Cybersecurity

Contact Info:

Teacher: Jeffrey Wile

E-mail: jwile@warwicksd.org

Feel free to contact me if you have any questions. Most of my day is occupied with teaching, so please understand I may not be able to respond immediately, but I will respond as quickly as I can.

About the Course and Course Objective:

The goal of this course is to provide students with a journey of exploration on all things related to cybersecurity. Students will learn the basics of passwords, understand human factors in hacking, and best practices, study cryptography, learn to operate a Linux system, and encounter threats.

Lab Time:

Students will receive plenty of lab time to complete activities in the Cyber Range once they accept the acceptable use of the cyber range. In addition to programming labs, students will have hands-on activities to engage with.

Teaching Philosophy in Programming:

My goal is to get students excited about code. I hope to expose each of you to a whole new world and to appreciate what technology can do for us. In this course, I hope to empower you to use the devices you own and learn to use them to solve problems. I will strive to promote critical thinking, collaboration, communication, and creativity within this course.

Units:

- Foundations & Threats
- Human Factor
- Data Safety & Best Practices
- Cryptography and Linux
- Devices & Networks
- Law & Ethics
- Securing Online Components

Grading Procedures

The course is broken into two marking periods each worth 50% of the overall grade.

Each marking period students will receive grades in several categories at the following weights:

Fundamentals: 25% Experience: 55% Application: 20% (Basic Knowledge) (Cyberrange practice) (Cybersecurity in the world)

All content is cumulative in nature, so all **Late work** is accepted for up to five days as long as the student communicates with the instructor prior to the due date.

General Expectations for Computer Use

- 0) Follow the District's Acceptable Use Policy
- 1) Always sign in as yourself.
- 2) Use the computer for classwork or advanced project work.
- 3) Keep the settings of the machine the way they are.
- 4) Use the Cyber Range as intended.

Students not following the expectations listed above will face the following procedure:

1st Offense: Warning and/or removal of the machine for the day

2nd **Offense:** Removal of the machine for a period of 2 or more days

3rd **Offense:** Removal of the machine for a week

4th **Offense:** Removal of the machine for the remainder of the course Students can move to the 4th offense level even if he or she should receive a 1st offense if the behavior and attitude of the student is disrespectful.

I expect students taking this course to be familiar with these expectations and to adhere to them completely. Failure to follow these expectations will greatly reduce the level of trust for using school laptops.