## Air Quality Issues: Parts 1 and 2 Study Guide EVPP 111 Lecture - Spring 2004 Dr. Largen

## <u>Air Quality Issues: Air Pollution, Indoor Air Pollution, Acid Deposition, Greenhouse Gases</u>

- What is air pollution?
- What are some natural events that can degrade air quality?
- What are the primary activities of humans that can degrade air quality?
- What are some of the results of air pollution?
- What are some of the causes of extremely poor air quality in megacities of developing countries?
- Where do air pollutants tend to accumulate in the US and why?
- What is a primary air pollutant?
- What are the 5 major types of primary air pollutants?
- What is a secondary air pollutant?
- What are the two major categories of secondary air pollutants?
- What is carbon monoxide, how is it produced, what is its largest source, what problems does it cause?
- What are hydrocarbons, how are they produced, what is their largest source, what problems does they cause?
- What are particulates, how are they produced, what is their largest source, what problems does they cause?
- What is sulfur dioxide, how is it produced, what is its largest source, what problems does it cause?
- What are nitrogen oxides, how are they produced, what is their largest source, what problems does they cause?
- What is photochemical smog, and how, in general, is it produced?
- What roles do ozone and PANs play in photochemical smog and why?
- What is acid deposition?
- What are some natural events that contribute to acid deposition?
- What are some human activities that contribute to acid deposition?
- How are acid forming reaction classified?
- What is acid rain?
- What is the pH of "normal" rain?
- What is the scope of the acid rain problem?
- What kind of damage does acid rain cause to man-made materials?
- What kind of damage does acid rain cause to ecosystems?
- What is global warming?
- What do scientists feel have occurred during the past 100s to the earth's average global temperature and sea level?
- What are the areas of concern, generally, related to global warming and climate change?
- What causes global warming?

- What are the characteristics the gases called "greenhouse gases" in terms of their role in global warming?
- What are the four most important greenhouse gases?
- Which is the most abundant of the greenhouse gases?
- What are the sources of the greenhouse gas carbon dioxide?
- What are the sources of the greenhouse gas methane?
- What are the sources of the greenhouse gas nitrous oxides?
- What are the sources of the greenhouse gas chlorofluorocarbons?