

**WASHINGTON UNIVERSITY
(ST. LOUIS, MISSOURI)**

GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK
WASHINGTON UNIVERSITY (of St. Louis)

SYLLABUS

Course: S20-5021

Title: Social Aspects of
Earthquake Hazards

Credit: 1

Location: Brown Hall, Room 111

Day and Time: Monday, 11:00 a.m. - 12:00 p.m.

Instructor: David Gillespie

Office Phone: (314) 935-6674

Office Hours: Tuesday, 1:00 p.m. - 2:00 p.m.

I. Course Domain and Boundaries

This course introduces some of the more important social aspects of earthquake hazards. The social aspects of earthquake mitigation, preparedness, response, and recovery are considered for individuals and families, organizations and communities, and societies. Topics include earthquake planning, beliefs and myths, emergency actions, restoration, reconstruction, perceptions, and attitudes toward various adjustments to reduce risks. Social aspects are recognized as creating both obstacles and opportunities for engineers, architects, social workers, planners, and other professionals who must be concerned with earthquake hazards.

II. Course Objectives

- A. To understand the social nature of earthquakes.
- B. To acquire knowledge of the social factors affecting earthquake mitigation, preparedness, response, and recovery.
- C. To reveal unfounded myths about human behavior in disasters.
- D. To increase awareness of unequal social consequences stemming from earthquake events.
- E. To gain an awareness of opportunities for policy adjustments and applications of research findings.
- F. To create or strengthen an appreciation for the practical value of social theory and theorizing.

III. Organization of the Course

Course content will be covered through reading, thinking, writing, talking, and listening. Readings are suggested for each class meeting. The reading should be completed prior to the

class meetings. Additional reading material may be suggested or assigned to increase the usefulness of the class discussions.

IV. Written Assignment

An annotated bibliography is due on the last day of class. Your bibliography should be organized around a particular theme concerning the social aspects of earthquake hazards. The topics addressed in class present one set of alternative themes for consideration. The number of citations appropriate for each bibliography will vary depending upon the amount of literature relevant to the theme which is developed. There are no absolute limits for the number of citations to be included in the bibliographies.

V. Grading Criteria

Your bibliography will provide 60% of your final grade. The criteria to be used in evaluating the bibliographies include: (a) thoroughness, (b) internal consistency, (C) lack of redundancy, (d) accuracy of reporting, and (e) clarity of annotations.

Your participation in class discussions will contribute 40% of your final grade. Criteria used include: (a) frequency, duration and quality of participation; (b) lack of digression from topic; (c) avoidance of redundancy; and (d) creativity.

VI. Course Outline

Class 1:

Orientation and Framework for Assessing Earthquake Hazards

Social aspects of earthquakes are defined and their significance is discussed. A general framework for understanding earthquake hazards is presented. Four temporal phases of disaster are discussed. Three social system levels are distinguished. The phases of disaster are cross-classified with the system levels to provide twelve areas for focused discussion. After considering the varying amounts of work in these areas, we discuss the merits and limitations of this general framework. We finish up this first class by talking about the focus of the course.

Drabek, Thomas E. *Human Response to Disaster: An Inventory of Sociological Findings*. New York: Springer-Verlag, 1986.

National Governor's Association. *Comprehensive Emergency Management: A Governor's Guide*. Washington, D.C.: U.S. Government Printing Office, 1979.

Class 2:

Earthquake Preparedness for Individuals and Families

Planning issues are discussed along with the acceptance of planning, family disaster planning, preparedness levels, and beliefs in disaster myths. Identifying earthquake hazards within living quarters and making common sense adjustments to reduce the probability of casualties is a useful aspect of preparedness. Most injuries result from flying glass, overturned bookcases, etcetera. Anything that can break away or fall during the shaking of an earthquake needs to be secured. There are things to do before the shaking, during the shaking, and after the shaking.

Turner, Ralph H. "Waiting for Disasters: Changing Reactions to Earthquake Forecasts in Southern California." *Journal of Mass Emergencies and Disasters* 1 (August, 1983): 307-334.

Wenger, Dennis E., Thomas F. James, and Charles F. Faupel. *Disaster Beliefs and Emergency Planning*. Newark, Delaware: Disaster Research Project, University of Delaware, 1980.

