

RUTGERS THE STATE UNIVERSITY OF NEW JERSEY
Department of Urban Studies and Community Health
Bloustein School of Planning and Public Policy

10:832:483
Protecting Public Health and the Environment
Spring 2005
Monday (6-8:40 pm)
Harbenbergh Hall room B2

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Hours to be arranged

Introduction

This course is about the multitude of factors that influence the environments of our neighborhood and our environmental health. You will learn by reading books and some additional articles, participating in class, and mostly by working on a field project that will become a short paper. There will also be a final exam. We will have several guest speakers who can address the issues from a political perspective.

It is absolutely essential that you understand my teaching philosophy. Many of the facts presented in environmental science and health are uncertain -- they change; they are debated; and they change again. I am not interested in having you memorize and tell back a series of uncertain facts or repeat the current legal controls, although these are important. I am interested in having you understand how our society makes policy in the face of uncertain facts and moral, legal, political and economic imperatives. This requires you to feel the uncertainty yourself, and the other pressures that influence policy in your own community. The best way for you to gain this sensitivity is to work in the field with real people and real health, redevelopment, and environmental issues. Please note that you will be required to do field interviews. If you do not want to do field work, please withdraw from the class.

The exam is based on questions that are included in this course outline. You can start developing answers immediately. Since you have the questions, my expectations for the answers are quite high.

After you complete the course, you should have expanded analytical, communication, and policy skills. Regarding analytical skills, I expect you to have a better understanding of how we define a research problem and question, determine what kinds of data and methods are needed to answer research questions, and the difficulties of drawing inferences from small and large data sets. Regarding communication, we want you to improve your ability to organize and write data-based research papers and to understand the role of communication in policy formation. In addition, you should have an idea of the effort required to obtain data through surveys.

Course Schedule

Class 1. Introduction (January 24th)

1. Overview of course goals, reading, and papers.
2. What makes a good and bad neighborhood and environment?
3. Review of survey instrument.

Class 2: Development and Public Health Elements of Community Health (January 31)

1. Key factors that have influenced metropolitan environment during the last 60 years and the next decades.
2. Specialization: The divorce of urban development and public health in the 20th century and the need to re-establish the link. Issues: sprawl, urban abandonment and decay, brownfield contamination, water supply and quality; air quality indoors and outdoors; noise pollution; visual blight; obesity; and many others.
3. Further discussion of class assignments

Class 3-7. Neighborhood Development and Policy Evaluation

1. Class 3, Policy criteria for decision making about neighborhoods and risk, using smart growth as an example (*February 7*).
2. Class 4, Scientific view of policy making (case studies of chemical weapons, urban redevelopment) (*February 14*).
3. Class 5, Public view of policy, outrage, trust, values, efficacy (*February 21*). Neighborhood surveys and definitions due on February 21.
4. Class 6, Mass media view of policy (*February 28*).
5. Class 7, Environmental inequity and ethics (*March 7*). Paper is due on March 7.
6. Spring break *March 14*.

Classes 8-15. Protecting Community Health: Some Examples

1. Classes 8-9, Superfund and brownfields redevelopment. What were they meant to do? What did they do? Why? (*March 21 and March 28*). What does it cost to remediate a site versus not cleaning it up?
2. Class 10: Is obesity and poor design a suburban problem? (*April 4*)
3. Class 11-15, Class presentations and guest speakers (*April 11, 18, 25 and May 2.*) Case studies of issues in public health and redevelopment. Case studies will be based on my knowledge, your interest and availability of outside speakers.

Reading

Read the following four books as you would a piece of fiction, do not try to underline or memorize everything. I want you to get their major messages: the link between those messages and how different people perceive hazards and risk. Try to integrate the ideas in these and other papers and books into your paper. There are specific questions from them in the final exam. Pace yourself, but make sure you do the reading.

