

Troy High School Course Profile

Course Title: Cybersecurity 101 Honors

Course Prerequisites: Networking Security Essentials Honors

Course Description: Cyber Security Fundamentals Honors is designed to give the student an understanding of the basic concepts behind computer security, evidential process, and handling electronic evidence, including securing and analyzing a computer system, securing and analyzing a network system, working with law enforcement, and information warfare. This class will also give students a survey of Network/Internet security, helping them prepare for the CompTIA Security+ Exam. Topics will cover Authentication, Malicious Code, Web Security, Intrusion Detection, Cryptography, and Biometrics. The class will have lecture and hands-on components.

Students entering this course should already have a mastery of the following concepts and possess the following skills:

- baseline knowledge in computer hardware, software, operating systems
- baseline knowledge in networking.

Workload Expectations for this course (list typical amount of homework, projects, presentations, papers, etc.): Students should expect to get theoretical experience with cybersecurity through a combination of lectures, case studies, guest lectures and field trips. You will be expected to do in-class online research, work together with other students in teams, take detailed notes, and be able to demonstrate mastery by taking written tests.