This class provides students with an overview of how technology has altered the environment over the course of the 20th Century. We pay special attention to the dilemmas posed by industrialization, pollution, overcrowding, and the biotech revolution. Students will read books and articles on a variety of topics. Students will go on a field trip to learn more about environmental conservation in the Greater Atlanta region, and students will research and write an 8-10 page final paper for this class.

Learning Outcomes: Students will...

- Gain an understanding of topics in the history of technology and the environment including pollution, water resources, environmental justice, development and the environment and biotechnology.
- