



**Mel and Enid Zuckerman College of Public Health  
University of Arizona**

**SYLLABUS**

**Public Health Preparedness EHS 489/589  
FALL 2019**

<b>Time:</b>	1:00 PM to 3:50 PM (Tuesdays)
<b>Location:</b>	Drachman Hall A-120
<b>Course Instructors:</b>	Mona Arora, MSPH
<b>Course Communication:</b>	Direct all course related emails to: <a href="mailto:ehs489@email.arizona.edu">ehs489@email.arizona.edu</a>
<b>Office:</b>	Drachman Hall Room A219T/Visits by appointment only
<b>Office Hours:</b>	By appointment only as scheduled via e-mail (Note: Please allow up to 48 hours response time.)

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**Course Information**

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**CATALOG DESCRIPTION**

This course will provide the participants a basic knowledge of public health preparedness and response using an all hazards approach: nuclear, biological, chemical, and natural disaster, and an opportunity to apply this content in a mock critical incident event.

**COURSE DESCRIPTION**

This course is designed to introduce students to the emergency preparedness discipline of public health using course work designed for current public health practitioners. During this course, students can expect to gain proficiency in the National Incident Management System and attain Centers for Disease Control & Prevention (CDC) Emergency Responder Tier Two level credentials (i.e., Certification in FEMA courses ICS 100, 200, 700, and 800). Students will hear from subject matter experts on various topics in relation to public health emergency preparedness and develop a strong foundation in the principles of the discipline. The course is taught using a blended format of both online and in-class sessions.

**COURSE PREREQUISITES**

None. Priority will be given to current public health students.

## **COURSE LEARNING OBJECTIVES**

Students who are engaged in the learning process and successfully complete all course requirement will be able to:

- 1) Acquire a basic knowledge of public health preparedness issues, preparedness and response.
- 2) Gain skills in core public health preparedness competencies.
- 3) Receive incident command system training.
- 4) Recognize the diverse roles of public health professionals and the various members of the public health system.
- 5) Characterize the role of the public health system before, during, and after a public health emergency.
- 6) Understand the ethical challenges faced by responders in public health emergencies.
- 7) Identify and use on-line and other resources to obtain preparedness response information.
- 8) Understand essential elements of critical incident programs, planning, implementation, and evaluation.
- 9) Participate as an evaluator in a mock critical incident event.

## **Undergraduate Learning Domains**

- The history and philosophy of public health as well as its core values, concepts and functions across the globe and in society
- The basic concepts, methods and tools of public health data collection, use and analysis and why evidence-based approaches are an essential part of public health practice
- The concepts of population health, and the basic processes, approaches and interventions that identify and address the major health-related needs and concerns of populations
- The underlying science of human health and disease, including opportunities for promoting and protecting health across the life course
- The socioeconomic, behavioral, biological, environmental and other factors that impact human health and contribute to health disparities
- Basic concepts of public health-specific communication, including technical and professional writing and the use of mass media and electronic technology If the school or program intends to prepare students for a specific credential, the curriculum must also address the areas of instruction required for credential eligibility (eg, CHES).

## **Undergraduate Competencies**

- The ability to communicate public health information, in both oral and written forms, through a variety of media and to diverse audiences.
- The ability to locate, use, evaluate and synthesize public health information.

### **Undergraduate Cross Cutting Areas Addressed:**

- Critical thinking and creativity
- Research methods
- Teamwork and leadership

### **MPH Core Competencies**

- Recognize and classify the major types of chemical, physical and biological exposure agents capable of inducing disease in the public.
- Identify control methods for reducing worker or public exposures to acceptable levels.
- Identify the steps involved in environmental and occupational health research

### **COURSE NOTES/RECOMMENDED TEXTS/READINGS**

Online course materials will be available through D2L. Select course readings will consist of review and completion of online training material developed by the Federal Emergency Management Agency (FEMA), assigned readings and modules.

You are expected to take your own notes in class. Computers, phones, iPads and other electronic device use is not allowed during class unless directed for specific class activities. Class lecture material will be posted on the D2L course page following lecture.

