

SYLLABUS

Course: Hazard Mitigation & Preparation

Course & Section: FES 6726

Credit Hours: 3

Session: Fall 2018

** On-line

Instructor: Dr. Chris Reynolds

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Bio for Dr. Chris Reynolds, CEM, EFO, MEMS, CFO (Lt.Col., USAF, RET)

Hello everyone. My name is Dr. Chris Reynolds and I am your professor for this class. I retired after 32 years as a Deputy Chief/Shift Commander with Hillsborough County Fire Rescue (Tampa, FL). I am a board certified emergency manager (CEM) and hold a doctorate in education. I am also a Chief Fire Designee (CFO) through the International Association of Fire Chiefs (IAFC) and a graduate of the Executive Fire Officer (EFO) program at the National Emergency Training Center in Emmitsburg, Maryland. I also hold the Military Emergency Manager Specialist Master Badge.

I also retired from the United States Air Force Reserve as a Lieutenant Colonel, finishing up my 21 year Air Force career as an Emergency Preparedness Liaison Officer (EPLO) assigned to the Defense Support of Civilian Authorities (DSCA) Command Cell, 1st Air Force (Air Forces Northern), Tyndall Air Force Base, Fla. Air Force EPLOs support the designated combatant commander and lead federal agencies to assist in coordinating military support to local, state and federal agencies involved in domestic incident management. I was deployed to the Oklahoma City Bombing in 1995, assisting the FEMA Incident Support Team (IST) on site. Again, in 1995 I was deployed to the Florida State Emergency Operations Center as a part of the State Emergency Response Team (SERT) and coordinated all firefighting and urban search and rescue operations during Hurricane Opal.

In my military role, I deployed to New Orleans in the aftermath of Hurricane Katrina as the officer in command of an aeromedical evacuation liaison team (AELT) that was a part of Joint Task Force (JTF) Katrina and coordinated joint civilian/military airlift of over 20,000 evacuee's and 4,500 casualties. I had the honor and privilege of deploying with a GREAT team of personnel shortly after the September 11th attacks. My Team and I were among the first mobilized in the aftermath of the

September 11th attacks in 2001 and deployed as the commanding officer of an Aeromedical Evacuation Team to two classified forward locations in the Afghanistan/Pakistan area. My Team coordinated the medical evacuation of US and coalition combat casualties and directly supported combat search and rescue operations. Our Team was recognized by the Department of Defense and awarded the valor "V" device for our efforts. In 1995, I deployed to Haiti during OPERATION UPHOLD DEMOCRACY and coordinated rotary lift-aeromedical evacuation between Port A' Prince and the USNS Comfort. Most recently, I was deployed during the Haitian Earthquake and coordinated all casualty movement from the Haiti AOR to South Florida air hubs for transport to US Trauma Centers.

**Course Website: <http://lss.at.ufl.edu>

Text:

Schwab, A., K., Eschelbach, K., & David J. Brower (2007). Hazard Mitigation Preparedness (1st Ed). Wiley & Sons. New Jersey. ISBN: 978-0471790198

***Additional Resources: Use resources on the course site under the Resource tab*

****Course Description:** This course will introduce the major principles involved in preparing for and mitigating the impact of hazards in the context of emergency / disaster management. Topics include: key features and characteristics of various hazards, both natural and manmade, the risk assessment process that is used to determine community vulnerability, and in-depth discussion of hazard mitigation planning.

****Course objectives:**

1. Describe the difference between hazards and disasters.
2. Identify steps in the risk assessment process.
3. Analyze local and federal emergency management strategies for mitigating hazards.
4. Recognize tools and techniques for hazard mitigation planning.
5. Develop a HVA Mitigation Analysis.

****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 emergency services 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. *Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.*

****Quiz/Exam Policy:** There is a final paper for this course. There are no exams or quizzes.

Make-up Policy: *You must contact me if you are going to be late on any assignment to receive credit.*

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

****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's honesty policy**

UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obliged to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor of in this class.

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>

Getting Help:

For issues with technical difficulties for E-learning in Canvas, 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

Module	Weeks	Assignments
1	1 & 2	<p><u>Objectives:</u></p> <ol style="list-style-type: none"> 1. Differentiate hazards and disasters. 2. Assess Meteorological & Hydrological Hazards 3. Evaluate the role of FEMA in disaster mitigation.. <p><u>Readings for Week 1 & 2</u></p> <ul style="list-style-type: none"> o Hazard Mitigation & Preparedness Text. Ch. 1 & 2 o (CRS) FEMA Disaster Declaration Process: A Primer o (CRS) Federal Emergency Management: A Brief Introduction o Disaster Types and Impacts o OECD Policy Brief Natural Disasters and Vulnerability <p><u>Video:</u></p> <ul style="list-style-type: none"> o Disaster Preparedness Natural Disasters o Disaster Documentary: Natural Disasters, Hurricanes, Tornadoes, Flood, & Earthquakes <p><u>Module 1: Paper Assignment:</u></p> <ol style="list-style-type: none"> 1. Prepare a 5 page (not including title page and bibliography) Reaction Paper following the format provided addressing the Module 1 readings. Be sure that you address the differences between a hazard and disaster. Also address the role of FEMA in natural disasters and the disaster declaration process.

