



# **ILLINOIS VALLEY COMMUNITY COLLEGE**

## **COURSE OUTLINE**

**DIVISION: Workforce Development**

**COURSE: CSC 2223 Cybersecurity Capstone**

Date: Spring 2021

Credit Hours: 3

Prerequisite(s): Consent of CSC Program Coordinator

Delivery Method:  **Lecture**                    **0 Contact Hours** (1 contact = 1 credit hour)  
 **Seminar**                    **0 Contact Hours** (1 contact = 1 credit hour)  
 **Lab**                                **9 Contact Hours** (2-3 contact = 1 credit hour)  
 **Clinical**                    **0 Contact Hours** (3 contact = 1 credit hour)  
 **Online**  
 **Blended**

Offered:  **Fall**     **Spring**     **Summer**

IAI Equivalent –**Only for Transfer Courses**-go to <http://www.itransfer.org>:

### **CATALOG DESCRIPTION:**

This course will give the student the opportunity to apply the knowledge and training obtained in the preceding courses culminating in a capstone project that correlates to the students' field of interest in Cybersecurity. The capstone project may consist of community classes, research, and specific assignments to their field of study. Assignments will consist of research, analysis, written and oral presentations in the field of cybersecurity.

## GENERAL EDUCATION GOALS ADDRESSED

*[See last page for Course Competency/Assessment Methods Matrix.]*

### Upon completion of the course, the student will be able:

*[Choose up to three goals that will be formally assessed in this course.]*

- To apply analytical and problem solving skills to personal, social, and professional issues and situations.
- To communicate successfully, both orally and in writing, to a variety of audiences.
- To construct a critical awareness of and appreciation for diversity.
- To understand and use technology effectively and to understand its impact on the individual and society.
- To develop interpersonal capacity.
- To recognize what it means to act ethically and responsibly as an individual and as a member of society.
- To recognize what it means to develop and maintain a healthy lifestyle in terms of mind, body, and spirit.
- To connect learning to life.

### EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

*[Outcomes related to course specific goals. See last page for more information.]*

#### Upon completion of the course, the student will be able to:

1. Develop techniques and skills common to practice in the cybersecurity field.
2. Apply knowledge, skills, and understanding derived from course content.
3. Assess career competencies and personal traits required of cybersecurity workers.

**Outcome 1** – Upon completion of the course, the student will be able to develop techniques and skills common to practice in the cybersecurity field.

Competency 2.1 – Students will be able to utilize skills of observation, data collection, and reporting and presentation both in oral and written form.

**Outcome 2** – Upon completion of the course, the student will be able to apply knowledge, skills, and understand from the course content.

Competency 1.1 – Students will be able to demonstrate continued development of knowledge and skills needed for the workplace.

**Outcome 3** – Upon completion of this course, the student will be able to assess career competencies and personal traits required of cybersecurity workers.

Competency 3.1 – Students will be able to reflect in their knowledge, skills, and abilities in the cybersecurity field.

Competency 3.2 – Students will be able to assess what knowledge, skills, and abilities they need to continue to build for future in the cybersecurity field.

### MAPPING LEARNING OUTCOMES TO GENERAL EDUCATION GOALS

*[For each of the goals selected above, indicate which outcomes align with the goal.]*

Goals	Outcomes
First Goal	
To apply analytical and problem-solving skills to personal,	Apply knowledge, skills, and understanding derived from course content.

social, and professional issues and situations.	Develop techniques and skills common to practice in the cyber security field.
Second Goal	
To communicate successfully, both orally and in writing, to a variety of audiences.	Students will be able to utilize skills of observation, data collection, and reporting and presentation both in oral and written form.
Third Goal	
To connect learning to life.	Assess career competencies and personal traits required of cyber security workers.

**COURSE TOPICS AND CONTENT REQUIREMENTS:**

The capstone project would be geared toward the particular field of interest in cybersecurity. The capstone would require instructor approval.

The course topics may consist of community education, research, and specific assignments to the student’s field of study. Assignments will consist of research, analysis, written and oral presentations in the field of cybersecurity.

**INSTRUCTIONAL METHODS:**

1. Discussion
2. Required reading assignments
3. Special Projects

**INSTRUCTIONAL MATERIALS:**

1. Internet Research
2. Materials are determined based on Capstone Project

**STUDENT REQUIREMENTS AND METHODS OF EVALUATION:**

1. Quality and completeness of documentation in given assignments
2. Number of resources used for project
3. Oral Presentation
4. Completion of Assignments within Project
5. Students are accountable for the equivalent of 135 hours of project-based learning. This is 9 contact hours over the 15-week semester.

- A= 90-100
- B= 80-89
- C= 70-79
- D= 60-69
- F= 0-59

**OTHER REFERENCES**