### **COURSE REQUIREMENTS**

In addition to class attendance and participation, students are expected to complete required online material by the assigned dates, submit written assignments and quizzes on time, take exams on the specified dates, and participate in the mock critical incident evaluation. Students will be required to collaborate with assigned group members and present a relevant case study during the semester (additional details will be provided in class). You will be asked to provide a University of Arizona e-mail address unless you have permission from the instructor. Changes and other information about the class will be posted on the D2L course page. It is your responsibility to check Course Announcements online.

Students will be required to complete all course assignments designated during this course.

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### **Course Deliverables**

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#### ***Course Participation (120 pts)***

Students will be awarded points for actively participating in class discussions, in-class assignments, and tabletop exercises. These points will be based on attendance and quality of engagement with course related activities.

#### ***Assignments & Online FEMA Courses (60 pts)***

Students are expected to complete five FEMA courses as part of the assigned readings for the semester.

- 1) Introduction to Incident Command System (IS-100.c) *Duration: 2 hours*

- 2) Basic Incident Command System for Initial Response (IS-200.c) *Duration: 4 hours*
- 3) National Incident Management System, An Introduction (IS-700.b) *Duration: 3.5 hours*
- 4) National Response Framework, An Introduction (IS-800.c) *Duration: 3 hours*
- 5) An Introduction to Exercises (IS-120) *Duration: 5 hours*
- 6) How to be an Exercise Evaluator (IS-130.A) *Duration: 2.75 hours*

Upon completion of each online course and subsequent quiz, the student will receive a FEMA Certificate that must be uploaded to D2L to receive credit for this assignment (10 pts per FEMA course for a total of 50 pts).

*In the field, successful completion of the above courses renders the individual as having completed CDC Tier Two level credentials for incident command and emergency management responsibilities.*

During the semester, 3-4 other assignments (e.g., discussion posts), relevant to lecture topics will be posted on D2L. These assignments will focus on reflection and analysis of the material being covered. Deadlines and dates for these posts will be announcement in class.

### **Quizzes (50 pts)**

There will be 6 quizzes given during the course of the term. Quizzes will be made up of multiple-choice, true and false or short answer questions. Questions will be taken from the online modules that you will be required to review. Quizzes will be administered online and range from 10-15 questions each. **Quizzes will be due at noon on the designated Tuesday. Once you begin the quiz, you will have 30 minutes to complete and make your submission.** Each quiz will be available for one attempt; after which it will be graded automatically. Each quiz will be worth 10-20 points. It is up to the student to set aside time to complete these online quizzes. *No make-up quizzes will be allowed. However, your lowest quiz score will be dropped at the end of the semester.*

**Due date: Noon, October 8<sup>th</sup>, 2019**

### **Inter-professional Exercise (IPE) Participation (40 pts)**

Practical exercises are a critical component of the emergency preparedness field. Each year the Arizona Health Sciences Center Colleges (i.e., Medicine, Nursing, Pharmacy, and Public Health), College of Law, and School of Social Work partner in an inter-professional exercise aimed at emergency preparedness. The theme of this year's exercise is Pandemic Flu. The simulated exercise is centered on a pandemic emergency that provides students with exposure to issues that arise during a pandemic; introduces the concept of all-hazards preparedness; addresses roles and responsibilities of different professionals; and underscores the importance of coordination and teamwork in preventing and controlling the spread of disease.

**The MANDATORY exercise will take place on Friday, October 25, 2019 from 2:00 - 4:30 p.m.**

Students will be required to:

- 1) Register for the exercise (Registration link will be made available on D2L.).
- 2) Complete all required pre-requisites associated with the exercise.
- 3) Report to their assigned exercise venue on exercise date.
- 4) Complete post-exercise evaluation and receive Certificate of Completion.
- 5) Submit the Certificate of Completion to D2L.

The instructor will make available an Exercise Excuse Letter that students can utilize to coordinate with any conflicting job or course commitments. Students must communicate any unresolvable conflicts to the instructor by Tuesday, September 3rd.