2	3 & 4	<p><u>Objectives:</u></p> <ol style="list-style-type: none"> 1. Differentiate hazards and disasters. 2. Assess earthquake Hazards 3. Evaluate the role of FEMA in disaster mitigation. <p><u>Readings for Week 3 & 4:</u></p> <ul style="list-style-type: none"> o Hazard Mitigation & Preparedness Text. Ch. 3 & 4 o (CRS) Earthquakes Risk-Detection-Warning and Research o Government Preparedness and Response to a Terrorist Attack Using WMD Congressional Hearing Transcript o Coleman-(2006)-Journal of Contingencies and Crisis Management <p><u>Video:</u></p> <ul style="list-style-type: none"> o Countdown to Catastrophe- Earthquake in North America o Congressional Hearing: Are We Prepared? Assessing Earthquake Risk Reduction_ <p><u>Module 2: Forum Assignment:</u></p> <ol style="list-style-type: none"> 1. After completing the Module 2 reading assignments and after viewing the video presentations, discuss the earthquake and man-made hazard. In your discussion, discuss the National Earthquake Hazards Reduction Program (NEHRP).
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3	5 & 6	<p><u>Objectives:</u></p> <ol style="list-style-type: none">1. Differentiate hazard management and the role of the federal government.2. Assess the National Mitigation Framework.3. Evaluate incorporating disaster resilience into disaster recovery. <p><u>Readings for Week 5 & 6:</u></p> <ul style="list-style-type: none">o Hazard Mitigation & Preparedness Text. Ch. 5 & 6o National Mitigation Frameworko Incorporating Disaster Resilience into Disaster Recoveryo FEMA Hazard Mitigation Assistance Guidance: Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program and Flood Assistance Program <p><u>Video:</u></p> <ul style="list-style-type: none">o Hazard Mitigation & How it Can Help Youo FEMA Disaster Assessment Process <p><u>Module 3: Paper Assignment:</u></p> <ol style="list-style-type: none">1. Prepare a 5 page (not including title page and bibliography) Reaction Paper following the format provided addressing the DHS mitigation strategy, as outlined in the DHS National Mitigation Framework. In your discussion, be sure to address seven (7) Core Capabilities.
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4	7 & 8	<p><u>Objectives:</u></p> <ol style="list-style-type: none">1. Differentiate the types of hazard mitigation assistance.2. Assess the mitigation planning efforts.3. Evaluate pre-disaster mitigation programs. <p><u>Readings for Week 7 & 8:</u></p> <ul style="list-style-type: none">o Hazard Mitigation & Preparedness Text. Ch. 7 & 8o FEMA Hazard Mitigation Assistance Guidance: Hazard Mitigation Grant Program, Pre-Disaster Mitigation Program and Flood Assistance Program -Part VIII. Additional Program Guidance (p.96 - 118)o FEMA Local Mitigation Handbook <p><u>Video:</u></p> <ul style="list-style-type: none">o Rising Skills in Mitigation Communication, Outreach, Educationo FEMA Hazard Mitigation Planning Part 2 <p><u>Module 4: Forum Assignment:</u></p> <ol style="list-style-type: none">1. After completing the Module 4 reading assignments and after viewing the video presentations, discuss the role of the State Hazard Mitigation Officer (SHMO). In your discussion, be sure to address the designation of the SHMO (who appoints?) and the state mitigation team. Please provide substantive responses to the posts of at least TWO of your fellow students.
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5	9 & 10	<p><u>Objectives:</u></p> <ol style="list-style-type: none"> 1. Differentiate the various forms of Community Resilience. 2. Assess continuity planning and management techniques. 3. Evaluate FEMA's Threat and Hazard Identification and Risk Assessment (THIRA) procedures.. <p><u>Readings for Week 9 & 10:</u></p> <ul style="list-style-type: none"> o Hazard Mitigation & Preparedness Text. Ch. 9 & 10 o Measuring Capacities for Community Resilience (2010) o Business Continuity During and After Disaster-Building Resilience through Continuity Planning and Management o FEMA-Threat and Hazard Identification and Risk Assessment Guide-Comprehensive Preparedness Guide <p><u>Video:</u></p> <ul style="list-style-type: none"> o The Secret to Successful Crisis Management in the 21st Century - Melissa Agnes TEDx Talk o Preparing to Participate in a THIRA <p><u>Module 5: Paper Assignment:</u></p> <p>Prepare a 5 page (not including title page and bibliography) Reaction Paper following the format provided addressing the relationship between business continuity planning and overall community resilience. In your discussion, be sure to address the elements of a Business Risk Assessment and the Threat and Hazard Identification and Risk Assessment (THIRA) process.</p>
