UNIVERSITY OF TOLEDO
(DEPARTMENT OF GEOGRAPHY)

Spring 1995
Geographic Research and Natural Disasters—GEPL 392
Meets: TR 2-3:40 p.m., UH Room 4410

Instructor: Dr. Showalter
UH 4580A, phone: 537-4313
Office Hours: Mon. 2-4 p.m., Tues. and Thurs. 9:30-11 a.m., or by appointment

Teaching Assistant/Alternate Instructor: Deborah Keirsey
UH 4380, phone: 537-7856
Office Hours: Tues. and Thurs. 12-2 p.m., Weds. 1-2 p.m., or by appointment

Required Text: Alexander, D. (1994), *Natural Disasters*

Grading System:
4 Short Papers (worth 15 points each).....60%
5 Homework Assignments (worth 8 points each) 40%
Total.....100%

Geographic Research and Natural Disasters is designed to provide students with a basic understanding of the interaction between humanity and natural climatic or geophysical events that pose a threat to life and property. While there will be some discussion of the mechanics of physical events, the course focuses on social response to these events, for example, efforts to control natural events through engineering, media coverage of disasters, and how warnings are communicated to populations at risk.

Class Requirements:

- Students are responsible for regular class attendance.
- There are no exams in this class. Instead, there are five (5) homework assignments and four (4) short papers.
- Homework assignments are based on in-class discussion and readings from the text. These assignments must be typewritten on one side of white paper, double-spaced, with 1-inch margins on all sides, and no more than 3 pages long. These assignments are to be completed independently or with the help of the Teaching Assistant. Homework will be marked down 20% each day that it is turned in late, and late assignments must be handed in personally either to myself, the Teaching Assistant or to Marlene Garber, the Office Manager of the Department of Geography and Planning. Homework must be submitted in order to obtain a passing grade.
- Each student also will write four short papers on a single research question which, when combined, will form a complete research paper. The first paper should describe the research question the student wishes to address and why they think it is important. The second paper describes how the student plans to learn about their research question (e.g., through interviews, library research). A bibliography will accompany this paper. The third paper describes what the student learned from their research. And the fourth paper provides a conclusion and recommendations for future research. Each of these papers will be

typewritten on one side of white paper, double-spaced, with 1-inch margins on all sides, and will be between 3-5 pages long.

- No "DR" grades will he granted after Thursday, May 4th.
- Students are responsible for taking their own notes or making arrangements to copy other students notes in cases of excused absences. I do not provide students with copies of my notes.
- In the event I am unable to lecture, my Teaching Assistant will substitute for me and class will proceed normally.

The following schedule is *tentative* and *changes* will probably occur. Regular class attendance will keep you informed of any adjustments.

4/4
- Introduction to the class

4/6
- Chapter 1, Introduction (pages 1-35)
- First homework assignment distributed

The Geophysical Agents

4/11
- Chapter 2, Earthquakes and Volcanoes (pp. 42-90)

4/13
- Chapter 2, Earthquakes and Volcanoes (pp. 90-112)
- First homework assignment due

4/18
- Chapter 3, Atmospheric and Hydrological Hazards (pp. 120-154)
- First homework assignment returned

4/20
- Chapter 3, Atmospheric and Hydrological Hazards (pp. 154-208)
- First paper due
- Second homework assignment distributed

4/25
- Chapter 4, Disasters and the Land Surface (pp. 217-266)
- First paper returned

4/27
- Chapter 4, Disasters and the Land Surface (pp. 266-305)
- Second homework assignment due

The Human Impact and Response

5/2
- Chapter 5, Damage and the Built Environment (pp. 316-340)
- Second homework assignment returned

5/4
- Chapter 5, Damage and the Built Environment (pp. 340-368)
- Second paper due
- Third homework assignment distributed

5/9
- Chapter 6, The Logistics of Planning and Emergency Action (pp. 374-416)
- Second paper returned

5/11
- Chapter 6, The Logistics of Planning and Emergency Action (pp. 416-451)
- Third homework assignment due

5/16
- Chapter 7, Medical Emergencies (pp. 461-482)
- Third homework assignment returned

5/18
- Chapter 7, Medical Emergencies (pp. 482-490)
- Third paper due
- Fourth homework distributed

5/23
- Chapter 8, The Third World (pp. 495-523)
- Third paper returned

5/25
- Chapter 8, The Third World (pp. 523-549)
- Fourth homework due

5/30
- Chapter 9, Disasters and Socio-Economic Systems (pp. 554-574)
- Fourth homework returned

6/1
- Chapter 9, Disasters and Socio-Economic Systems (pp. 574-602)
- Fourth paper due
- Fifth homework distributed

6/6
- Chapter 10, Towards an International Strategy Against Disasters (pp. 611-616)
- Fourth paper returned

6/8
- Chapter 10, Towards an International Strategy Against Disasters (pp. 616-618)
- Fifth homework due

6/12-16
- Finals week
- Monday, June 12 ("final exam day"), pick up Fifth homework and receive final grade. I will be available from 9 a.m.-5 p.m., except for the hours 11:30 a.m.-1:30 p.m.

Books on Reserve

(these are on 2-hour loan in the reserve room, or overnight 2 hours before closing)

Blaikie, P., 1994. *At Risk: Natural Hazards, People's Vulnerability, and Disasters*. New York: Routledge.

Blong, R.J., 1984. *Volcanic Hazards: A Sourcebook on the Effects of Eruptions*. Orlando, FL: Academic Press.

Burton, I., R.W. Kates, and G.F. White, 1993. *The Environment as Hazard*, 2nd ed. New York: The Guilford Press.

Chester, David K., 1993. *Volcanoes and Society.* London: Edward Arnold.

Frazier, K., 1979. *The Violent Face of Nature: Severe Phenomena and Natural Disasters*. New York: Morrow.

Maybury, R.A. (editor), 1986. *Violent Forces of Nature*. Mt. Airy, MD: Lomond Publications.

Robinson, A., 1993. *Earth Shock: Hurricanes, Volcanoes, Earthquakes, Tornadoes, and Other Forces of Nature*. New York: Thames and Hudson (*** this book was due April 3, so should be available by the week of April 10).

Spence, W., R. Herrmann, A. Johnston, and G. Reagor, 1993. *Responses to Iben Browning's Prediction of a 1990 New Madrid, Missouri, Earthquake.* USGS Circular No. 1083, Washington: US Government Printing Office.

Wijkman, A., and L. Timberlake, 1988. *Natural Disasters: Acts of God or Acts of Man?* Philadelphia: New Society Publishers.