



Summer 2023 Workshop July 24 - 28, 2023

This workshop is designed to equip teachers with the knowledge and skills needed to teach cybersecurity using the Teach Cyber courseware. The objectives are to:

- Explore the Teach Cyber courseware and related resources
- Gain hands-on experience working through selected labs and activities
- Expand cybersecurity knowledge
- Discuss pedagogical implications of teaching cybersecurity, especially in regards to using the Teach Cyber instructional materials

Expected incoming knowledge:

- Basic understanding of computer hardware, software, and networks
- If you are new to the Linux command line, we recommend you complete the Pre-workshop module to prepare for the workshop
- If you are new to cybersecurity, we recommend completing the NetAcad Cybersecurity Basics Module (link [here](#))

Format:

- Morning and afternoon synchronous sessions via Zoom and Canvas
- Hands-on activities and labs on the US Cyber Range
- One month of Cyber Range access
- Office Hours providing assistance as needed
- Possible follow-up Saturday session(s) in the Fall

Cost: \$800 per teacher

Registration*: <https://teachcyber.org/product/pd-for-educators/>

Schedule:

1 - Why Cybersecurity Matters	Morning	Welcome, Ice breaker, goals Cybersecurity Fundamentals HSCCG Teach Cyber overview
	Afternoon	Unit 1 Overview Unit 2 Overview Trust, Risk, and Adversity activity
	Wrap-up	Synch option for beginners - range orientation, answer Intro to Linux lab questions Asynch option for advanced - Linux Networking Lab
2 - Elements of Cyberspace	Morning	Ice breaker Unit 3 overview and activity Unit 3 labs breakdown



		U3 Intro to Wireshark Capture Guided Lab & Student Submission lab
	Afternoon	OSINT activities Introducing Adversarial Thinking to Students Unit 4 overview
	Wrap-up	Synch option for beginners - U4L5 Vulnerability Scanning Lab tutorial Asynch option for advanced - U4L5 Vulnerability Scanning Lab
3 - Data, Software, and Network Security	Morning	Vulnerabilities, Threats, and Attacks U4L5 NVD Search Activity Units 1 - 4 recap and reflection
	Afternoon	Threat landscape Cyber Range Lab reflection U4L7 Email Tracking Lab
	Wrap-up	Synch option for beginners - lab help session for U4L7 Email Tracking Lab Asynch option for advanced - another Unit 4 lab
4 - Countermeasures	Morning	Hash Functions and Cryptography Hash Functions activity Unit 5 overview
	Afternoon	Unit 5 lab Revisit Trust Risk and Adversity
	Wrap-up	Synch option for beginners - Unit 5 lab tutorial Asynch option for advanced - Unit 5 labs
5 - Teaching Cybersecurity	Morning	Unit 6 overview and activity Unit 7 overview and activity Unit 8 overview
	Afternoon	Intentional aspects of Teach Cyber Planning and Pacing Next steps

*A minimum of 25+ participants is needed to run the workshop.