UNIVERSITY OF RICHMOND
(VIRGINIA)
INSTRUCTOR: Walter G. Green III, MPA, MBAA, CEM
Disaster Coordinator
Virginia Office of Emergency Medical Services

TELEPHONE: work: 371-3500
voice mail: 800-487-0031

CONTACT: Students may contact me during the work day or before 2100 in evenings.

COURSE LOCATION: Political Science/Military Science Building.
Room 205.

DAY AND TIME: Thursdays from 1900 to 2140.


I selected this text because it discusses a wide variety of issues of importance to all emergency services disciplines, not just the fire service. For students who are not fire service oriented, I suggest reading it in the context of your own discipline and comparing and contrasting issues with those you encounter.

Emergency Management: Principles and Practice for Local Government.


Books listed as suggested additional readings are sources for the student who wishes information specific to other disciplines. These are basic sources in the field, and are worthwhile additions to any professional library. They are not required to master the material in the course.
INSTRUCTIONAL PHILOSOPHY: This course is a multi-disciplinary integrative course designed to set the stage for subsequent courses in the degree program. It focuses on the unique characteristics of the emergency and supporting services and examines commonalities and differences in issues impacting them. Most students enrolled in this course are expected to be experienced already in the delivery of emergency services. The students will use their technical knowledge of their disciplines as the foundation for the introduction of concepts of management.

OBJECTIVES: Objectives for individual blocks of instruction will be provided on the class day. At the completion of the course students will be able to:

(1) Formulate a working definition of emergency service and describe the role of the emergency services in the community.

(2) Characterize the roles of a specific emergency service organization.

(3) Develop and defend a conceptual model for the development of emergency services in the future.

(4) Analyze the governmental, public, and private forces acting upon emergency services managers.

COURSE REQUIREMENTS: Students will submit an abstract of one outside journal article reading from the trade press for each class session on a 4” by 6” note card. The abstract will include full bibliographic detail (authors, title, publication, volume and number, date, pages) and a short three to four sentence summation of the subject of the article. Any article of at least one page in length may be abstracted. Abstracts will be permanently filled for future student use.

Students will prepare two practical analysis projects. One will be a SWOT analysis of the students own discipline in the emergency services. The second will be a case study of four to six double spaced pages on a topic approved by the instructor.

Each student will submit a research paper examining an assigned issue in emergency services management.

Research papers will be from 10 to 20 typed pages in length, double spaced, and with notations and bibliography in accordance with any standard style manual.

A final examination covering the entire course material, including both assigned readings and lecture material. The examination will focus on reasoned application of knowledge to situations.
Students are expected to make a substantive contribution to learning by their fellow students through interaction in class discussion. In class oral participation will be graded based on knowledge of assigned materials, discussion of abstracted readings, contribution to solution of presented case scenarios, and logical argument of positions.

Requirements will be weighted as follows in determining the overall grade:

- Abstracts 5%
- SWOT Analysis 10%
- Case Study 20%
- Research Paper 25%
- Examination 30%
- Class Participation 10%

Students desiring to perform additional work to improve their grade must contact the instructor for approval of a specific project.

**LATE AND MAKE-UP WORK:** Students are expected to submit work on time. Work may be mailed to the instructor at P.O. Box 799, Glen Allen, VA 23060 or faxed to 371-3543. Work delayed by a declared state of emergency will be accepted without penalty. Any other delay must be coordinated with the instructor in advance. Unapproved delays will be subject to a 5% grade penalty.

**ACADEMIC INTEGRITY:** All work submitted will be your own original work prepared for this class. Students are expected to follow the University’s standards of academic integrity, including the avoidance of even the appearance of plagiarism. In the emergency services your integrity is the foundation of trust in the heat of response to catastrophe. The same standards apply to your work in and for the classroom.