### ***Tabletop Exercise Participation (100 pts)***

All students will be assigned into groups at the beginning of the course and each group will be responsible for preparing for and role-play disaster response during in-class Tabletop exercises, which will mimic real world incidents. The groups will be responsible for completing research on their assigned jurisdictions and submitting documents prior to the first exercise. Your score for each exercise (20-25 pts) will be contingent upon the following: individual participation, group problem-solving and discussion, and submission of completed exercise documents. These exercises are pre-scheduled and students are discouraged from missing class during those days. There will be no make-ups for these exercises.

More details regarding the grading rubric and expectations will be posted on D2L.

### ***Pima County RSS Exercise (40 pts)***

All students will be required to perform as trained exercise evaluators for the Pima County RSS Exercise. This will involve observing and providing feedback on how to improve agency plans and capabilities for the specific tasks being evaluated. You will receive training that will prepare you for this role. Additional details will be provided in the first few weeks of the semester.

### ***Personal Preparedness Plan (40 pts)***

Using provided FEMA templates, develop a personal preparedness plan for you and your family. Your Preparedness Plan should consider the needs of family including parents, children, and any pets. You will be provided with templates to complete and submit as a “packet”.

### ***Exams (200 pts)***

There will be 2 non-cumulative exams during the semester. The instructor will post a study guide two weeks prior to each exam and will hold a review session near the end of class, one week prior to each exam. Exams are worth 100 points each and will consist of the following types of questions: multiple-choice, true/false, fill-in-the blank, and matching. Except for emergency situations (e.g., medical, supported by appropriate documentation) make-up exams will not be given and zero credit will be awarded for missed exams.

### **Late Submission Policy**

All due dates will be posted in the syllabus and on the D2L course page. It is the student's responsibility to ensure that the assignments are turned in on time. All late assignments will be penalized 10% per day and late submissions will only be accepted within one week of the due date. After this time, the student will be awarded zero points for the assignment. Whenever you are unsure or cannot access the assignment submission function on D2L, please email your assignment to the instructor before the deadline.

### **Grading/Student Evaluation**

The grading system for this course is as follows:

Evaluation Component	Potential Points	
	Undergraduate (489)	Graduate (589)
Course Participation	120	120
2 exams @ 100 pts each	200	200
Quizzes (6) *drop lowest scores	50	50
Assignments (6): - FEMA Courses	60	60
Personal Preparedness Plan	40	40
IPE Participation	40	40
Tabletop Exercise Participation (In-class)	100	100
Pima County Exercise Evaluation	40	40
Graduate Student Tabletop Design & Facilitation	N/A	100
Graduate Student AAR Report	N/A	50
Total	650	800

Final grades will be based on the following relative point system (undergraduate and graduate students):

- A = 585-650 points OR 720 - 800 points
- B = 520-584 points OR 640 - 719 points
- C = 455-519 points OR 560 - 639 points
- D = 390-480 points OR 480 - 559 points
- E = < 324 points OR < 480 points

### **589 Graduate Course Requirements**

The 500 level course expectations include a more in-depth understanding of the course material and additional deliverable. Each graduate student will be required to:

- 1) Develop and facilitate a tabletop exercise on a chosen PHEP Capability. (100 pts)
  - a. Completion of IS-139.A: Exercise Design and Development (10 pts)

- b. Submission of exercise design materials (Exercise PowerPoint, Situation Manual) (40 pts)
  - c. Exercise facilitation (50 pts)
- 2) Disaster Communication in a University Setting Review & Development. (50 pts)

Additional details will be posted on D2L.

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### Course Policies

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#### **D2L POLICY**

All course materials and communications (syllabus, readings, homework, video clips, assignments, grades, feedback, updates, etc.) will be available through the course website: <http://d2l.arizona.edu>.

All students will be expected to make use of this website and to use their university email accounts (**if you don't use your D2L email, please make sure to set it to forward to your UA email**) for communications about the course.

You are responsible for the timely submission of your work. Due dates are firm unless you provide a health provider's note or dean's excuse. Assignments will involve direct entry of your information into D2L. All submissions must be a Word and/or PDF document and/or before being submitted into the Assignments folder. Other formats (e.g., pages) will not be accepted.

You should check D2L announcements as well as your e-mail daily for new information related to the course.

