

Cybersecurity Awareness

Instructor: Ryan Moore

About the Instructor



15+ Years in IT Industry



6 Years as Faculty in the School of Information Technology

Courses in Systems Administration and Cybersecurity



Lead Educator for the Ohio Cyber Range Institute

Develop Cybersecurity learning and training materials

Run programs to educate Ohio citizens in cybersecurity



Music Enthusiast



Trivia Host

Ohio Cyber Range Institute

- OCRI is a UC Center Serving the State
- Collaboration with other educational institutes and centers
- Tenured Faculty & Adjunct Professionals Currently Working the Field
- Bootcamps & Industry Certifications
- Training Opportunities



About this Course

- Designed for everyday cyber citizens
 - No technical knowledge needed
- Weekly Online Meetings
 - Tuesday's from 2:15-3:30
 - 30-45 presentation/demonstrations
 - Group discussions
- Resource Guides
 - Provide additional information
 - Guides to help you stay secure
- Weekly Survey's



Goals and Topics

Help you understand and identify threats

Teach simple steps to protect yourself and others

Help spread and improve cybersecurity awareness

Topics (Tentative):

- Protecting your online presence
- Social Engineering and Phishing
- Securing your home and devices
- Social Media and Privacy
- Safe “Surfing”
- How to respond to a personal cybersecurity incident
- Current Cybersecurity News

Security Mindset

- Protecting our lives and our property
 - Locking doors
 - Checking who is at the door
 - Alarm systems
 - Washing your hands
 - Leaving a light on
 - Firesafe for valuables



Cybersecurity Mindset



- Being safe online isn't so different from being safe in the physical world!
 - Become aware of the threats
 - Initiate behaviors to minimize threats
 - Take steps to prevent attacks
 - Protect yourself and others

It doesn't affect me...

...I barely use the Internet

...I don't shop/bank online

...I don't have anything to steal

...That's what the IT person is for



Cybersecurity Affects Everyone

- We are more connected than we realize
- Your information is valuable
- 95% of all Cyber Security Breaches are caused by human mistakes and misunderstanding
- It doesn't just affect you



Don't Be Afraid



Commonly Used Terms

- **Bad Actor/Threat Actor/Hacker**
 - Person or Entity that exploits a threat to preform and attack, with malicious intentions
- **Cyber Threat**
 - The potential for an attack to occur
- **Vulnerability**
 - A “weakness” in a system that could be threat
- **Cyber Attack**
 - Occurs when a threat has been exploited
- **Cybercrime**
 - Any crime which is committed electronically



Discussion

What are some motivations for Bad Actors?

Who are the Bad Actors?

Cyber attack motives

Organized crime

- Money!

Angry persons

- Customer dissatisfaction
- Unsatisfied former employee
- Revenge

Hacktivists

- Destruction
- Racism
- Disruption
- Political influence

Script kiddies

- Testing skills
- Excitement & Fun
- Training & experimenting
- "Show-off"

Competitors

- Competitive advantage

Nation State

- Destruction
- Spread disinformation
- Political influence
- Espionage

Image Source: <https://www.nixu.com/blog/cyber-attack-motives-part-1-why-hackers-hack-who-are-they>



**OHIO CYBER
RANGE INSTITUTE**
UNLOCKING POTENTIAL,
SECURING THE FUTURE

Discussion

What are some common cybersecurity threats?
(Potential for an attack)

Common Threats

- People
 - Mistakes
 - Lack of knowledge/training
- Out of date software/hardware
- Lack of basic security
- Misconfiguration

Discussion

What are some common cyber attacks?

Common Cybersecurity Attacks

- Malware
- Ransomware
- Bots
- Social Engineering
- Phishing
- Man-in-the-Middle
- Shoulder Surfing