**ATTENDANCE:** Students must attend 75% of the scheduled classes for the course. Failure to do so will result in a grade of V (failure due to excessive absence). A sign-up sheet will be circulated for each class; it is the student’s responsibility to sign the sheet. Failure to sign will be recorded as an absence.
COURSE OUTLINE

29 August

Introduction.
University and Course academic standards.
Course procedures.
Course overview.

Defining Emergency Services - what they are, what the environment is, what the changing paradigm portends.

Introduction to SWOT.

5 September

Focus on Fire - the role of the traditional Fire Department.

Introduction to the Case Study Method.

ASSIGNMENTS: SWOT Analysis due.
First abstract due.

12 September

Focus on Emergency Medical Services - what does the continuum of prehospital and hospital care provide?

ASSIGNMENTS: Abstract due.

19 September

Focus on Emergency Management - what does all hazard integrated emergency management bring to the community?

ASSIGNMENTS: Abstract due.

26 September

Focus on Business and Industry - how does the private sector interface with the public sector and what is the scope of its emergency services effort?

Introduction to Research.

ASSIGNMENTS: Abstract due.
3 October

Focus on Government - the role of elected and appointed public managers in emergency services management.

ASSIGNMENTS: Case Study due.
               No abstract required.

10 October

Focus on non-emergency emergency services - utilities, transportation, communications, general services, etc.

ASSIGNMENTS: Abstract due.

17 October

Consolidated services: one department, two departments, and what belongs where?

ASSIGNMENTS: Abstract due.

24 October

Regulations and law and other constraints on action.

ASSIGNMENTS: Abstract due.

31 October

Personnel - they don’t come in one issue size any more.

ASSIGNMENTS: Abstract due.

7 November

Money - the budget as the ultimate plan of action.

ASSIGNMENTS: Research paper due.
               No abstract required.

14 November

Volunteer or Paid or…

ASSIGNMENTS: Abstract due.
21 November

Volunteer organizations with emergency services roles, including social welfare, communications, military auxiliaries, and others.

ASSIGNMENTS: Abstract due.

5 December

Final Examination.

ASSIGNMENTS: No abstract required.

12 December

Integrative Emergency Services Game (this mirrors the capstone course and introduces the use of games as training tools).

ASSIGNMENTS: No abstract required.

Note: Although specific themes are given for each class night, new developments or world or state events may warrant changing the focus of a specific session or rearranging the topic order. In this event an updated course outline will be provided.
Planning is an integral part of emergency management at all levels. This course will emphasize local government disaster planning and will examine State, Federal and personal emergency preparedness.

January 15, 1997

Introduction and distribution of text
What is a disaster?
The Integrated Emergency Management System

January 22, 1997

Hazard Analysis
Risk vs. Hazard
Justification for the plan
Legal Aspects

January 29, 1997

The Basic Plan
Format and Content
Direction and Control
Fire/EMS

February 5, 1997 – First test

The Basic Plan (cont.)
Law Enforcement
Communication
Public Information
February 12, 1997

The Basic Plan (cont.)
Evacuation
Reception and Care

February 19, 1997

The Basic Plan (cont.)
Resource Support
Hazard Mitigation

February 26, 1997 – Draft of paper due

Hazardous Materials Emergency Plan Annex

March 5, 1997

Guest Speaker: “Local Emergency Planning Committee”

March 12, 1997

SPRING BREAK

March 19, 1997

Disaster Specific Planning
Exercises and Training

March 26, 1997

Disaster Recovery

April 2, 1997

State Emergency Operations Plans

April 9, 1997 – Second test

Federal Emergency Operations Plans
April 16, 1997

Business Disaster Preparedness
Personal Emergency Preparedness

April 23, 1997 - Final Paper Due

Emergency Operations Plan Exercise

Determination of Grade

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>First test</td>
<td>20%</td>
</tr>
<tr>
<td>Second test</td>
<td>20%</td>
</tr>
<tr>
<td>Draft</td>
<td>5%</td>
</tr>
<tr>
<td>Exercise</td>
<td>15%</td>
</tr>
<tr>
<td>Final paper</td>
<td>40%</td>
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</tbody>
</table>

School policy permits absence from no more than 25% of all scheduled class sessions. Students exceeding this standard receive a grade of “V” and no credit for the course. Incompletes must be approved by the instructor prior to the end of the semester. Tests will cover text and lectures.

