

**KENT STATE UNIVERSITY
(DEPARTMENT OF GEOGRAPHY)**

Natural Hazards

SPRING 1997

Geography - 40195 "Special Topics-Geography"

321 McGilvrey Hall

Time: Tuesday 12:30-3:00 p.m.

Professor: Dr. Ute J. Dymon, Room 438 McGilvrey Hall.

Office Hours: Tue, 12:00 - 12:30, Wed 10:00 - 1:00, Thu 12: 00 - 1:00

Phone: (216) 672-3226

TA: Steve Gibbins

Required Text:

David Alexander, 1993. *Natural Disasters*, Chapman & Hall, New York. (D.A.) Burton, Ian, Robert W. Kates and Gilbert F. White, 1993. *The Environment as Hazard*, The Guilford Press, New York/London. (B.K.W.)

Other readings will be assigned. Selected readings, from various books and journals, including case studies.

Course Description:

Natural hazards and their effects on humans and their environment: volcanic eruptions, earthquakes, floods, droughts, hurricanes, tornadoes, catastrophic landslides, fires etc. will be discussed.

Management and relief of disasters; the damage they cause; planned pattern of prevention, mitigation and prediction.

Week - 1 (Jan. 21) Introduction to Natural Hazards - The Global Problem, Definitions and Basic Concepts. Is the Environment Becoming More Hazardous?

Readings: D.A. Chapt 1, B.K.W. Chapter 1

Week - 2 (Jan. 28) Earthquakes and Volcanoes - The Human Impact of Seismic Hazards. Case Studies: Northridge and Loma Prieta Earthquakes, Mount St. Helens.

Readings: D.A. Chapt. 2, B.K.W. Chapt. 2

(Position paper 1 due - on Chapter 1 B.K.W.)

Week - 3 (Feb 4) Floods and Droughts - Frost and Snow Disasters - A Look at the Developed and Developing World.

Readings: D.A. Chapt 3, B.K.W. Chapter 3

Week - 4 (Feb 11) Hurricanes - Tornadoes, Lightning, Hailstorms - The Human Impact of Atmospheric and Hydrological Hazards. (*Visit by Dr. Schmidlin Feb 11 (Debra)*)

Readings: Chapt. 4 B.K.W. (Debra)

(Position paper 2 due - on Chapter 2 B.K.W.)

Week - 5 (Feb 18) Case Studies - Hurricane Hugo, Andrew and Fran. Tornadoes in North America, Japan, and Bangladesh. (**Yuichi**)

Readings

Week - 6 (Feb 25) Desertification, Soil Erosion, Landslides, Coastal Erosion - The Impact of Forest and Range Fires on the Environment and Humans. (**Michael**)

Readings: D.A. Chapt 4

(Position paper 3 due - on Chapter 4, B.K.W.)

Week - 7 (Mar 4) Human Response to Disasters - Damage and the Build Environment. (Scott)

Visit by *Deborah L. Bailey*, Environmental Coordinator, Sea World

Readings: D.A. Chapt 5, B.K.W. Chapter 5

Week - 8 (Mar 11) Planning and Emergency Action (Portage County Emergency Directors Visit - *Andy Miller* and EPA Hazmat Coordinator, Columbus *Jeff Beahie*) Presentation of Research Proposal.

Readings: D.A. Chapt 6

(Proposal Due for Final Research Paper 2 Typed Pages).

Week - 9 (Mar 18) Medical Emergencies - Hazards mapping.

Readings: D.A. Chapt 7, B.K.W.

Week - 10 (Mar 25) Spring Recess

Week - 11 (Apr. 1, Apr. 3) The Economics of Disasters - **AAG meeting**

Readings: D.A. Chapt 9, Dymon and Platt

Week - 12 (Apr. 8) Disasters and National Policies

Readings: B.K.W. Chapter 6

Week - 13 (Apr. 15) Disasters in the Developing World and Response by the International Community.

Readings: D.A. Chapt 8, B.K.W. Chapter 7

Week - 14 (Apr. 22, Apr. 24) Disasters and the Socio-economic Systems)

Readings: D.A. Chapt 9, B.K.W. Chapter 8

(Report on Research Progress 5 minute each student)

Week - 15 (Apr. 29) A Research Agenda for Disasters in the New Millennium.

Readings: D.A. Chapt 10, B.K.W. Chapter 9

Week - 16 (May 6) Presentation of Research

Grading Policy:

This Course is a Research Seminar. It is expected of each student to produce a research paper of quality to be presented at the East Lakes Geography Meeting in Lansing, Michigan, in the Fall of 1997 (Oct 17, 18).

Position Papers	15% of the grade
Proposal	5% of the grade
Class Participation	15% of the grade
Research Paper	65% of the grade