M. Greenberg and D. Schneider, Environmentally Devastated Neighborhoods: Perceptions, Policies, and Realities. New Brunswick, NJ: Rutgers University Press, 1996. Focus on this book for your paper. This is particularly useful for the paper because it is the most extensive attempt to use survey data to understand the relationship of neighborhood quality and other factors. .

Frank, Lawrence, Peter Engelke, and Thomas Schmid, eds., Health and Community Design: the Impact of the Built Environment on Physical Activity, Washington, D.C.: Island Press, 2003. This is the first book to link design and obesity.

Worldwatch Institute, Inc. Vital Signs 2003: the Trends That Are Shaping Our Future, 2002, Worldwatch Institute. Very sobering assessment about the environmental health of the world, published annually. Do not read when you want to be cheered up.

Tarr, Joel, editor. Devastation and Renewal: An Environmental History of Pittsburgh and its Region, Pittsburgh, PA: University of Pittsburgh Press, 2003. A great new historical book.

Selected Articles and Books (you may find some of these useful for your papers). They are not on reserve.

S. Cutter, Living with Risk. New York: Edward Arnold, 1993.

PEW Research Center, Deconstructing Distrust: How Americans View Government, Washington, D.C., PEW, 1998.

M. Greenberg, Understanding the civic activities of residents of inner city neighborhoods, Urban Geography, 19, 1998, 68-76.

U.S. Environmental Protection Agency, Environmental Equity: Reducing Risk for All Communities (EPA/230-R-92-008, Washington, D.C., 1992).

N. Freudenberg, and C. Steinsapir, ANot in our backyards: The grassroots environmental movement,@ Society and Natural Resources 4, 235-245 (1991).

A. Levine, Love Canal: Science, Politics, and People (Lexington Books, Lexington, MA, 1982).

L. Gibbs, AThe movement on the move,@ Everyone=s Backyard 7(Summer), 1,3, 1989.

M. Edelstein, Contaminated Communities: the Social and Psychological Impacts of Residential Toxic Exposures (Westview Press, Boulder, CO, 1988).

N. Freudenberg, ACitizen action for environmental health: Report on a survey of community organizations,@ American Journal of Public Health 74, 444-448.

M. Brown, Laying Waste: The Poisoning of America by Toxic Chemicals (Washington Square Press, New York, 1981).

- S. Verba and N. Nie, Participation in America: Political Democracy and Social Equality (Harper & Row, New York, 1972).
- J. Mondros and S. Wilson, Organizing for Empowerment (Columbia University Press, NY, 1984).
- R. Putnam, 'Bowling alone: America's declining social capital', @ Journal of Democracy 6(1) 65-78 (1995).
- M. Castells, The City and Grassroots (University of California Press, Berkeley, 1983).
- M. Baldassare and C. Katz, 'The personal threat of environmental problems as predictor of environmental practices', @ Environment and Behavior 24, 602-616 (1992).
- L. Friedman, D., D. Nelson, P. Baer, M. Lane, P. Smith, et al. 'The relationship of dispositional optimism, daily life stress, and domestic environment to coping methods used by cancer patients', @ J Behav Med 15, 127-141 (1992).
- E. Lin and C. Peterson, 'Pessimistic explanatory style and response to illness', @ Behav Res Ther 28, 243-248 (1990).
- S. Strack, C. Carver, and P. Blaney, 'Predicting successful completion of an aftercare program following treatment for alcoholism: the role of dispositional optimism', @ J Pers Soc Psychol 53, 579-584 (1987).
- C. Carver and J. Gaines, 'Optimism, pessimism, and post-partum depression', @ Cognitive Therapy and Research 11: 449-462 (1987).
- M. Scheier, G. Magovern, R. Abbott, K. Matthews, J. Owens, et al. 'Dispositional optimism and recovery from coronary artery bypass surgery: the beneficial effects on physical and psychological well-being', @ J Pers Soc Psychol 57: 1024-1040 (1989).
- N. Weinstein, 'Why it won't happen to me: perception of risk factors and illness susceptibility', @ Health Psychol 3(5), 431-457 (1984).
- M. Scheier and C. Carver, 'Optimism, coping, and health: Assessment and implications of generalized outcome expectancies', @ Health Psychology, 4, 219-247 (1985).
- W. O'Brien, L. VanEgeren, and P. Mumby, 'Predicting health behaviors using measures of optimism and perceived risk', @ Health Values 19, 21-28 (1995).
- D. Piller, The Fail-Safe Society, Community Defiance and the End of American Technological Optimism (University of California Press, Berkeley, 1991).
- J. Flynn, W. Burns, C. Mertz, and P. Slovic, 'Trust as a determinant of opposition to a high-level radioactive waste depository: Analysis of a structural model', @ Risk Anal. 12(3), 417-429 (1992).
- J. Flynn and P. Slovic, 'Nuclear wastes and public trust', @ Forum APL. Res. Public Policy Spring, 92-101 (1993).
- W. Freudenberg, 'Risk and recreancy: Weber, the division of labour, and the rationality of risk perceptions', @ Soc. Forces 71(4), 909-932 (1993).
- P. Slovic, 'Perceived risk, trust, and democracy', @ Risk Anal. 13, 675-682 (1993).
- B. Fischhoff, 'Managing risk perception', @ Issues Sci. Technol. 2, 83-96 (1995).
- S. Jasonoff, 'Bridging the two cultures of risk analysis', @ Risk Anal. 13(2), 123-129, 1993.
- R. Kasperson, 'The social amplification of risk: Progress in developing an integrative