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6	11 & 12	<p><u>Objectives:</u></p> <ol style="list-style-type: none">1. Differentiate the various forms of disaster resilience.2. Assess reducing risk to natural hazards.3. Evaluate hazard mitigation tools & techniques. <p><u>Readings for Week 11 & 12:</u></p> <ul style="list-style-type: none">o Hazard Mitigation & Preparedness Text. Ch. 11 & 12o GAO Testimony Disaster Resilience Actions Underwayo FEMA) Mitigation Ideas- A Resource for Reducing Risk to Natural Hazards (2013) <p><u>Video:</u></p> <ul style="list-style-type: none">o Federal Disaster Responseo The Difference Disaster Mitigation Makes (FEMA) <p><u>Module 4: Forum Assignment:</u></p> <ol style="list-style-type: none">1. After completing the Module 6 reading assignments and after viewing the video presentation, discuss mitigation strategies for drought, earthquake, flood, and tornado. In your discussion, be sure to address at least three mitigation strategies for each of the four hazards in the previous sentence.
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7	13 & 14	<p><u>Objectives:</u></p> <ol style="list-style-type: none">1. Differentiate hazard exposure and structural vulnerability.2. Assess social vulnerability.3. Evaluate the term culture of prevention. <p><u>Readings for Week 13 & 14:</u></p> <ul style="list-style-type: none">o Hazard Mitigation & Preparedness Text. Ch. 13 & 14o Mitigation Planning-Why Hazard Exposure-Structural Vulnerability and Social Vulnerability Matter (2014)o The Relationship between Socio-Economic Conditions and the Impact of Natural Disasters on Rural and Urbanized Regions Level of Preparedness and Recovery <p><u>Video:</u></p> <ul style="list-style-type: none">o The Insiders- The Politics of Disaster Managemento Can we build disaster resilient communities? Gregory Kopp at TEDx Western U <p><u>Module 7 Paper Assignment:</u></p> <ol style="list-style-type: none">1. Prepare a 5 page (not including title page and bibliography) Reaction Paper following the format provided addressing the Module 7 readings. Be sure that you address the impacts poverty has on disaster mitigation and response.
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8	15	<p><u>Objectives:</u></p> <ol style="list-style-type: none">1. Demonstrate competency in hazard mitigation and preparedness.2. Synthesize what we have covered over the past 15 weeks.3. Elaborate on mitigation techniques and strategies.. <p><u>Readings for Week 13 & 14:</u></p> <ul style="list-style-type: none">o No reading assignment this week. <p><u>Video:</u></p> <ul style="list-style-type: none">o Course Summary Video <p><u>Module 8 Forum Assignment:</u></p> <ol style="list-style-type: none">1. We have extensively covered hazard mitigation and preparedness activities over the past 15 weeks. This is a two-part posting assignment:<ol style="list-style-type: none">a. <i>Discuss YOUR role in hazard mitigation and preparedness in your department, organization, or community.</i>b. <i>Please post your thoughts on the class and any recommendations that you have for improvement.</i>
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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. A grading rubric for the final project is under the Resource Tab on the course.

Assignment	Points or percentage
Paper Assignments (4) – 100 points each discussion	400 points
Forum Discussions (4) – 50 points each assignment	200 points
Total Grade	600 points

See <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> regarding current UF grading policies.

Late Assignments and Discussion Posts

- 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.

Please note that any student have less than 75% of their work complete for the semester cannot earn an “I” contract. If you have 75% of the work complete, you can propose an I contract to the instructor.

It is your responsibility to keep your instructor informed at all times. The instructor does have the right under extenuating circumstances with proper notification to assist the student by extending the above time requirements.

Grading Scale

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

Passing Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-
Grade Points	4.0	3.67	3.33	3.0	2.67	2.33	2.0	1.67	1.33	1.0	.67

Evaluation process:

Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at <https://evaluations.ufl.edu>. Evaluations are typically open during the last two or three

Weeks of the semester, but students will be given specific times when they are open.

Summary results of these assessments are available to students at

<https://evaluations.ufl.edu>.