



### Schedule for ABIO 106, Fall 2007

| Date    |                                                                          | Chapter           |
|---------|--------------------------------------------------------------------------|-------------------|
| Aug. 24 | Introduction                                                             | 1                 |
| Aug. 27 | Ecosystems and Energy                                                    | 2                 |
| Aug. 29 | Sustainability and Biogeochemical Cycles                                 | 2                 |
| Aug. 31 | Succession and Biomes                                                    | 2 & 5             |
| Sep. 3  | <b>Holiday</b>                                                           |                   |
| Sep. 5  | Species Interactions                                                     | 7                 |
| Sep. 7  | Invasive Species and Extinctions                                         | 11                |
| Sep. 10 | Aquatic Ecosystems                                                       | 6                 |
| Sep. 12 | Aquatic Ecosystems                                                       | 6                 |
| Sep. 14 | <b>Exam 1</b>                                                            |                   |
| Sep. 17 | Water Resources                                                          | 6 & 14            |
| Sep. 19 | Water Quality                                                            | 21                |
| Sep. 21 | Water Quality                                                            | 21                |
| Sep. 24 | Population Dynamics                                                      | 8                 |
| Sep. 26 | Human Populations and Resource Use                                       | 9                 |
| Sep. 28 | Urbanization                                                             | 23                |
| Oct. 1  | Toxicology                                                               | 18                |
| Oct. 3  | Toxicology                                                               | 18                |
| Oct. 5  | Risk Assessment                                                          | 18                |
| Oct. 8  | Atmosphere and Ozone                                                     | 19 & 20           |
| Oct. 10 | <b>Exam 2</b>                                                            |                   |
| Oct. 12 | <b>Fall Break</b>                                                        |                   |
| Oct. 15 | Local Air Pollution                                                      | 19                |
| Oct. 17 | Local Air Pollution and Indoor Air Pollutants                            | 19                |
| Oct. 19 | Global Warming                                                           | 20                |
| Oct. 22 | Current Energy Technology: Oil and Natural Gas                           | 16                |
| Oct. 24 | Current Energy Technology: Using Coal for Electricity                    | 16                |
| Oct. 26 | Current Energy Technology: Using Nuclear Power for Electricity           | 16                |
| Oct. 29 | Future Energy Technologies: Can We Be Sustainable?                       | 17                |
| Oct. 31 | Toxic Metals: Lead and Mercury                                           | 22                |
| Nov. 2  | Toxic Metals: Cadmium and Arsenic                                        | 22                |
| Nov. 5  | Petroleum Hydrocarbons and Asbestos                                      | in-class material |
| Nov. 7  | <b>Exam 3</b>                                                            |                   |
| Nov. 9  | Solid and Hazardous Waste                                                | 22                |
| Nov. 12 | Endocrine Disruption and PCBs ( <b>research papers and letters due</b> ) | 18                |
| Nov. 14 | Dioxin and Pharmaceuticals & Personal Care Products                      | p. 568            |
| Nov. 16 | Food and Genetically Modified Crops                                      | 13                |
| Nov. 19 | Food-borne Illness                                                       | in-class material |
| Nov. 21 | <b>Thanksgiving Holiday</b>                                              |                   |
| Nov. 23 | <b>Thanksgiving Holiday</b>                                              |                   |
| Nov. 26 | Environmentally-Related Disease                                          | in-class material |
| Nov. 28 | <b>Exam 4</b>                                                            |                   |
| Nov. 30 | Pesticides                                                               | 13                |
| Dec. 3  | Radiation and Nuclear Weapons Legacy                                     | in-class material |
| Dec. 5  | Environmental Laws                                                       | in-class material |
| Dec. 7  | Noise and Light Pollution                                                | in-class material |
|         | <b>Comprehensive Final Exam: Dec. 12 at 9:00 am</b>                      |                   |

**CHANGES:** The instructor reserves the right to make changes in the lecture or laboratory schedule, the number of quizzes and exams given, and the contents of each exam as deemed necessary.

**RESEARCH AND ACTIVISM PROJECT:** Students are to identify one environmental problem with a direct impact on them, and then take action. This problem could be an on-campus problem, a local issue, or even a national / international issue. **On-campus and local issues are preferred.** Students are to submit a brief research paper that provides background on the issue and explains how it impacts humans. This paper should be 1 to 2 typed pages (1.5-spaced) and should include at least 3 references from periodicals and /or published books. **Website references are not acceptable.** The “action” portion of this project will include a letter to either the editor of the *Pacer Times* (for on-campus problems), the editor of the *Aiken Standard* (for local problems), or a letter to a legislator or other political leader. Once letters are graded and edited by the instructor, they will be returned to the student for revision and mailing (actual mailing of the letter will be the student’s choice). Students are strongly encouraged to explore ideas with the instructor and to bring up questions regarding this project during class. Students are also cautioned to be on their guard against plagiarism when preparing this paper and letter. The final version should be submitted in hardcopy and electronic format no later than November 12 at 5:00 pm. Ten points will be deducted for each day after November 12.

**ELECTRONIC DEVICES:** Plan to be out of touch and to have your cell phone stored out of sight during lecture and lab time. This includes leaving the room to answer silent rings or using the phone for text messages.

**COMPUTER USE AND EMAIL:** All laboratory reports will require the use of a computer. You must be able to log on to the USCA computer system in order to accomplish these laboratory exercises. If you do not know how to sign on to the USCA computer system, you should contact the CSD HELP desk as soon as possible. In addition, lecture outlines and any additional materials (handouts, extra figures, bonus quizzes, etc.) will be provided for students on Blackboard. Students are urged to print necessary materials prior to class time. Blackboard can be accessed through VIP (<http://vip.sc.edu>). Refer to the Blackboard help menus for information on accessing and using Blackboard. Blackboard login difficulties should be brought to the attention of USC Columbia Computer Services.

All official email communications, including class announcements, are made to USCA email accounts. Students should check their USCA email account on a regular basis and use this account for communication with the instructor. In order to protect the privacy of the student, the instructor will not reply to emails sent from non-USCA accounts (e.g., Hotmail, Yahoo, etc.).

**DISABILITY STATEMENT:** If you have a physical, psychological, and/or learning disability which might affect your performance in this class, please contact the Office of Disability Services, 126A B&E, (803) 641-3609, as soon as possible. The Disability Services Office will determine appropriate accommodations based on medical documentation.