SYLLABUS

Course: Impacts of Natural & Man-made Disasters on Buildings

COURSE & SECTION: FES6836

CREDIT HOURS: 3

FALL 2022

** ON-LINE

** THERE WILL BE TIMES SCHEDULED FOR ON-LINE MEETINGS.

INSTRUCTOR: Dr. *Christopher M Reynolds, Ed.D, MEMS, CFO, EFO*

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   Bio for Christopher M Reynolds, Ed.D., MEMS, EFO, CFO

Chris Reynolds, CEM has over 35 years of higher education experience in both the traditional and online classroom. He serves on two emergency management boards of directors and is involved with the International Association of Emergency Managers. He is also a recently retired Division Fire Chief and Emergency Manager with over 33 years of experience in a large metro-county fire-rescue organization. His emergency management experience includes the Oklahoma City Bombing, Hurricanes Andrew, Elena, Opal, and Katrina; Haitian Earthquake, and the Deepwater Horizon Gulf Oil Spill. Dr. Reynolds is a certified emergency manager (CEM) through the International Association of Emergency Managers (IAEM), a graduate of the National Fire Academy Executive Fire Officer Program (EFO), and is a Chief Fire Officer Designee (CFO) through the International Association of Fire Chiefs (IAFC). Additionally, he holds the Military Emergency Management Senior Specialist (MEMS) badge. He is also a registered Paramedic in the State of Florida.

Dr. Reynolds also recently retired after serving as a Lieutenant Colonel in the United States Air Force Reserve stationed at Tyndall Air Force Base, Florida as an Emergency Preparedness Liaison Officer (EPLO) assigned to Air Force Northern Command, 1st Air Force. Air Force Northern Command is the Air Force component of the North American Aerospace Defense Command and United States Northern Command (NORAD/NORTHCOM), responsible for all military support to civilian authorities in times of disaster. His prior assignment was as an aeromedical evacuation operations officer assigned to MacDill Air Force Base, Florida. His team was activated under the Presidential Partial Mobilization order issued shortly after September 11th attacks and deployed to the Afghanistan / Pakistan Theater in support of Operation ENDURING FREEDOM. Chris served as the OIC of an Aeromedical Evacuation Liaison Team at two forward operating bases and was responsible for tactical evacuation

of coalition and US casualties. They were the only Aeromedical evacuation capability in the immediate area and directly supported combat search and rescue operations.

He is a graduate of the United States Air Force Officer Training School and the Air Force Air Command and Staff College.

OFFICE HOURS: *I am in the office Mon – Fri hours vary depending on travel and meetings; however, I am usually available 8am – 3 pm. You can email me any time.*

**COURSE WEBSITE: *http://lss.at.ufl.edu*

** COURSE COMMUNICATIONS: There is a General Discussion tab that can be used, or send me an email through the course email. *Urgent messages can be sent to my ufl.edu email.*

REQUIRED TEXT: No text. Web resources, including congressional reports, journal articles, case studies, and peer-reviewed journals will be used.

You will also need a webcam and microphone.

**ADDITIONAL RESOURCES: *Use resources on the course site under the Resource tab*

NOTE: To check the truthfulness of contemporary statements, etc. go to this site from the University of Pennsylvania: http://www.factcheck.org/

http://www.uwsp.edu/psych/apa4b.htm

http://owl.english.purdue.edu/owl/

http://web.uflib.ufl.edu/ct/dltop.html

http://www.rrc.usf.edu/index.html

http://thesaurus.reference.com/

http://www.distancelearning.ufl.edu/students/

http://www.usfa.fema.gov/training/lrc/

**COURSE DESCRIPTION: Impacts of natural and man-made disasters, including terrorist attacks, on buildings. The class will also address CIKR - Private/Public Partnerships - Critical Infrastructure - Community Risk Assessment - Risk Management Practices - Hazard Mitigation - Natural Disaster - Critical Infrastructure Protection - National Infrastructure Protection Plan - Mitigating Risk & Sustainability

**PREREQUISITE KNOWLEDGE AND SKILLS: Students participating in, and completing, this course are expected to have the skill and ability to conduct research using a variety of resources, assimilate the information contained in those resources, and make appropriate inferences. Students must also have the skills to effectively communicate through writing assignments and presentations. In ALL of your writing assignments grammar and content will be considered when grades are assigned.

PURPOSE OF COURSE: To provide students skills that will enable them to become proficient in assessing the impact of disaster or terror attacks on communities.

COURSE GOALS AND/OR OBJECTIVES: *By the end of this course, students will:*

  a. Analyze the nature, origins and limitations of risk.
  b. Critique and interpret the NIPP as it relates to CIKR.
  c. Compare & contrast local, state, and federal mitigation activities.
  d. Analyze and interpret data that will help them assess risks from disasters.
  e. Assess the roles of voluntary and government organizations in disaster.
  f. Determine the effectiveness sustainability.
  g. Interpret the known natural hazard threats.
  h. Assess the importance of critical infrastructure protection.
  i. Determine the state of current disaster affairs.
  j. Analyze the Heritage Foundation study.
  k. Interpret disaster after-action recommendations.
  l. Appraise the cycles of recovery, and the physical aspects of recovery.
  m. Determine whether current mitigation practices will be effective in the future.
  n. Assess the future of disaster management practices.
  o. Analyze current case studies and determine their impacts in 10 years.
  p. Formulate a comprehensive disaster response strategy.