How much you benefit from this class is directly related to your contribution.
UNIVERSITY OF SOUTH CAROLINA
(DEPARTMENT OF GEOGRAPHY)
University of South Carolina  
Spring 1994

GEOG 510-I ENVIRONMENTAL HAZARDS

Instructor: Dr. Susan Cutter  
Department of Geography  
Callcott 114  
777-5236

Office Hours: Tuesday mornings or by arrangement

Class Meetings: Tuesday 2-5 p.m., Callcott 112

Course Description:

Most parts of the world are at risk from environmental hazards, although to differing degrees. Flooding in the Midwest, Hurricane Emily in North Carolina, and the great Indian earthquake are just three of the most recent examples. The mass media, relief organizations, politicians, and the entertainment industry are among many groups that routinely highlight the impact of environmental hazards worldwide. The importance of environmental hazards to societal well-being is best reflected by the UN declaration proclaiming 1990-2000 the International Decade for Natural Hazard Reduction.

This course investigates the causes and impacts of environmental hazards. Using the human-ecological approach pioneered by the “natural hazards” school of geography, the course focuses on the relationship between society and nature, particularly how people and societies respond to hazardous geologic, atmospheric, hydrologic, and technological events. In addition to examining the physical and/or technological dynamics of hazards and their impacts, we will look also at the efforts for recovery and mitigation of hazards.

The major goals of the course are as follows: to introduce the range of environmental hazards and their geographic distribution; to examine the causes and consequences of hazards on society over time, to assess various responses (response, recovery, mitigation) to hazards by individuals and society, from local to global scales; and finally to identify the direction of hazards research and important directions for geographic research.

There are no pre-requisites for the course, but basic knowledge of physical and human geography is assumed.

Course Requirements:

This course will be conducted in a seminar format. In other words, I will do little formal lecturing. Instead, we will spend a considerable amount of time discussing the key concepts and issues identified in the assigned readings. It is expected that all students will complete the
reading prior to class. Furthermore, I expect all students to actively participate in class discussions.

Grades will be based on three short assignments (45%), a term project (40%) and class participation (10%). Deadlines for the assignments are strictly enforced. There will be no incompletes given, so be sure to plan and use your time wisely.

**Texts:**


These books are available at the USC Bookstore in Russell House.
DISCUSSION/READING OUTLINE

PART I  THE NATURE OF ENVIRONMENTAL HAZARDS

Tues Jan. 18  What are hazards and disasters?

Key concepts/topics
- definitions, typology
- history of hazards research
- practical and theoretical issues

Reading:  Smith, chapters 1-2
Cutter, chapter 1
Burton, Kates, White, chapter 1

Tues Jan. 25  Assessing the risk: What happens?

Key concepts/topics
- patterns and trends
- risk assessment
- tools and techniques
- risk and vulnerability
- resilience and adaptation

Reading:  Smith, chapter 3
Cutter, chapter 3
Burton, Kates, White, chapter 2

Tues Feb. 1  Hazard perception: myth and reality

Key concepts/topics
- hazards perception
- disaster myths and images
- media coverage of hazards/disasters

Reading:  Cutter, chapter 2

**Exercise 1 Due**

Tues Feb. 8  Responding after the disaster happens: the four R’s

Key concepts/topics
- rescue, relief, recovery, reconstruction
- range and choice of adjustments
- sharing losses (insurance)
- societal choices
Tues Feb. 15  
**Hazard reduction and mitigation**

Key concepts/topics
- modify hazard event--controlling nature, protective structures, structural measures
- reduce vulnerability--preparedness, land use controls

Reading: Smith, chapter 5  
Cutter, Chapter 4

Tues Feb. 22  
**Is the environment becoming more hazardous or are we just becoming more aware?**

