



CyberCitadel: Cybersecurity Training for Middle/High School Teachers

July 25 – 29, 2016

The Citadel

Daniel Library 3rd Floor

Schedule

Day 1 Monday July 25th

Daniel Library 3rd Floor (Museum Reading Room)

Time	Agenda Item	Presenter
9:00 am	Welcome Address	Dr. Shankar Banik
9:10 am	Opening Remarks	Dr. Connie Book
9:15 am	Overview of GenCyber Camp at The Citadel	Dr. Shankar Banik, Dr. Jennifer Albert
9:30 am	Cybersecurity Programs at The Citadel	Dr. Shankar Banik
10 am – 12 pm	Fundamental Concepts of Cybersecurity. CIA of Cybersecurity – Confidentiality, Integrity, Availability. Common Vulnerabilities, Social Engineering Attacks, Online Security.	Dr. Shankar Banik
12 pm – 1 pm	Lunch	
1 pm – 4 pm	Introduction to First Principles of Security, Case Scenarios of Cybersecurity, Cybersafety and Cyberethics.	Dr. Shankar Banik

Day 2 Tuesday July 26th

Daniel Library 3rd Floor (Museum Reading Room)

Time	Agenda Item	Presenter
9:00 am – 12:00 pm	First principle of Security - <i>domain separation, process isolation, resource encapsulation and least privilege</i> , Introduction to operating systems, Basic concepts of hardening.	Dr. George Rudolph
12:00 pm – 1:00 pm	Lunch	
1:00 pm – 4:00 pm	User account management, Access controls, Password policy configurations, Installing updates and patches, Removing unnecessary components, Backup and restoring data, and Vulnerability scanning for Windows and Linux.	Dr. George Rudolph

Day 3 Wednesday July 27th

Daniel Library 3rd Floor (Museum Reading Room)

Time	Agenda Item	Presenter
9:00 am – 12:00 pm	Introduction to programming, Software vulnerability and poor programming practices, Secure development lifecycle model (SDLC), First principles of security – <i>modularity, simplicity, and abstraction.</i>	Dr. George Rudolph
12:00 pm – 1:00 pm	Lunch	
1:00 pm – 4:00 pm	Writing example programs and analyzing their security implications. Addressing input validations, integer errors, and buffer overflow. Using Security Injection Modules developed at Towson University.	Dr. George Rudolph

Day 4 Thursday July 28th

Daniel Library 3rd Floor (Museum Reading Room)

Time	Agenda Item	Presenter
9:00 am – 12:00 pm	Working in groups to develop course units and lesson plan using the modules from Days 1, 2, and 3.	Dr. Jennifer Albert
12:00 pm – 1:00 pm	Lunch	
1:00 pm – 4:00 pm	Team Presentations.	Dr. Jennifer Albert

Day 5 Friday July 29th

Daniel Library 3rd Floor (Museum Reading Room)

Time	Agenda Item	Presenter
9:00 am – 11:00 am	Information on Cyber Defense Competitions.	Mr. Jeff Sweeney, PCDC Mr. Scott Bell, CyberPatriot
11:00 am – 12:00 pm	Concluding Remarks and Distribution of Certificates	

The Citadel GenCyber Team 2016

Shankar Banik, PhD
Program Director

George Rudolph, PhD
Instruction Lead

Jennifer Albert, PhD
Curriculum Development and Assessment Lead

Anthony Zovich
Student Assistant