Executive Masters in Crisis and Emergency Management

ECEM 710 Crisis and Emergency Management

Faculty:

Office Hours: Tuesdays 10:00 AM-1:00 PM EDT and Thursdays 2:00-5:00 PM EDT

Course Description:

Students will learn to communicate technical and non-technical aspects of cybersecurity to employees, upper management and executives. Strategies addressing the risk, mitigation, prevention, response and recovery of a cybersecurity incident will be examined to include future trends in the field.

Course Objectives:

- Develop crisis and emergency management plans that define and prepare for potential cybersecurity threats and attacks.
- Formulate mitigation and response procedures in a cybersecurity crisis.
- Identify recovery strategies for mission essential functions and time critical tasks.
- Prepare a crisis communication plan with defined responsibilities for personnel both directly and indirectly impacted by the event.

Grade Determination:

100 points	Discussion Questions	Ten discussions questions (ten points each) posted to Webcampus requiring research, reading and response.
100 points	Incident Tracking	Recording of daily and weekly incidents of cybersecurity attacks to include responses, recovery and mitigation efforts.
100 points	MidTerm Exam	An essay exam of ten questions (ten points each) covering all required reading assigned to date
100 points	Incident Timeline	Design of a cybersecurity timeline that illustrates an event(s) from onset to remediation.
100 points	Final Exam	An essay exam of five questions (twenty points each) on mitigation/risk, preparation, response, recovery and communication in a cybersecurity incident.

Grading Scale

A =500-450 points
B+ =449-435 points
B =434-400 points
C+ =339-385 points
C =384-350 points
D =349-300 points
F =less than 299 points

Required Reading

Cybersecurity Protecting Critical Infrastructures from Cyber Attack and Cyber Warfare,
Thomas A. Johnson, Ed., ISBN: 9781482239225

Supplement Materials

A listing of journals and websites can be found on WebCampus. These lists are evolving and
will be added to throughout the semester.

Course Schedule

Module One – Introduction
August 28-September 2
- Review Syllabus
- Read Chapter 1 Historical Reference Points in the Computer Industry
- Discussion Question (Due: September 3)

Module Two – Defining Cybersecurity
September 4-9
- Read Chapter 5 Cybersecurity: A Primer of U.S. and International Legal Aspects
- Discussion Question (Due: September 10)

Module Three – U.S. Computer Emergency Readiness Team
September 11-16
- Explore the www.us-cert.gov website and subscribe to security alerts
- Begin Incident Tracking Assignment

Module Four – NIST
September 18-23
- Review Framework for Improving Critical Infrastructure Cybersecurity
- Read Roadmap for Improving Critical Infrastructure Cybersecurity

Module Five – Role of Government
September 25-30
- Read Chapter 2 Critical Infrastructures, Key Assets: A Target-Rich Environment
- Discussion Question (Due: October 1)

Module Six – Risks and Mitigation
  October 2-7
- Read Article: Multifirm models of cybersecurity investment competition vs. cooperation and network vulnerability
- Read Article: A survey of emerging threats in cybersecurity
- Discussion Question (Due: October 8)

Module Seven – Preparation
  October 9-14
- Read Article: A quick perspective on the current state in cybersecurity
- Read Article: Evaluating the readiness of cyber first responders responsible for infrastructure protection
- Discussion Question (Due: October 15)

Module Eight – Reports and Exams
  October 16-21
- Complete Incident Tracking Assignment (Due: October 22)
- Submit Midterm (Due: October 22)

Module Nine – Cyber Warfare
  October 23-28
- Read Chapter 4 Cyber Intelligence, Cyber Conflicts and Cyber Warfare
- Discussion Question (Due: October 29)

Module Ten – Response
  October 30-November 4
- Review NIST Computer Security Incident Handling Guide
- Review National Cyber Incident Response Plan

Module Eleven – Recovery
  November 6-11
- Read Chapter 6 Economic Cost of Cybersecurity
- Discussion Question (Due: November 12)

Module Twelve – Communication
  November 13-18
- Read Article: 'Cyber Gurus": A rhetorical analysis of the language of cybersecurity
- Read Article: Gender differences and employees' cybersecurity behaviors
- Discussion Question (Due: November 19)

Module Thirteen – The Future
  November 20-25

- Read Chapter 7 Cybersecurity Threat Landscape and Future Trends
- Discussion Question (Due November 26)

Module Fourteen – Incident Timeline
  November 27-December 2
- Review Timeline Samples
- Start Incident Timeline Assignment

Module Fifteen –
  December 4-9
- Submit Incident Timeline
- Discussion Question (Due: December 10)

Module Sixteen – Final
  December 11-16
- Submit Final Exam
- Complete course surveys and evaluations

Additional Course and University Policies
Academic Misconduct—Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution.
An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at: https://www.unlv.edu/studentconduct/student-conduct.

Copyright—The University requires all members of the University Community to familiarize themselves with and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: http://www.unlv.edu/provost/copyright.

Disability Resource Center (DRC)—The UNLV Disability Resource Center (SSC-A 143, http://drc.unlv.edu/, 702-895-0866) provides resources for students with disabilities. If

you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

Religious Holidays Policy—Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: http://catalog.unlv.edu/content.php?catoid=6&navoid=531.

Transparency in Learning and Teaching—The University encourages application of the transparency method of constructing assignments for student success. Please see these two links for further information:

https://www.unlv.edu/provost/teachingandlearning

https://www.unlv.edu/provost/transparency

Incomplete Grades—The grade of I—Incomplete—can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student's control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

Library—Students may consult with a librarian on research needs. For this class, the subject librarian is   https://www.library.unlv.edu/contact/librarians_by_subject. UNLV Libraries provides resources to support   students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful

post-college life. Access library resources and ask questions at https://www.library.unlv.edu/.

Tutoring and Coaching—The Academic Success Center (ASC) provides tutoring, academic success coaching and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, visit http://www.unlv.edu/asc or call 702-895-3177. The ASC building is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of the SSC (ASC Coaching Spot). Drop-in tutoring is located on the second floor of the Lied Library and College of Engineering TEB second floor.

UNLV Writing Center—One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: http://writingcenter.unlv.edu/.

Rebelmail—By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. Emailing within WebCampus is acceptable.

Final Examinations—The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: http://www.unlv.edu/registrar/calendars.

Any other class specific information—(e.g., absences, make-up exams, status reporting, extra credit policies, plagiarism/cheating consequences, policy on electronic devices, specialized department or college tutoring programs, bringing children to class, policy on recording classroom lectures, etc.)

This syllabus is a guide, not a contract. It may be revised if it seems to be in the best interest of the class to do so. Students will be notified promptly of any revisions.