Key concepts/topics
- spatial variation in vulnerability
- differential impacts

Reading: Burton, Kates, White, chapters 3, 6, and 7

**Exercise 2 Due**

PART II  HAZARD EXPERIENCES

Tues Mar. 1  
**Geomorphological**

Key concepts/topics
- volcanoes
- earthquakes
- mass movements

Reading: Smith, chapters 6-8

Video: Volcano Scapes: Pele’s March or The Eruption of Mt. St. Helens

Tues Mar. 8  
**SPRING BREAK--no class**
Tues Mar. 15       Atmospheric

Key concepts/topics
- tornados
- hurricanes

Reading: Smith, chapter 9

Video: Great Weather Catastrophes

Tues Mar. 22       Hydrologic

Key concepts/topics
- floods
- coastal erosion

Reading: Smith, chapter 11

Guest Discussant: A. James--The 1993 Mississippi Flood (tentative)

Tues Mar. 29       AAG MEETING-- no class, work on term project

Tues Apr. 5        Technological failures

Key concepts/topics
- industrial accidents
- dam failures, airplane crashes, train derailments
- Chernobyl, Bhopal

Reading: Smith, chapter 13
Cutter, chapters 5, 7

** Exercise 3 Due **

Tues Apr. 12       Nature-society interactions I: extreme events

Key concepts/topics
- drought
- fire

Reading: Smith, chapter 10, 12
**Tues Apr. 19**  
Nature-society interactions II: chronic events

Key concepts/topics
- pollution
- global environmental change
- warfare

Reading:  
Cutter, chapter 6

Video:  
For export only: pesticides

**Tues Apr. 26**  
Hazards as complex phenomena

Key concepts/topics
- trends in hazards research
- theoretical issues

Reading:  
Cutter, chapter 8
Burton, Kates, White, chapters 8, 9

**Term Project Due**
EXERCISE 1

Media Coverage of Environmental Hazards

This exercise is designed to help you understand how the mass media report and cover environmental hazards. Images of disasters are most often shaped by the electronic media, and as a result some people tend to overestimate the risks of some events (airline crashes which have a great visual impact) and underestimate others (such as smoking, car accidents). Rather than examining the full range of coverage, we will only examine “disaster events”. For ease in completing this exercise, we will only look at the print media rather than electronic.

Procedure

1. Select a particular disaster event (Southern California fires, Mississippi flooding, Hurricane Andrew), and see how two or more newspapers covered the same story. A range of national and regional newspapers are available in the Thomas Cooper Library. Regional variations in the selection of newspapers will facilitate a geographic approach to the exercise.

2. Content analysis. How much coverage was there (e.g. how many column inches or pages)? What types of topics were addressed? How were the headlines (size and wording) used to portray the event? Were some aspects of the event covered more than others? How good was the reporting of the science of the hazard, its physical impact, human impact? How much of the reporting was focused on the impacts on individuals, (e.g. the individual human interest story, tales of heroism). Are there variations in reporting due to the proximity of the newspaper to the location of the event? What kind of language was used to characterize the event?

3. Analysis and assessment. You are to write a 5-7 page paper that details your findings. It might be useful to place some of your data on the content analysis in tabular form, particularly your comparison between the two newspapers. One question you should consider in your paper is your assessment of the “fairness” of the reporting. In other words, did you feel the newspaper coverage was factual in its reporting or did the coverage seem to “hype” the event and seemingly focus on trivial issues? Did it only examine the rescue and relief aspects of disasters, or did it go into some detail about recovery and reconstruction?

4. Evaluation. I will evaluate these papers based on your creativity and thoroughness in compiling and analyzing the primary data. There is no right or wrong way to approach this exercise, so just use your own judgment and see what you can do. If you use additional references, be sure to include these in a bibliography.