Whiteman, M.R. "Planning for Disasters: The Preparedness Dimension in Emergency Assistance." *Development Digest* 19 (1981): 93-97.

Class 3:

Individual and Family Responses

Victim reactions, non-victim actions, and emotional responses are discussed. When an earthquake strikes, people begin almost immediately to help themselves; they do not panic. The so-called "disaster syndrome" or shock is rare. There are very few instances of looting; instead, there is a strong sense of common identity where victims unite to deal with the problem. Preparing for an earthquake on the basis of what we know about how people act, rather than on the basis of misplaced popular beliefs, will increase the effectiveness of our responses. Special consideration is given to the emotional responses of children and older people.

Quarantelli, E.L. and Russell R. Dynes. "When Disaster Strikes (It Isn't Much Like What You've Heard and Read About)." *Psychology Today* 5 (No.9, 1972): 66-70.

Takuma, Taketoshi "Human Behavior in the Event of Earthquakes." Pp. 159-172 in E.L. Quarantelli (Editor), *Disasters: Theory and Research*. Beverly Hills, California: Sage Publications, 1978.

Class 4:

Individual and Family Recovery

The processes of both short-term and longer-term recovery are discussed for individuals and families. Aspects of victim health, definitions of loss, self-help, and helping behaviors are covered. We will consider both positive and negative impacts.

Barton, Allen H. *Communities in Disaster: A Sociological Analysis of Collective Stress Situations*. Garden City, New York: Doubleday and Company, Inc., 1969.

Howard, Stephen J. "Children and the San Fernando Earthquake." *Earthquake Information Bulletin* 12 (September-October, 1980): 190-192.

Bolin, Robert C. "Family Recovery from Natural Disaster: A Preliminary Model." *Mass Emergencies* 1 (1976): 267-277.

Ahern, Frederick L. "Disaster Mental-Health—A Pre-Earthquake and Post-Earthquake Comparison of Psychiatric Admission Rates." *Urban and Social Change Review* 14 (Summer, 1981): 22-28.

Class 5:

Individual and Family Mitigation

Hazard awareness, individual experience, and correlates of hazard perceptions are discussed. We also examine issues of earthquake insurance, and attitudes toward earthquake predictions.

Drabek, Thomas E, Alvin H. Mushkatel, and Thomas S. Kilijanek. *Earthquake Mitigation Policy: The Experience of Two States*. Boulder, Colorado: Institute of Behavioral Science, The University of Colorado, 1983.

Mileti, Dennis S. "Human Adjustment to the Risk of Environmental Extremes." *Sociology and Social Research* 64 (April, 1980): 327-347.

Parker, Stanley D., Marilyn B. Brewer, and Janie R. Spencer. "Natural Disaster, Perceived Control, and Attributions to Fate." *Personality and Social Psychology Bulletin* 6 (September, 1980): 454-459.

Wyner, Alan J. "Earthquakes and Public Policy Implementation in California." *Journal of Mass Emergencies and Disasters* 2 (August, 1984): 267-284.

Class 6:

Organizational Preparedness

Organizational preparedness has been identified with planning, resource identification, warning systems, training and simulations, and other predisaster actions intended to improve the safety and effectiveness of community response to earthquakes and other disasters. Drawing upon correlates of organizational preparedness, a preliminary model is presented and discussed.

Drabek, Thomas E. "Managing the Emergency Response." *Public Administration Review* 45 (January, 1985): 85-92.

Gillespie, David F. and Calvin L. Streeter. "Conceptualizing and Measuring Disaster Preparedness." *Journal of Mass Emergencies and Disasters* 5 (August, 1987): 155-176.

Class 7:

Emergency Response Systems

Some hypotheses based on a typology of emergency response organizations are discussed. Issues of organizational stress, mobilization, control, effectiveness, and coordination are considered.

Dynes, Russell R. *Organized Behavior in Disaster*. Lexington, Massachusetts: Heath Lexington Books, 1970.

Gillespie, David F., Ronald W. Perry, and Dennis S. Mileti. "Collective Stress and Community Transformation." *Human Relations* 27 (October, 1974): 767-778.

