



ENVIR 202 • WINTER QUARTER 2003

INTRODUCTION TO ENVIRONMENTAL STUDIES: POPULATION & HEALTH

Final Examination Review Sheet

Your final exam will be the same format as your midterm and is the same percentage as the midterm.

The first part of the exam will be a set of short answer questions similar to (but not necessarily exactly like) the ones below. Note that this is not an exhaustive list of questions. Your short answers should not exceed one well-written paragraph, and may be shorter. The second part of the exam will be a choice of essay questions. These questions ask you to make an argument and support it with evidence. Your answers will be judged on content, logic, and organization. It would be wise to outline and write drafts of your answers beforehand. Your answers will likely be around 3-4 paragraphs.

1. Professor Treser presented a model of disease etiology where the agent and host balance on the fulcrum of the environment. Explain the role of the environment, its important factors and processes, in this model. Provide an example to illustrate your answer.
2. Using examples from the current events, lectures, and/or your textbook carefully explain three impacts on population health caused by urbanization.
3. Discuss at least three population health trade-offs between traditional agricultural societies and industrialized urban societies. (You may want to use real-life examples.)
4. Give an example of how recent changes in political/economic systems have resulted in changing patterns of infectious disease.
5. What three (3) key factors in Kaplan's human ecological model explain the demographic transition in India?
6. Apply Mike Davis' view of disaster to Seattle. Indicate if the conditions for a disaster are present in the Seattle area.
7. Apply the concept of "seed nexus" to the concept of health, and provide an example.
8. Name and explain three theories that attempt to explain the beginnings of agriculture.
9. McMichael discussed the concept of "ecological footprints". Is it possible for two cities with the same size population, covering the same land area to have different ecological footprints? Why or why not?
10. Describe three factors that help explain why malaria is still a major public health threat in many areas of the world.

11. In general, the world's rural populations are declining and urban populations are rapidly rising. A) What is the primary cause of urbanization? B) Using examples from the lectures, textbooks, readings and films, detail three "push" and three "pull" factors that have contributed to this trend.
12. What are three characteristics of intensive agricultural systems? Discuss the economic/ecological/political implications of one of these specific characteristics.
13. McMichael critiques various solutions that people have developed to address urban problems. Identify at least 2 of these solutions and McMichael's critiques associated with both.
14. In Jennifer Mas' lecture on Population Health, she argued that income distribution is a factor in determining the health status of populations measured at state and national scales. Explain a possible mechanism for this relationship between high income inequality and poor population health status.
15. Critique the use of life expectancy as the best measure of population health.
16. Representatives of the biotechnology industry are currently promoting Yellow Rice on television. A) What problem is Yellow Rice supposed to address? B) What is one externality of Yellow Rice production? C) What is it about golden rice that is of concern to a political ecologist?
17. Rachel Carson has said "The 'control of nature' is a phrase conceived in arrogance, born of the Neanderthal age of biology and philosophy, when it was supposed that nature exists for the convenience of man." Carson and Fred Soper lived at the same time, yet held diametrically opposed ideas about nature. What was Soper's view on control of nature? Give an example of his philosophy.
18. What are three ultimate and three proximate factors responsible for rising mosquito populations around the globe?
19. Is access to health care the most important factor for keeping people healthy? From a political economic perspective, why or why not? From an ecological perspective, why or why not? Give specific examples to support your opinion.
20. The Zimbabwe famine crisis was recently in the news. Zimbabwe's biggest trade partner is the European Union, which is not a supporter of GMO foods. The United States offered to give GMO corn kernels to Zimbabwe to help alleviate its famine. Zimbabwe would not accept the corn unless it was milled, which the US declined to do. What are some possible explanations for Zimbabwe's refusal?
21. Describe social cohesion. Give an example linking social cohesion to health.
22. Why is community mapping important to things like public health and environmental policy?
23. What is the precautionary principle? Give an example of a public health issue in which it has been applied (or could be applied) and explain why.
24. Is the demographic transition experienced equally by all members of a given society? If not, why not? Explain your answer using examples from Mary Shenk's lecture on urban India, or from another culture you are familiar with.

25. Define substantive and procedural environmental justice and give an example of each. Which do you think is more important for ensuring the long-term physical and social health of a population?
26. King County recently approved building a wastewater treatment plant. What questions would you ask from a substantive justice perspective? From a procedural justice perspective?
27. The following is a recent press release from the United Nations:

“A press release from the U.N. Population Fund (UNFPA) says global population is increasing by 77 million people a year, a rate of 1.3 percent. Half of the annual growth is occurring in six countries: India, China, Pakistan, Nigeria, Bangladesh and Indonesia. Most of the overall global population growth is expected to occur in developing nations. Fertility rates in lesser developed regions are expected to decline, but the new report has developed a range of projections, each based on different assumptions.”

What assumptions about fertility rate, mortality rate, demographic transition may underlie their estimates? Discuss regional differences hidden in this global projections. Could under-population a problem in some regions of the world?

28. Was the limits to growth argument science or theory? What are the implications when looking at something as science versus theory?
29. Over the last two hundred years the world's population has become increasingly urban. How has the social organization of production and consumption contributed to this unprecedented growth? What can societies do to maximize the benefits and minimize the costs associated with urbanization?
30. Is population growth the cause of poverty (planetary overload?) or is poverty a cause of population growth (or neither, or both?). Discuss in relation to environmental change.
31. Provide a constructive critique of the concept of human carrying capacity.