- framework, in S. Krimsky and D. Golding, eds. Social Theories of Risk (Praeger Pub., Westport, CN, 1992, pp. 153-178).
- L. Frewer and R. Shepherd, Ethical concerns and risk perceptions associated with different applications of genetic engineering: interrelationships with the perceived need for regulation of technology, @ Agriculture and Human Values. 12(1), 48- 57 (1995).
- J. Q. Wilson, The Moral Sense (Free Press, NY, 1993).
- M. Greenberg, D. Schneider, and J. Parry, Brown fields, a regional incinerator and resident perception of neighborhood quality, @ Risk: Health, Safety, and Environment, @ 6, 241-259 (1995).
- M. Greenberg and D. Schneider, Gender differences in risk perception: Effects differ in stressed vs. Non-stressed environments, @ Risk Analysis. 15, 503-511 (1995).
- M. Greenberg and D. Schneider, Neighborhood quality, environmental hazards, personality traits, and resident actions, @ Risk Analysis, 17, 1997, 169-175.
- M. Greenberg and M. Cidon, Broadening the definition of environments, mental equity: a framework for states and local governments, @ Population Research and Policy Review, 16, 397-413, 1997.
- J. Flynn, P. Slovic, and C. Mertz, Gender, race, and perception of environmental health risks, @ Risk Analysis, 14, 1101-1108 (1994).
- A. Campbell, The Sense of Well-Being in America (McGraw-Hill Book Co. N.Y., 1981).
- A. Campbell, P. Converse, and W. Rodgers, The Quality of American Life: Perception, Evaluations, and Satisfaction (Russell Sage Foundation, New York, NY, 1976).
- A. Furnham and H. Steele, Measuring locus of control: A critique of general, children=s, Health - work-related locus of control questionnaires, @ British Journal of Psychology, 84, 443-479 (1993).
- R. Lazarus, Emotion and Adaptation (Oxford University Press, NY, 1991).
- A. Stone and J. Neale, New measure of coping: development and preliminary results, @ Journal of Personality and Social Psychology, 46, 892-906 (1984).
- L. Pearlin, M. Lieberman, E. Menaghan, and J. Mullan, The Stress Process, @ Journal of Health and Social Behavior, 22, 337-356 (1981).
- L. Pearlin and C. Schooler, The structure of Coping, @ Journal of Health and Social Behavior, 19, 2-121, 1978.
- S. Folkman and R. Lazarus, If it changes it must be a process: study of emotion and coping during three stages of a college examination, @ Journal of Personality and Social Behavior, 48, 150-170, 1985.
- C. Beaumont, Smart States, Better Communities. Washington, DC, National Trust for Historic Preservation, 1996.
- K. Benfield, Once there were greenfields. Forum for Applied Research and Public Policy, 14(3), 1999, 6-16. Actually the entire issue focuses on smart growth.
- R. Burchell, R. D. Listokin, and C. Galley, Smart growth: more than a ghost of urban policy past, less than a bold new horizon, Housing Policy Debate, 11, (4), 2000, 821-879.