All course deadlines have been scheduled around D2L scheduled maintenance. To access the calendar with D2L scheduled maintenance, visit: <http://help.d2l.arizona.edu/> and click on the calendar on the right. Any unscheduled or unexpected maintenance will be monitored, and changes to the course schedule will be made at the discretion of the instructor.

#### **CLASS COURTESY POLICY**

Everyone in this class has a unique perspective. In order to create the best possible learning environment, we must all be respectful of one another. It is perfectly acceptable to disagree with others, but keep comments focused on the topic and do not personally attack others. Any statements that could be construed as a threat of any kind will result in removal from the course and the student will be reported to the Dean of Students.

#### **E-MAIL**

E-mail is used to communicate and disseminate much information in this class. Responses to student e-mail messages will occur in a timely manner, typically within 24-48 hours (discounting weekends). However, there are rules of communication. E-mails must be respectfully addressed, spell-checked, and demonstrate appropriate use of grammar/punctuation. No

responses will be given to emails that are 'text-messaged', impolite, poorly written, or presumptuous.

### **DISABILITY ACCOMODATION**

If you anticipate issues related to the format or requirements of this course, please meet with me. I would like us to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; <http://drc.arizona.edu/students>) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations. The official policy can be found at: <http://catalog.arizona.edu/2014%2D15/policies/disability.htm>

### **NONDISCRIMINATION and ANTI-HARASSMENT POLICY**

The University of Arizona is committed to creating and maintaining an environment free of discrimination, <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

### **GRIEVENCE POLICY**

Should a student feel he or she has been treated unfairly, there are a number of resources available. With few exceptions, students should first attempt to resolve difficulties informally by bringing those concerns directly to the person responsible for the action, or with the student's graduate advisor, Assistant Dean for Student and Alumni Affairs, department head, or the immediate supervisor of the person responsible for the action. If the problem cannot be resolved informally, the student may file a formal grievance using the Graduate College Grievance Policy found at: <http://grad.arizona.edu/academics/policies/academic-policies/grievance-policy>

### **GRADE APPEAL POLICY**

<http://catalog.arizona.edu/2014-15/policies/gradappeal.htm>

### **UA SMOKING AND TOBACCO POLICY**

The purpose of this Policy is to establish the University of Arizona's (University) commitment to protect the health of University faculty, staff, students, and visitors on its campuses and in its vehicles. The latest version of the policy is available at: <http://policy.arizona.edu/ethics-and-conduct/smoking-and-tobacco-policy>

### **SYLLABUS CHANGES**

Information contained in the course syllabus, other than the grade and absence policies, may be subject to change with reasonable advance notice, as deemed appropriate.

### **TELEPHONE AND COMPUTER USE**

You are not allowed to have your computer on during class. Turn your cell phones to silent or vibrate in order to not disrupt the class and disturb your fellow students and professor.

## **STATEMENT OF COPYRIGHTED MATERIALS**

Students are advised that all lecture notes, lectures, study guides and other course materials disseminated by the instructor to the students, whether in class or online, are original materials and, as such, reflect intellectual property of the instructor or author of those works. All readings, study guides, lecture notes and handouts are intended for individual use by the student. Students may not distribute or reproduce these materials for commercial purposes without the express written consent of the instructor. Students who sell or distribute these materials for any use other than their own are in violation of the University's Intellectual Property Policy (available at [http://www.ott.arizona.edu/uploads/ip\\_policy.pdf](http://www.ott.arizona.edu/uploads/ip_policy.pdf)). Violations of the instructor's copyright may result in course sanctions and violate the Code of Academic Integrity.

## **PLAGIARISM**

What counts as plagiarism?

- Copying and pasting information from a web site or another source, and then revising it so that it sounds like your original idea.
- Doing an assignment/essay/take home test with a friend and then handing in separate assignments that contain the same ideas, language, phrases, etc.
- Quoting a passage without quotation marks or citations, so that it looks like your own.
- Paraphrasing a passage without citing it, so that it looks like your own.
- Hiring another person to do your work for you, or purchasing a paper through any of the on- or off-line sources.

## **COURSE SCHEDULE**

Information contained in the course syllabus, other than the grade and absence policies, is subject to change with reasonable advance notice as deemed appropriate by the instructor.

