The Conservation of Natural Resources ~ Your Cargo Cult College ~ © 2025 Dr. Walt Aikman

<u>COURSE DESCRIPTION</u>: This course explores the human relationship with the natural environment through the challenges and rewards of natural resource conservation. We will study this relationship through an ecological lens to learn about a variety of natural resource conservation efforts, including land protection through public land acquisition and private conservation easements, watershed management, wildlife management, and alternative energy development. We will consider these efforts in light of their ecological and economic sustainability, and target our attention on solving the problems that make the management and protection of living systems difficult. As such we will not spend time trying to fix society, as success in conservation is achieved through hard work, building trust and partnerships on the land to manage and protect vulnerable places, plants, and wildlife.

Although the diverse concepts within the course could well map out an academic major, this course will survey conservation as it is understood today and emphasize a practical, interactive approach using structured class discussions, field trips, strategy games, and hands-on computer lab work examining spatial data sets with Google Earth. Regular reading and homework assignments will be reinforced by discussions, lectures, and encounters with the outdoors, land owners, and resource managers. In this class, students are expected to reflect on their own relationship with the natural world and contribute to discovery and discussions. As a result of this approach we'll uncover some historic and current conflicts driving new approaches to conservation, new social movements, and the development of environmental policy and law. This will lead us to examine the ethical and political conflicts surrounding individual and community choices in natural resource conservation around the world today.

<u>COURSE OUTCOMES</u>. Upon completion of this course, the successful student will:

- Understand the history, principles, and practices of natural resource conservation.
- Grasp the fundamentals of ecology and how science frames natural resource conservation.
- Comfortably employ critical thinking skills to evaluate and engage arguments surrounding contemporary local, regional, and global conservation conflicts.
- Have a stronger appreciation for the diversity of natural resources in the Finger Lakes region and the importance of conserving them.

<u>COURSE TEXTS</u>: There are two required texts: Aldo Leopold's <u>A Sand County Almanac</u> & Richard L Knight & Courtney White's <u>Conservation for a New Generation</u>. In addition to these books, students will read from various texts & journals supplied by the instructor, articles held on library reserve, & other materials as needed.

COURSE ELEMENTS & GRADING VALUE:

Home Essay: 50% 2 exams: 20% each Class Participation: 10% <u>COURSE AGENDA</u>: Our time together is coordinated by an agenda that provides a dynamic but generally reliable plan for our work. Course elements like lecture & discussion topics & field trips will be listed in our agenda.

<u>Please note</u>: since our agenda will be influenced by the weather, available daylight, and the needs and convenience of our hosts, it is not set in stone. I will inform you of any agenda changes, but it is your responsibility to keep up with changes as they occur. Use it to plan your work and prepare for travel conditions. All transport will be provided by the Cargo Cult College.

<u>CLASS ATTENDANCE</u>. Students must attend classes in their entirety. College attendance policy is very clear about this. Experience shows that a significant number of accumulated absences - determined by the frequency the class meets, tardiness and early departures - will result in poor performance. Students who miss too many classes & do not complete their work in proportion to the grading scheme described above, will for any reason, fail the class. If you do decide to withdraw, I'll help you: but only written requests for withdrawal will be acted upon.

<u>EXAMS</u>: Exams are "open book" but they are not "open net". You may consult your notes and texts if you wish, but you cannot use Wi-Fi or 3/4 G networks to search for help. Do not be fooled by this policy: you can expect unusual and challenging situations on exams, including collaborative exercises that will tax your social interactive skills. It stands to reason if you attend class, participate, record good notes, and do your assignments you will probably do well on the exams.

<u>FIELD TRIPS</u> are planed for this class, as weather, time, and transportation permit:

- 1. Camillus Maples.
- 2. Owasco Flats.
- 3. Solid waste management centers, such as the Auburn Landfill or Recycle America.
- 4. Montezuma National Wildlife Refuge.
- 5. Private forest lands protected through conservation easements.
- 6. Honeywell's Onondaga Lake restoration project center.
- 7. Solar homes and/or businesses in the region.

<u>FIELD TRIP TRANSPORTATION</u>: College policy requires we use commercial transportation so you may not drive your own vehicles to field trip destinations. All Auburn-based field trips depart from the North side of the College, at the Tech building entrance. <u>Also note</u>: students must wear appropriate clothing, including footwear: please do not wear open toe sandals. Students are responsible for knowing where and when trips will take place. Students must be prepared for rain or snow. Use a practical approach to your preparation for field trips: why wear fancy shoes to a wetland? A landfill?

<u>ASSIGNMENTS</u>: There is one major writing / re-writing assignment in this course, the Home Essay. It is grounded in shared field activities and readings, and will be due at various points during the semester. All parts of the Home Essay require close reading, analysis, and solid writing. Each stage of your work will include reflection on, research into, and critical thinking about the activities we share and places we visit. Key portions of the Home Essay include, but are not limited to the following themes:

- 1. Local and Regional Environmental History in the "Good Oak" exercise.
- 2. Land Use Change, Choices as Values, & Nutrient Cycling.
- 3. Global Challenges in Conservation.
- 4. Footprint exercise / Human impact.
- 5. Conserving Wildlife across landscapes.

- 6. Conservation's Administrative Context.
- 7. Common Property Management & the Mangrove Commons strategy game.
- 8. Watersheds Management Conflict.
- 9. Ecological reciprocity.
- 10. Culture and Conservation.

<u>GRADING</u>: A: 95 to 100.0 % |A-: 90 to 95 % |B+: 85 to 90 % |B: 80 to 85 % |B-: 75 to 80 % |C+: 70 to 75 % |C: 65 to 70 % |C-: 60 to 65 % |D+: 55 to 60 % |D: 50 to 55 % |D-: 45 to 50 % |F: 0.0 to 45 %

GENERAL PERFORMANCE ADVICE: Temporarily disable your wireless device. Write everything down!