Grades

Grades will be primarily be based on the paper and exam. Each will be assigned a grade. During the semester, I will ask for class members to summarize the results of their neighborhood surveys. A verbal presentation is required. Please do us all a favor by not enrolling in this class if you do not intend to attend, participate, and do not like to write. I have high expectations of every student in this class. Merely showing up when it is convenient or not paying attention will not work.

1. Surveys: 5 points
Neighborhood definition: 5 points.
2. Paper: 40 points
2. Exam: 35 points
3. Class participation, including attendance: 15 points

Grades on Paper

Presentation - page numbers, margins, double-space, clear typing, lay-out of tables and charts (if any): 10 points

Spelling, grammar and overall writing quality: 20 points

References and citations: 15 points

Structure of the paper (introduction, development of the argument, conclusion) 15 points

Content of the paper (answer to the questions and analysis): 40 points

Total: 100 points

Late papers: 5 points deducted per day, unless we have been informed and given an appropriate reason for lateness.

A:	91 - +	C:	70-74
B+:	86-90	D:	65-69
B:	80-85	F:	<65
C+:	75-79		

Class

Due Assignment

3rd week, or February 7: NEIGHBORHOOD DEFINITION: Walk around and through a neighborhood. Look, hear, smell, and feel it. Don=t rush. Draw your neighborhood on a map. Sketch in the streets, terrain, major buildings, water bodies, bridges, and other important physical features. Make sure your map has a scale and a north arrow. Turn in the map, it will be returned to you. In one page, what are the reasons you defined the neighborhood with these boundaries?

5th week, or February 21: SUBMIT SURVEYS: Turn in 8 surveys if you are an undergraduate student, 16 if you are a graduate student. Half of your responses should be at least 60 years old and half less than 60 years old. Keep one copy for yourself and return one copy to us. Each

survey will take 2 to 1 hour to complete. Don't rush. We want you to understand the survey interview process. The surveys are anonymous. Do not put anything on the survey that will identify the respondents. If a respondent does not understand a question, you can explain it to him/her. But do not help the respondent answer the question. I will talk more about IRBs in class. (see also notes below)

The surveys you provide to us will be coded. This will allow the instructor to analyze the data and present the results to the class during the last class. Your grade on this assignment is satisfactory, or you redo it until you get it right.

7th week, or March 7: **Paper Due (Length 6 to 12 pages, not including tables and charts)**

RISKS, PRIORITIES, AND AGE PAPER

Looking at questions 1 and 2, what risks were people most concerned about? How much control did they feel that they had over these risks (question 3)? How much do they think we knew about these risks (question 4)? Looking at questions 5 and 6, how did their priorities compare to their perceptions of government priorities? Is there a difference between the elderly and younger respondents with regard to these answers? Is there a difference between more and less formally educated respondents? Between respondents who rate their health as excellent or good versus fair and poor?

Looking at part 2, how much did people rely on past experience and how comfortable were they with answering without additional information from written documents and friends?

Do you see any relationship in their responses between their responses to their priority questions (question set 5) on the one hand and the trust questions in part 3 (last page), their feelings of control (question set 3), their responses to knowledge (question set 4), and government priority questions (question set 6).

Integrating across all the material you have gathered this semester, how would you rate your respondents risk priorities compared to your risk priorities? What do you think explains the difference between their responses and your responses? What do you think the government's priorities ought to be compared to your respondents?

See notes below for further suggestions about preparing the paper.