Class 8:

Organizational and Community Recovery

The recovery environment, emergent versus routine task structures, and media responses are discussed. We also examine the dynamics of the mass assault, the synthetic community, and patterns of community conflict.

Gillespie, David F. "Response and Recovery Planning in St. Louis." Pp. 573-583 in Walter W. Hays (Editor). *A Review of Earthquake Research Applications in the National Earthquake Hazards Reduction Program: 1977-1987*, Reston, Virginia: U.S. Department of the Interior Geological Survey, 1988.

Quarantelli, E.L. and Russell R. Dynes. "Community Conflict: Its Absence and Its Presence in Natural Disasters." *Mass Emergencies* 1 (1976): 139-152.

Ross, G. Alexander. "The Emergence of Organization Sets in Three Ecumenical Disaster Recovery Organizations - An Empirical and Theoretical Exploration." *Human Relations* 33 (January, 1980): 23-39.

Class 9:

Community Mitigation

Hazard perceptions and actions taken by organizational executives are discussed. We look at public education efforts and the influence of media organizations. Then we discuss what affects a community's adoption of earthquake mitigation policies and procedures.

Wenger, Dennis E., Thomas F. James, and Charles F. Faupel. *Disaster Beliefs and Emergency Planning*. Newark, Delaware: Disaster Research Project, University of Delaware, 1980.

Turner, Ralph H. "The Mass Media and Preparation for Natural Disaster." Pp. 281-292 in *Disasters and the Mass Media: Proceedings of the Committee on Disasters and the Mass Media Workshop*, February, 1979, Committee on Disasters and the Mass Media. Washington, D.C.: National Academy of Sciences.

Class 10:

Societal and International Preparedness

Structural complexity in a society contributes to fragmented and uneven disaster planning. Changes in levels of preparedness are usually prompted by a particular disaster rather than a persistent threat. Lower socioeconomic classes consistently bear disproportionate losses from earthquakes and other disasters. We will consider some of the problems of cross-national comparisons and assessments of international planning systems.

Blundell, D.J. "Living with Earthquakes." *Development Digest* 19 (1981): 110-118.

Brown, Barbara J. *Disaster Preparedness and the United Nations: Advance Planning for Disaster Relief*. New York: Pergamon Press, 1979.

Cochran, Harold C. *Natural Hazards and Their Distributive Effects*. Boulder, Colorado: Institute of Behavioral Science, 1975.

Mileti, Dennis S. *Disaster Relief and Rehabilitation in the United States: A Research Assessment*. Boulder, Colorado: Institute of Behavioral Science, 1975.

Nilson, Linda Burzotta, and Douglas C. Nilson. "Resolving the 'Sooner vs. Later' Controversy Surrounding the Public Announcement of Earthquake Predictions." *Disasters* 5 (No.4, 1981): 391-397.

Class 11:

World Response

Differential vulnerability and response patterns are discussed. Response patterns are affected by population concentrations, occupational trends, and various social institutions.

Burley, L.A. "Disaster Relief Administration in the Third World." *Development Digest* 12 (1974): 127-140.

Davis, Morris. "A Few Comments on the Political Dimensions of Disaster Assistance." *Disasters* 2 (Nos. 2/3, 1978): 134-136.

Dynes, Russell R. "Cross Cultural Studies of Disaster." Pp. 235-256 in *Proceedings of the Japan-United States Disaster Research Seminar: Organizational and Community Responses to Disasters*. Columbus, Ohio: Disaster Research Center, The Ohio State University, 1972.

McClure, R.S. "Coordination of International Emergency Disaster Relief." *Development Digest* 12 (No. 2, 1974): 119-121.

McLuckie, Benjamin F. "Italy, Japan, and the United States: Effects of Centralization on Disaster Responses 1964-1969." *The Disaster Research Center Historical and Comparative Disaster Series*, No. 1. Columbus, Ohio: Disaster Research Center, The Ohio State University, 1977.

Class 12:

World Recovery

Earthquake relief measures are not distributed evenly. Experts from industrialized countries sometimes have difficulty distinguishing disaster-related needs from chronic problems characteristic of developing countries. There are many instances of countries given assistance that conflicts with cultural values or actual needs of people in the impacted region. Rumors of epidemics sometimes disrupt relief efforts. The evidence thus far suggests that wide-spread disasters like earthquakes seem to intensify rather than lessen previously existing status differences and patterns of social inequality.

