

SYLLABUS
PART I
EDISON STATE COMMUNITY COLLEGE
CYB 237S SYSTEM VULNERABILITIES AND SECURITY
3 CREDIT HOURS

COURSE DESCRIPTION

Advanced course for network, computer, and information security specialists that analyzes the various methodologies used to attack networked systems. Will include the concepts, principles, and techniques used in network attacks that disable systems as well as the use of the techniques and tools to assess vulnerabilities and how to properly secure the systems. Prerequisite: CYB 236S. Lab fee.

COURSE GOALS

The student will:

Bloom's Level		Program Outcomes
1	1. Examine the methodologies and tools used to disable and attack systems.	1, 3, 4, 5, 6, 8
2	2. Explain the concepts, principles, and techniques used to attack and disable network based computer information systems.	3, 4, 5, 6, 7, 8
5	3. Apply the various techniques and tools to assess network, computer, and information system vulnerabilities.	3, 4, 5, 6, 7, 8
5	4. Develop plans to implement security measures required and demonstrate how to properly secure systems.	1, 3, 4, 5, 6, 7, 8

CORE VALUES

The Core Values are a set of principles that guide in creating educational programs and environments at Edison State. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE

1. Methodologies, concepts, principles, and techniques used to disable networked systems
2. Methodologies, concepts, principles, and techniques used to attack networked systems
3. Tools commonly used to disable, violate, or penetrate networked computer information systems
4. Proper ethical use of the tools for penetration and vulnerability assessment
5. Plan development for securing assessed vulnerabilities