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. Criminal record background check required.
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. Demonstrate by applying 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 the 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