Cuny, Frederick C. *Disasters and Development*. New York: Oxford University Press, 1983.

Paulozzi, Leonard J. "Great Myths in Disaster Relief - Epidemics." *Journal of Environmental Health* 43 (No. 3, 1980): 140-143.

McLuckie, Benjamin F. "Centralization and Natural Disaster Response: A Preliminary Hypothesis and Interpretations." *Mass Emergencies* 1 (1975): 1-9.

Wijkman, Anders, and Lloyd Timberlake. *Natural Disasters: Acts of God or Acts of Man? An Earthscan Paperback*. London: International Institute for Environment and Development, 1984.

Class 13:

Societal and International Mitigation

All societies reveal continuing structural change. Sometimes changes increase vulnerability to earthquakes and other disasters. Population shifts, increased corporate risk taking, increased propensity to seek compensation for injury through litigation, and increasingly complex interdependence of organizational networks are examples.

Green, Stephen. *International Disaster Relief: Toward a Responsive System*. New York: McGraw-Hill Book Company, 1977. Published for the Council on Foreign Relations, Inc.

Kunreuther, Howard. "Disaster Insurance: A Tool for Hazard Mitigation." *Journal of Risk and Insurance* 41 (June, 1974): 287-303.

Petak, William J. "Natural Hazard Mitigation: Professionalization of the Policy Making Process." *Journal of Mass Emergencies and Disasters* 2 (August, 1984): 285-302.

Seitz, Steven Thomas, and Morris Davis. "The Political Matrix of Natural Disasters: Africa and Latin America." *Journal of Mass Emergencies and Disasters* 2 (August, 1984): 231-250.

Class 14: Discussion of bibliographic Topics.

**GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK
WASHINGTON UNIVERSITY**

SYLLABUS, SPRING 1995

Course: S81-XXXX

Title: Community Crisis Management Skills

Credit: 1

Location: Brown Hall, Lounge

Months, Days, Time: January 23, February 6, February 20, and March 13, 1995

Each class meets from 1:00 p.m. to 4:30 p.m. with a short break

Instructors: David Gillespie and Mary Rogge

Office Phone: 935-6674 and 935-7087

Office Hours: Gillespie: Monday, 2-3 p.m., Tuesday, 1-2 p.m.

Rogge: Monday, 4:30-6:00 p.m.

I. Course Domain and Boundaries

This lab examines major facets of disaster management. Skills are learned for managing mitigation, preparedness, response, and recovery. Different levels of intervention (individual, local, regional, national, international) as well as both private and public types of intervention are considered for each phase of disaster management. The skills that are covered include vulnerability screening, network building, leadership negotiation, and resource mobilization. These skills are useful for social workers, engineers, architects, planners, and other professionals who must be concerned with natural and technological hazards.

II. Course Objectives

- A. To acquire mitigation skills that help communities reduce the amount of damage and losses from disaster.
- B. To gain preparedness skills that increase community effectiveness in responding to disaster.
- C. To know how to apply response skills that minimize hardship immediately after disaster strikes.
- D. To attain recovery skills that improve the quality of life in communities struck by disaster.
- E. To increase awareness of opportunities for applying skills to improve policy and practice.
- F. To increase skills that create disaster management strategies at the individual, local, organizational, regional, national, and international levels.

III. Organization of the Course

Skills are learned through illustrations and exercises, as well as reading, talking, and listening. Supplemental reading is encouraged for each class meeting.

IV. Grading Criteria

Mitigation, preparedness, response, and recovery skills will each contribute 25% of the final grade.

V. Course Outline

Class 1: Monday, January 23, 1995, 1:00 p.m. to 4:30 p.m.

Mitigation

Types of mitigation, issues of special populations, and the role of various organizations are considered. Skills to achieve adoption of mitigation policies and procedures are learned.

Gordon, B. and Monague, P. 1990. *A Citizen's Toxic Waste Audit Manual*. Washington, DC: Greenpeace USA.

Streeter, Calvin L. 1991. "Disasters and development: Disaster preparedness and mitigation as an essential component of development planning." *Social Development Issues* 13(4), pp. 100-110.

