

Rutgers, The State University of New Jersey

Fall 2019

Biology, Society and Ecological Issues 01:119:160

Professor John Pescatore

Office Hours – 10 minutes before or after class

Phone (609)477-8954

Textbook – “Living in the Environment”, Nineteenth Edition, by G. Tyler Miller, Jr. Wadsworth Group
Brooks/Cole Thompson Learning, Inc.

CLASS

LECTURE TOPICS

- 1 *Ecology* – Ecosystems, Energy, Ecotones, Realms, Biomes, Biomass, Biosphere, Biogeochemical Cycles, Classification of Organisms according to Energy Relationships and Food Source, Food Web, Ecosystem Homeostasis, Competition, Sustainability, Environmental Injustice
- 2 *Evolution of Humans*
- 3 *Human Population Growth* – Effects of an Increased Population, Population Size Limitations, Population Growth Curves, Demography, Population Ecology, Measurements of Growth, Demographic Transition, Population Policies and Control in Different Countries
- 4 *Air Pollution* – Gases and Smoke, Atmosphere, Sources of Pollution: Natural vs. Man-made, Photochemical and Industrial Smog, Temperature Inversion, Effects of Air Pollution, Air Pollution Standards, Control, Air Pollution Legislation
- 5 *Pest Control* – Chemical Pesticides, Biological Pest Control, Integrated Pest Control, Herbicides
- 6 *Food* – Fat and Water Soluble Vitamins, Nutrition, Food Crisis, Green Revolution, Novel Sources of Food, Chemicals in Food: Stabilizers, Emulsifiers, Preservatives, Artificial Colors and Flavors
- 7 **TEST 1**
- 8 *Energy* – Types and Use of Energy, Renewable and Nonrenewable Energy
- 9 *Water Pollution* – Hydrological Cycle, Types of Impurities, Categories of Water Pollutants, Bacterial Processes, Effects of Pollution on Rivers and Lakes, Eutrophication, Pollution of the Oceans, Effects on Human Health, Water Purification, Water Pollution Legislation
- 10 *Solid and Hazardous Waste* – Cycles, Types of Solid Waste, Nature of the Problem, Disposal Techniques, Energy Derived from Solid Waste, Recycling
- 11 *Noise Pollution* – Anatomy and Physiology of the Ear, Sound vs. Noise, Decibel Levels, Decibel Scale, Effects of Noise on Man, Noise Control, Noise Legislation
- 12 *Noise Pollution* - continued
- 13 Continue Oral Presentations
- 14 **TEST 2**

GRADING SYSTEM

Multiple Choice Tests (2)	80% (This is calculated from the average of the 2 tests)
Oral Presentation (1) or Paper (1)	15%
Attendance	5% This includes being on time and staying until the end of class.

You should read the appropriate chapters in the textbook to provide you with a foundation for understanding each lecture topic.

- You are expected to attend all lectures, take notes, watch any videos/presentations and stay until the end of class. Cell phones should be turned off during class.
- All missed tests will be made up on the date of our last test.
- If you want to discuss anything or meet with me, let me know in person or contact me via e-mail at johnpescatore48@gmail.com Your oral presentation should deal with an environmental subject, issue, or problem that is not too broad in scope. It should be between 10 or 15 minutes long and should include the use of Power Point. Check with me to determine the appropriateness of your topic. If you select to do the paper, it should be 9 pages long (7 pages of text, 1 title page, 1 works cited page).