**TEACHING PHILOSOPHY: *I am looking for students to demonstrate a working knowledge of the subject. You need to be creative when you complete your assignments but maintain a professional appearance of your work. Your work needs to be complete and in such a manner that someone can pick up your document and understand what you are trying to convey. And most of all your work needs to be supported with research and cited in properly in APA format.*

**INSTRUCTIONAL METHODS: *The course is designed for individual and group interactivity. It is important to post and respond to discussion questions in the course within the time frame allotted. This provides a learning environment by networking with other students in the course. The assignments are individual base to give you the opportunity to do a variety of activities, in many cases, similar to what you will be doing in role as a leader in the profession.*

COURSE POLICIES:

ATTENDANCE POLICY: *The course is designed in module format. You should check the site at least once a week. You are required to complete the assignments including discussion questions within the time period designated on the module. There will be meetings set up throughout the course.*

**QUIZ/EXAM POLICY: *There is a final project for this course.*

MAKE-UP POLICY: *You must contact me if you are going to be late on any assignment and receive credit. Any late assignments will receive a 10% grade reduction for each week it is late.*

**ASSIGNMENT POLICY: *All assignments have a due date. Please be sure to check the date and time it is due in each module.*

**LATE ASSIGNMENT & DISCUSSION POLICY:

* *Assignments 48 hours late will receive a 10% deduction in their grade.*
  Assignments more than 48 hours but less than 30 days late will receive a 20% deduction in their grade.

* *Assignments more than 30 days late but submitted during the semester will receive a 50% deduction in their grade.*

* *Discussions more than 48 hours late will receive a 25% deduction in their grade. Discussions more than 48 hours later will receive a 50% deduction in their grade.*

**COURSE TECHNOLOGY: *Class meetings will require a web camera and mic/audio. If you are not able to use a web camera you will need to at least provide audio/mic, you can call in on a phone also.*

UF POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT: Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at http://www.dso.ufl.edu/students.php.

**NETIQUETTE: COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. [Describe what is expected and what will occur as a result of improper behavior] http://teach.ufl.edu/docs/NetiquetteGuideforOnlineCourses.pdf

Course Evaluations: Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/.

GETTING HELP:

For issues with technical difficulties for E-learning in Sakai, please contact the UF Help Desk at:

- Learning-support@ufl.edu

- (352) 392-HELP - select option 2

- https://lss.at.ufl.edu/help.shtml

** Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

Other resources are available at http://www.distance.ufl.edu/getting-help for:

- Counseling and Wellness resources

- Disability resources

- Resources for handling student concerns and complaints

- Library Help Desk support

Should you have any complaints with your experience in this course please visit http://www.distance.ufl.edu/student-complaints to submit a complaint.

Module 1 Weeks 1 & 2	**Required Readings:** • NIPP • Emergency_Services_Sector_and_CIKR_Private_Public_Partnership • Public-Private Partnership: Goals and Recommendations for Moving Forward Critical Infrastructure and Key Assets: Definition and Identification • Homeland Security Intelligence Guide for Fire Chiefs • Presidential Policy Directive-8: National Preparedness **Video:** • Why I am going to attack your infrastructure • Presidential Policy Directive 8 **Discussion Forum Assignment**: 1. After reading Chapter 2: "How to Obtain Information: Partnerships, Resources and Alerts" in the Homeland Security Intelligence Guide for Fire Chiefs, describe Fusion Centers and the Joint Terrorism Task Force. Do you see these two as viable intelligences gathering mediums? How can they assist a fire chief or emergency manager in effectively dealing with a terror threat or natural disaster? 2. Provide a substantive response to a fellow student colleague. Don't just agree or disagree--provide a substantive response or in support or non-support.

Module 2	**Required Readings:**
Weeks 3 & 4	- NIPP - Emergency Services Sector and CIKR Private Public Partnership - CRITICAL INFRASTRUCTURE PROTECTION: Update to National Infrastructure Protection Plan Includes Increased Emphasis on Risk Management and Resilience - GAO Critical Infrastructure Protection Update to National Infrastructure Protection Plan **Required Video:** - Beyond the Storms: Strengthening Homeland Security and Disaster Management to Achieve Resilience - Recovering and Building Resilience After Disasters **Paper Assignment:** - Write a 5-7 page paper (not including title page and bibliography) discussing the current state of disaster preparedness affairs in the United States. In your discussion, be sure to address risk assessment, prioritization process, risk management, measuring effectiveness, and the public/private partnership opportunities. - Be sure to follow APA formatting.
	Required Readings: - Mitigating Earthquake Risks to Schools Four Case Studies - Natural Hazards and Sustainability for Residential Buildings