FINAL EXAM QUESTIONS (four to be selected for the final exam)

1. Pick a community health issue, such as HIV/AIDS, asthma, drugs and violent crime, water quality, air quality, brownfield redevelopment, and others and explain how health and science; cost and benefit; political officials' reactions; staff reactions; media coverage; public

perception; ethical and moral implications bear upon decision-making with regard to this policy. Which factors drive the process? Why? Use readings to support your answers.

2. What is risk analysis? How does the scientific perspective on risk differ from the public perception of risk? Why are they different? How do the mass media impact public perception of risk? What is environmental justice, and how important is it in risk analysis and management? Use readings to support your answers.

3. Larry Frank and his colleagues argue that landscape design influences public health. What is their evidence? How strong is the proof they present?

4. Reading the annual Worldwatch Institute report is sobering. Why do I choose that word? what conditions continue to worsen, and what conditions appear to be improving? Why?

5. What factors do Greenberg and Schneider say lead people to rate their neighborhood quality as poor or fair? In light of what you have learned, why are these factors so important?

6. Joel Tarr's environmental history of Pittsburgh and environs shows a major transformation over the course of a century. What major stages has Pittsburgh gone through and what have been the environmental and health effects of each of those stages?

Assignment Specifics: NEIGHBORHOOD DEFINITION

This assignment is made up of two components: a map and a one page written description. Please use normal size (8.5" x 11") paper and staple everything together.

It is **CRITICAL** to understand that the neighborhood you use for this assignment will be **THE SAME NEIGHBORHOOD** in which you will later conduct your surveys. Therefore, when selecting a neighborhood to describe, be sure that it is somewhere you can visit easily, would feel comfortable conducting interviews and where you can find people of different ages (remember that half your surveys must be filled out by people under the age of 60 and half by those over 60).

A town is **USUALLY NOT** considered to be a single neighborhood. If you wish to study an entire town please consult with Dr. Greenberg for approval **BEFORE** proceeding with this assignment.

Map:

Draw your map by hand. You don't have to be a great artist, just make sure that it's neat and legible. Using different colors can be a good way to enhance your map.

Things you **MUST** include:

- Streets with street names
- Landmarks (schools, ponds, hills, etc.)
- Scale (i.e.: 1 inch = 10 feet)
- North Arrow

- Clear boundaries (make sure that the boundaries depicted on your map coincide with those you enumerated in your written description)
- Terrain

**** If you use maps infrequently, it may be a good idea to examine a real map before beginning this portion of the assignment, in order to familiarize yourself with the normal components and format.

Written Description:

Before sitting down to write, take a walk through the neighborhood. Get a feeling for the place, your description should include your observations and serve to delimit the area in which you will later conduct your survey.

Things you MUST include:

- Location of the neighborhood (city and state)
- Study area boundaries AND why they were chosen (i.e.: Fisher Creek was chosen as the northern boundary because it is a natural barrier that separates the neighborhood of study from the surrounding area.)
- Observations (some examples of things to think about include: Is it quiet? Are there lots of kids running around? Does it feel like a safe place? Do people have gardens? Are the houses in disrepair?)

Assignment Specifics: ADMINISTERING SURVEYS

For this assignment you will be acting as an independent researcher, asking eight (if you are an undergraduate) or sixteen (if you are a graduate student) people to fill out the survey which will be provided to you in class.

This is the fun part - you are gathering original social science data!

What to Hand In:

Make a photocopy of each completed survey, keep these for your own use (you will need them in order to write the term paper). Write your name at the top of each ORIGINAL survey, place them in the envelope, and hand them back to Josie. Make sure to double check that all 8 (or 16) surveys are in the envelope.

Do:

. Devise a sampling methodology and remain consistent throughout the survey process. (i.e.- Interview a resident from every 10th house on the right-hand side of the street until you have acquired the necessary number of completed surveys.) Just be careful that the method you choose does not accidentally introduce bias into your sample.

