STATE UNIVERSITY OF NEW YORK COLLEGE OF TECHNOLOGY CANTON, NEW YORK



MASTER SYLLABUS

CITA 354 - CYBER INCIDENT RESPONSE AND DISASTER RECOVERY

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> CANINO SCHOOL OF ENGINEERING TECHNOLOGY DECISION SYSTEMS FALL 2018

A. TITLE: CYBER INCIDENT RESPONSE AND DISASTER RECOVERY

B. COURSE NUMBER: CITA 354

C. CREDIT HOURS: (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)

Credit Hours: 3 # Lecture Hours: 3 per week # Lab Hours: per week Other: per week

Course Length: 15 Weeks

D. <u>WRITING INTENSIVE COURSE</u>: No

E. <u>GER CATEGORY</u>: None

F. <u>SEMESTER(S) OFFERED</u>: Fall

G. <u>COURSE DESCRIPTION</u>: This course presents methods to identify vulnerabilities within computer networks and the countermeasures that mitigate risks and damage. It covers market-leading content on contingency planning, effective techniques that minimize downtime in an emergency, and ways to curb losses after a breach in case of a network intrusion.

H. <u>PRE-REQUISITES/CO-REQUISITES</u>:

- a. Pre-requisite(s): CITA 250 Information Security
- b. Co-requisite(s): none
- c. Pre- or co-requisite(s): none

I. <u>STUDENT LEARNING OUTCOMES</u>:

By the end of this course, the student will be able to:

Course Student	<u>PSLO</u>	<u>ISLO</u>
Learning Outcome		
<u>[SLO]</u>		
a. Specify fundamental	3. Use a variety of computer	5
concepts and	hardware and software and other	
components of	technological tools appropriate and	
incident response and	necessary for the performance of	
disaster recovery	tasks	
b. Summarize and	5. Analyze and resolve	2[CA]
compare various	Cybersecurity problems through the	5
methodologies in	application of systematic	
incident response and	approaches, and complete all work in	
disaster recovery	compliance with relevant policies,	
	practices, processes, and procedures	
c. Recommend	5. Analyze and resolve	2[CA,
incident response and	Cybersecurity problems through the	PS]
disaster recovery	application of systematic	5
solutions to specific	approaches, and complete all work in	
electronic system	compliance with relevant policies,	
implementations	practices, processes, and procedures	

d. Exhibit example of	6. Adapt to new situations and	5
most current	demands by applying and/or	
developments in	updating his/her knowledge and	
incident response and	skills	
disaster recovery		

J. <u>APPLIED LEARNING COMPONENT:</u>

Yes X No

- Classroom/Lab
- K. <u>TEXTS:</u> None

L. <u>REFERENCES</u>: Various online resource such as SUNY Canton Library Books24x7 ITPro Book Database

M. <u>EQUIPMENT</u>: Computer lab classroom with virtual machine software installed

N. <u>GRADING METHOD</u>: A-F

O. <u>SUGGESTED MEASUREMENT CRITERIA/METHODS</u>:

- Exams
- Quizzes
- Participation
- Interactive lecture/lab

P. <u>DETAILED COURSE OUTLINE</u>:

I. Introduction to Cyber Incident Response and Recovery

- A. Incident Response.
- B. Incident Recovery.
- II. Contingency Planning
 - A. Planning for Organizational Readiness
 - B. Data Protection Strategies for IR/DR/BC.
 - C. Incident Response Planning.
 - D. Computer Incident Response Teams.

III. Cyber Incident Response and Recovery Implementation

- A. Incident Detection and Plan Activation.
- B. Incident Response.
- C. Incident Response Recovery and Preventative Maintenance.
- D. Incident Response Forensics and eDiscovery.
- E. Incident Recovery: Preparation and Implementation.
- F. Business Continuity Planning and Implementation.
- G. Crisis Management and Human Factors.

IV. Other Topics: As Defined by the Instructor (The topics on most recent Incident Response and Disaster Recovery developments are strongly recommended.)

Q. LABORATORY OUTLINE: N/A