Turner, Ralph H. "The Mass Media and Preparation for Natural Disaster." Pp. 281-292 in *Disasters and the Mass Media: Proceedings of the Committee on Disasters and the Mass Media Workshop*, February, 1979, Committee on Disasters and the Mass Media. Washington, DC: National Academy of Sciences.

Wenger, Dennis E., Thomas F. James, and Charles F. Faupel. *Disaster Briefs and Emergency Planning*. Newark, Delaware: Disaster Research Project, University of Delaware, 1980.

Wijkman, Anders and Timberlake, Lloyd. 1984. *Natural Disasters: Acts of God or Acts of Man?* Earthscan. Washington, DC: International Institute for Environment and Development.

U.S. Environmental Protection Agency. 1991. *A Risk Analysis of Twenty-Six Environmental Problems: Summary Report*. Washington, DC: U.S. Environmental Protection Agency.

Class 2: Monday, February 6, 1995, 1:00 p.m. to 4:30 p.m.

Preparedness

Disaster preparedness has been identified with planning, warning systems, training and simulations, and other predisaster actions intended to improve the safety and effectiveness of community response to disasters. Skills to build organizational preparedness are learned.

Banerjee, Mahasweta M. and David F. Gillespie. "Linking Preparedness and Organizational Disaster Response Effectiveness." *Journal of Community Practice* 2(3): Forthcoming.

Gillespie, David F. and Mahasweta M. Banerjee. "Prevention Planning and Disaster Preparedness." *Journal of Applied Social Science* 17 (No.2, Spring/Summer, 1993): 219-236.

Hadden, S.G. and Bales, B.V. 1989. *Risk Communication about Chemicals in Your Community: A Manual for Local Officials*. Washington, DC: U.S. Environmental Protection Agency and Lyndon B. Johnson School of Public Affairs, University of Texas at Austin.

Tierney, K.J., Petak, W.J., and Hahn, H. 1988. *Disabled Persons and Earthquake Hazards*. Boulder, CO: Institute of Behavioral Science, University of Colorado.

Class 3: Monday, February 20, 1995, 1:00 p.m. to 4:30 p.m.

Response

Issues of organizational stress, mobilization, control, effectiveness, and coordination are considered. Skills to enhance response effectiveness are learned.

Drabek, Thomas E. "Managing the Emergency Response." *Public Administration Review* 45 (January, 1985): 85-92.

Dynes, Russell R. *Organized Behavior in Disaster*. Lexington, Massachusetts: Heath Lexington Books, 1970.

Gibbs, L.M. and Collette, W. 1983. *Leadership Handbook on Hazardous Waste*. Falls Church, VA: Citizen's Clearinghouse For Hazardous Wastes.

Gillespie, David F., Ronald W. Perry, and Dennis S. Mileti. "Collective Stress and Community Transformation." *Human Relations*, 27 (October, 1974): 767-778.

Pick, M. 1993. *How to Save your Neighborhood, City or Town: The Sierra Club Guide to Community Organizing*. San Francisco, CA: Sierra Club Books.

Class 4: Monday, March 13, 1995, 1:00 p.m. to 4:30 p.m.

Recovery

The recovery environment, emergent versus routine task structures, and media responses are considered along with the dynamics of the mass assault, the synthetic community, and patterns of community conflict. Skills to minimize dysfunctional conflict are learned.

Berke, P.R., Kartez, J. and Wenger, D. 1993. Recovery after disasters: Achieving sustainable development, mitigation, and equity. In pp. 211-231 of *Socioeconomic Impacts*. Monograph 5. National Earthquake Conference. Memphis, TN: Central United States Earthquake consortium.

Cuthbertson, B.H. and Nigg, J.M. 1987. Technological disaster and the nontherapeutic community: A question of true victimization. *Environment and Behavior* 19(4), pp. 462-483.

Quarantelli, E.L. and Russell R. Dynes. "Community Conflict: Its Absence and Its Presence in Natural Disasters." *Mass Emergencies* 1 (1976): 139-152.

Ross, G. Alexander. "The Emergence of Organization Sets in Three Ecumenical Disaster Recovery Organizations—An Empirical and Theoretical Exploration." *Human Relations* 33 (January, 1980): 23-39.