (10 comments)

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

- 1 Engage in course material earlier, I usually went over what I needed within 5 days of the due date.
- 2 I could have started the challenges a bit earlier to give time to more difficult sections and bonus challenges. I really wanted to do the best I could on my own, but I recognize I could have asked for more help from TAs. Find that balance.
- 3 I could have gone to OH more.
- 4 I felt that my pacing through this course was fairly perfect but maybe not allowing assignments to build up at a time would have helped a bit more.
- 5 I wish I started the challenges (or at least read the outlines for each) earlier than I did. I also could have utilized the TAs and office hours to help me where I was stuck in challenges.
- 6 Try to keep one challenge per week pace. Impossible to do the bonuses if you don't budget your time properly.
- 7 Sitting and staring at the homework isn't going to help with progress - pivoting and thinking about the problems in different ways is the way to make progress instead.
- 8 Challenges really pile up. I would recommend doing one of them per week (as Kaan recommends). I don't know why I didn't listen :).
- 9 I could've worked more on the bonus challenges, which would've given more practice with practical cybersecurity.
- 10 I could have started working on challenges earlier which would have given me more time to solve the challenges quickly and potentially give me time for working on bonuses.