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### **Course Rules of Conduct**

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## **CLASS ATTENDANCE & PARTICIPATION**

You are expected to attend classroom sessions and participate in class discussions. All holidays or special events observed by organized religions will be honored for those students who show affiliation with that particular religion, and absences pre-approved by the University of Arizona Dean of Students (or Dean's designee) will be honored. Class make-ups can be arranged with instructor permission.

## **COMMUNICATIONS**

You are responsible for reading emails sent to your UA account from your professor and the announcements that are placed on the course web site. Information about readings, news events, your grades, assignments and other course related topics will be communicated to you with these electronic methods. The official policy can be found at:

<https://www.registrar.arizona.edu/personal-information/official-student-email-policy-use-email-official-correspondence-students>

## **ACADEMIC INTEGRITY**

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercise must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity, available through the office of the UA Dean Students:

<http://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity>

## **CLASSROOM BEHAVIOR**

(Statement of expected behavior and respectful exchange of ideas)

The Dean of Students has set up expected standards for student behaviors and has defined and identified what is disruptive and threatening behavior. This information is available at:

<http://policy.arizona.edu/education-and-student-affairs/disruptive-behavior-instructional-setting>

Students are expected to be familiar with the UA Policy on Disruptive and Threatening Student Behavior in an Instructional Setting found at:

<http://policy.arizona.edu/disruptive-behavior-instructional> and the Policy on Threatening Behavior by Students found at:

[http://deanofstudents.arizona.edu/sites/deanofstudents.arizona.edu/files/Disruptive\\_threat\\_bklt\\_2012.pdf](http://deanofstudents.arizona.edu/sites/deanofstudents.arizona.edu/files/Disruptive_threat_bklt_2012.pdf)

## **DISRUPTIVE BEHAVIOR IN AN INSTRUCTIONAL SETTING**

Disruptive Behavior is prohibited. "Disruptive behavior" means conduct that materially and substantially interferes with or obstructs the teaching or learning process in the context of a classroom or educational setting. Disruptive behavior includes conduct that distracts or intimidates others in a manner that interferes with instructional activities, fails to adhere to an instructor's appropriate classroom rules or instructions, or interferes with the normal operations of the University. Students who engage in disruptive behavior may be directed by the instructor to leave the class for the remainder of the class period. If the student refuses to leave after being requested to do so, the instructor may summon the University Police. For involuntary removal for more than one class period, involuntary withdrawal from class, or more serious sanctions, the disciplinary procedures set forth in section C, below, must be utilized.

<http://web.arizona.edu/~policy/distruptive.pdf>

## **THREATENING BEHAVIOR IN AN INSTRUCTIONAL SETTING**

Threatening Behavior is prohibited. "Threatening behavior" means any statement, communication, conduct or gesture, including those in written form, directed toward any member of the University community that causes a reasonable apprehension of physical harm to a person or property. A student can be guilty of threatening behavior even if the person who is the object of the threat does not observe or receive it, so long as a reasonable person would interpret the maker's statement, communication, conduct or gesture as a serious expression of intent to physically harm.