References:


EXERCISE IS DUE FEBRUARY 1, 1994
EXERCISE 2

National Hazard Profiles

There are extensive geographic variations in the occurrence and impact of hazards at both the regional and global scales. This exercise will facilitate your understanding of these spatial variations by developing a hazard profile of a particular country. Some countries are more affected by natural hazards than others. Still other countries are more susceptible to technological failures. Again, for ease in conducting the analysis we will only focus on specific disaster events as reported to disaster and relief agencies, rather than the chronic hazards problems that face all nations.

You are to compile data on disaster events in your country during the last 10–20 years. The parameters you should examine include but are not limited to the following:

1. type of disaster
2. frequency, magnitude, duration of event
3. location
4. impact (deaths, injuries, property damages)
5. trends over time and over space

Product

You are to prepare a short paper (5–7 pp.) on the hazardousness of your country. Your paper should include a table on disaster stats, a graph that plots the number of disasters over time, and a dot map showing the location of each event. As this is a report, you should include some background information on your country and its ability to respond and recovery from these disaster events.

Sources: You will be able to find most of your data will come from the United Nations (UNDRO) (UNEP), or from USAID Office of Disaster Assistance.

EXERCISE IS DUE FEBRUARY 22, 1994
EXERCISE 3

Book Review

You have been asked by the Book Review Editor of the *Professional Geographer* to do a book review on John McPhee’s *The Control of Nature*. The format and specifications are listed below. The review is due **Tuesday, April 5, 1994**.
Book Reviewing

One of the most difficult professional duties many of us face is preparing informed and concise book reviews for journals. Journals are the primary outlets for scholarship in the form of lengthy articles. They also recognize the value of book reviews in informing their readers of new publications. As a compromise, editors will only allocate limited space for a book review section. In geography, most book reviews average between 2-5 pages in length (500-1250 words). The task facing a book reviewer is to convey the content to the reader as well as to render judgments on the book’s strengths and weaknesses using a limited amount of space. Since there are so many books published in the field in any given year, many of us rely heavily on the comments of colleagues regarding new and interesting work in the field and are avid readers of book review sections in the journals. All too often, however, you come across really bad reviews.

There are some clear do’s and don’ts of writing book reviews that many of us follow. I’ve taken the liberty to list some of these below.

Some Canons of Book Reviewing

Book reviews should be divided into three sections: content, analysis, and evaluation. You need to inform the reader of what is in the book, whether the author’s objective was achieved, and then your critique of the work in question.

A. Content
   1. Explain how the book is organized and the content of the book. What is the purpose of the book? Intended audience?
   2. What were the author’s objectives and goals in writing the book? Most often this information will be found in the preface where the author will explicitly state their purpose and intent.

B. Analysis
   3. Did the book achieve the author’s intent/goals?

Here is where most reviewers fall short. Instead of analyzing the book on the author’s terms, the reviewer will often describe the book they wanted to see or worse, the one they wanted to write but never got around to it. As a reader of this review, you really come away knowing very little about the monograph in question, but quite a bit about the reviewers grinding axe.

C. Evaluation
   4. What are the strengths and weaknesses of the book?
   5. Who could use it? Would you recommend this book? If so why? Is the book worth the money? Should it be in your own personal collection or the library?

   This is the section of the review where you insert your own personal opinion. This is often the most useful portion of the review and helps the reader make a decision about whether to read the book.

Susan Cutter
January 1993
TERM PROJECT

Case Study of a Particular Hazard Event

You are to select a particular hazard event and develop a detailed case study. The choice of events is up to you. For example, you could choose either a recent or historical event. It could be a disaster that occurred here in South Carolina or in another country. The texts for this course provide some clues on specific incidents. Data are more available for historical events rather than the more contemporary (e.g. last summer) since it takes a while for hazards researchers to publish their material.

Your paper should include a description of the event, a chronology of the event and responses, the impact of the event on the local community the short-term response to the event, longer-term recovery and reconstruction, and any lessons learned. This paper should provide a general synthesis of the entire hazard system as we have discussed in class. You must be as comprehensive as possible in your paper, illustrating your knowledge of this one event.

PROJECT IS DUE ON APRIL 26, 1994