Module 3 Weeks 5 & 6	• The Impact of Natural and Manmade Disasters on Household Welfare **Required Video:** • Seconds From Disaster - Fukushima [Documentary] – Nuclear Advisor • Biological Warfare and Terrorism **Discussion Forum Assignment**: 1. After reading "Natural Hazards and Sustainability For Residential Buildings", refer to Section 4, "Sustainability and Natural Hazards" and briefly describe the "Seismic Hazard", "Wind Hazard", "Flood Hazard", and "Wildfire Hazard." Which of the four do you believe is the most critical? Be sure to explain why. 2. Provide a substantive response to a fellow student colleague. Don't just agree or disagree--provide a substantive response or in support or non-support.
Module 4 Weeks 7 & 8	**Required Readings:** • Station Night Club Fire • Bangladesh Apparel Factory Collapse Background in Brief • How to Fix Critical Infrastructure Protection Plans A Guide for Congress (Heritage Foundation) • Homeland Security 4.0 Overcoming Centralization Complacency and Politics (Heritage Foundation) **Required Video:** • Disaster Preparedness: Natural Disasters • Future Challenges: Dealing with Disasters

	Discussion Forum Assignment: 1. After reading "Homeland Security 4.0 Overcoming Centralization, Complacency, and Politics," refer to Part II: Combating Complacency (p.17-24) and summarize Recommendations 19 through 27. Which of these recommendations do you see as the most critical? Be sure to explain why. 2. Provide a substantive response to a fellow student colleague. Don't just agree or disagree--provide a substantive response or in support or non-support.
Module 5 Weeks 9 & 10	**Required Readings**: • Government Preparedness and Response to a Terrorist Attack Using WMD Congressional Hearing Transcript • FEMA National Strategy Recommendations Future Disaster Preparedness • GAO Testimony Disaster Resilience Actions Underway **Uploaded Paper Assignment:** Write a 5-7-page paper (not including title page and bibliography) discussing the common elements with the Station Nightclub Fire and Bangladesh Apparel Factory Collapse. In your discussion, be sure to address particular life-safety hazards and elements that led the number of fatalities being high. Additionally, address whether protection plans would have mitigated these incidents.

Module 6 Weeks 11 & 12	**Required Readings:** • CSIS-Pennington Family Foundation: Series on Community Resilience • Homeland Security Intelligence Guide for Fire Chiefs • FEMA National Strategy Recommendations Future Disaster Preparedness • GAO Testimony Disaster Resilience Actions Underway • Damage Study and Future Direction for Structural Design Following the Tuscaloosa Tornado of 2011 **Required Video**: • Top Ten Natural Disasters **Discussion Forum Assignment:** 1. After reading "CSIS-Pennington Family Foundation Series on Community Resilience", briefly summarize the legislative branch actions on p.6 of the report. Which action do you believe is the most significant? Be sure explain why. 2. Provide a substantive reply to a fellow student. Do not simply agree or disagree—provide a compelling argument to substantiate your viewpoint.
Module 7 Weeks 13 & 14	**Upload Research Paper** 1. Students are required to conduct a case study or research paper focusing on any aspect of disaster and emergency management. Research must be a minimum of ten (10) double spaced pages. This does not include your cover page or reference page. You may use the APA standard for citing your

	work. As with all writing assignments, punctuation, spelling and proper grammar are expected.
	2. All papers must be double-spaced with title page and reference list, following the APA format. Here is a link to the University of Florida Writing Center (Links to an external site.), which is an excellent resource.
Module 8 -Week 15	**Discussion Forum Assignment:** 1. Please take a few moments and post your thoughts on the course. Was it value-added and did it meet your expectations? What recommendations do you have for improvement? 2. Provide a substantive response to a fellow student colleague. Don't just agree or disagree--provide a substantive response or in support or non-support.

TENTATIVE COURSE SCHEDULE: GRADING POLICIES:

The grade is based on a point system. You divide the total number of earned points into the total amount of points available to determine your grade.

Module 2 Paper	100
Module 5 Paper	100
Final Paper	200
6 Forum Postings (@ 50 pts each)	300
Total	700 Points

GRADING SCALE

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

A = 93.0 to 100%   C = 73.0 to 76.9
A- = 90.0 to 92.9   C- = 70.0 to 72.9
B+ = 87.0 to 89.9   D+ = 67.0 to 69.9
B = 83.0 to 86.9   D = 63.0 to 66.9
B- = 80.0 to 82.9   D- = 60.0 to 62.9
C+ = 77.0 to 79.9   F = below 60

EVALUATION PROCESS:

"Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at https://gatorevals.aa.ufl.edu/students/. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via https://ufl.bluera.com/ufl/. Summaries of course evaluation results are available to students at https://gatorevals.aa.ufl.edu/public-results/."

Reynolds (Aug. 15)