<http://web.arizona.edu/~policy/threatening.pdf>

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**Course Schedule**

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<b>Date</b>	<b>Course Topic</b>	<b>Homework &amp; Deadlines</b>
Week 1- August 27	<u>In-class Session</u> - Course Overview - Introduction to Preparedness	Introduction to Public Health Online Modules (4 modules) Introduction to Public Health Preparedness Modules Quiz <b>Due Date: September 3<sup>rd</sup>, 2019 (Noon)</b>
Week 2- September 3	<u>In-class Session</u> - The Incident Command System in Practice ( <i>Cmdr. Brian Seastone, UA Police Department</i> )	FEMA Courses: IS-100, IS-200 Upload FEMA Course Certificates to D2L <b>Due Date: September 10<sup>th</sup>, 2019 (Noon)</b>
Week 3- September 10	<u>In-class Session</u> - Introduction to Emergency Response Plans ( <i>Ramon Trejo, Tucson Medical Center</i> ) - Introduction to Exercises	Emergency Management Readiness Modules <ul style="list-style-type: none"> <li>• Hazard Vulnerability Analysis (HVA)/Risk Assessment</li> <li>• All Hazards Emergency Operations Plan</li> <li>• Continuity of Operations</li> <li>• Emergency Operations Center Management</li> </ul> Emergency Management Readiness Modules Quiz <b>Due Date: September 24<sup>th</sup>, 2019 (Noon)</b>
Week 4- September 17	<u>Online Session</u> FEMA Courses: IS 700, 800	FEMA Courses: IS-700, IS-800, IS-120 Upload FEMA Course Certificates to D2L <b>Due Date: October 1<sup>st</sup>, 2019 (Noon)</b>
Week 5- September 24	<u>In-class Session</u> - Public Health Response Plans ( <i>Louie Valenzuela, Pima County Health Department</i> ) - Tabletop Exercise/Case Study	Mass Care Readiness Series <ul style="list-style-type: none"> <li>▪ Mass Casualty</li> <li>▪ Mass Fatality</li> <li>▪ Shelter and Evacuation</li> <li>▪ Volunteer Management</li> </ul>
Week 6- October 1	<u>In-class Session</u> - Tabletop Exercise/Case Study - Midterm I study guide posted on D2L	Mass Care Readiness Modules Quiz <b>Due Date: October 8<sup>th</sup>, 2019 (Noon)</b>
Week 7- October 8	<u>In-class Session</u> - Emergency Civilian Casualty Care Training ( <i>Dr. Sheldon Marks, Medical Reserve Corps</i> )  - Midterm I Q & A Session	Functional Needs and Psychosocial Support Readiness Modules <ul style="list-style-type: none"> <li>▪ Vulnerable Populations</li> <li>▪ Crisis and Emergency Risk Communications</li> <li>▪ Disaster Mental Health</li> </ul> Mental Health Quiz <b>Due Date: October 22<sup>nd</sup>, 2019 (Noon)</b>

Week 8- October 15	<u>In-class Session</u> - <b>Midterm I</b> - Emergency Response & Recovery: Local perspective (Lane Spalla, UA Police Department)	IS-120 Upload FEMA Course Certificates to D2L <b>Due Date: November 5<sup>th</sup>, 2019 (Noon)</b>
Week 9- October 22	<u>Online Session</u> IPE Modules	
October 25 (FRIDAY)	IPE	Submit IPE Certificate <b>Due Date: October 29<sup>th</sup>, 2019 (Noon)</b>
Week 10- October 29	<u>In-class Session</u> - Pandemic Influenza Planning (Harry McDermott, UA Campus Health Services)**	Medical Countermeasures Readiness Modules <ul style="list-style-type: none"> <li>• Strategic National Stockpile</li> <li>• Mass Dispensing</li> <li>• Isolation &amp; Quarantine</li> </ul>
Week 11- November 5	<u>In-class Session</u> Points of Dispensing	Medical Countermeasures Quiz Personal Preparedness Plans Due <b>Due Date: November 12<sup>th</sup>, 2019 (Noon)</b>
November 6-8	<u>Pima County Health Department RSS Exercise</u>	
Week 12- November 12	<u>In-class Session</u> - Tabletop Exercise/Case Study	<i>Epidemiology Readiness Series Modules</i> <ul style="list-style-type: none"> <li>• Preparedness in Utah: Epidemiology of Chemical, Biological, &amp; Radiological Incidents</li> <li>• Colorado: Environmental Health Aspects of Natural Disasters</li> </ul>
Week 13- November 19	<u>In-class Session</u> - Don Kautz (Mass Fatality Operations)** -Tabletop Exercise/Case study	Epi Modules Quiz <b>Due Date: November 26<sup>th</sup>, 2019 (Noon)</b>
Week 14- November 26	<u>Online Session</u> <i>Climate Change &amp; Preparedness</i>	Climate Change & Public Health Readings & Assignment <b>Due date: December 3<sup>rd</sup>, 2019 (Noon)</b>
Week 15- December 3	<u>In-class Session</u> - Framing CC as a Public Health (EP) Issue: Challenges & Opportunities Final Exam Review	
Week 16- December 10	<u>In-class Session</u> <b>Final exam</b> Tuesday 1:00 PM - 3:50 PM	