. Conduct all surveys in person. Either hand the respondent the survey and a pen and ask them to fill it out, or read them the questions and the answer choices and fill it out for them.

. Do not allow respondents to take surveys home with the promise that they will return

them to you later.

- . Conduct ALL surveys within the area you used for the “Neighborhood Definition” assignment.

- . Make sure that half of your respondents are under age 60 and half are 60 years old or older.

- . Strive for diversity within your sample. Try to survey people of different racial/ethnic backgrounds, sexes and ages (keeping in mind the guideline just mentioned).

- . It is advisable (although not required) that you carry a notebook with you while conducting your surveys. In it you can write your own observations about the circumstances of the interview. Although this would not be a good idea for a large-scale undertaking, with such a small number of respondents, this type of information could be useful later in analyzing your data.

- . Begin the surveying process early. Unpredictable factors, such as weather conditions, can affect the ease of locating respondents - Don’t wait until the last minute to start!

- . Remember to thank respondents for taking the time to complete your surveys.

Don’t:

- . Don’t conduct surveys over the phone.

- . Don’t select respondents who share a common trait that could affect their responses to the survey. (i.e.- Don’t survey a group of your parents’ friends, local volunteer firemen, a family of recent immigrants, etc.)

- . Don’t put yourself at risk. Be smart about who you interview and where, remember that your safety is the top priority.

Assignment Specifics:

RISK, PRIORITIES AND AGE PAPER

This paper should provide an analysis of your survey findings, your interpretations of their meanings, and comparisons between your observations and theories advanced by/studies described in the scholarly literature. Focus your thoughts around a central thesis: what is the underlying message conveyed by your respondents’ answers? Use specific examples to support your thesis and to highlight any possible deviations from it.

General Guidelines:

- . Include an INTRODUCTION and CONCLUSION in your paper. These sections should be used as transitions into and out of the body of your paper and provide a brief summary of its underlying thesis.

- . Make sure to answer EVERY QUESTION listed in the assignment description (pg. 7 of the syllabus).

- . Provide counts of responses (NOT percentages) within your explanations. (i.e.- Six respondents felt “calm” with respect to sexual abuse, the other two felt “uncertain”, no one reported experiencing “dread at the gut level”. It seems, therefore, that this risk factor was not perceived as especially threatening by the survey participants.)

- . Include AT LEAST THREE references in MLA format. Good examples include, but are not limited to: the 2000 US Census (useful for gathering demographic information about the

study area), scholarly publications (such as those enumerated within the syllabus), pamphlets or web sites which provide information about relevant social or other types of programs that are ongoing in the area of study.

- . Provide a description of your sampling methodology within the body of your paper.

- . Describe any shortcomings of your study.

- . Be aware that **YOU WILL BE GRADED ON YOUR SPELLING, GRAMMAR AND OVERALL WRITING QUALITY.**

Charts and tables are optional. If you choose to include them, please discuss them in the text of your paper.

Everyone will be allowed ONE rewrite. If your paper is handed back to you marked as a “REDO” (this means that it is unacceptable and has not been assigned a grade), the grade you receive on the next attempt will count as your FINAL GRADE for the paper.

Do:

- . Write-out numbers less than ten.

- . Spell people’s names correctly.

- . Have OTHER PEOPLE read your paper and make corrections before you hand it in.

Choose individuals who you think are good writers, who have the time to give your paper serious attention and who will give you honest feedback. You may wish to take your work to the writing center. A typical paper that I write takes 3-5 drafts and is read by at least two colleagues.

Don’t wait until the last minute to get help.

- . Read your paper OUT LOUD to yourself. Does it flow well? Is it interesting?

- . Use speculative language in explaining your findings. (i.e- “It seems that...”, “It is probable that...”, “This is likely caused by...”) If you use definite language it must be accompanied by a citation.

Don’t:

- . Don’t assume that the reader is acquainted with the class or the survey. Write so that anyone can understand your work.

- . Don’t use improper references. If you would like to use a reference, but are unsure whether it is acceptable, ASK before submitting the paper.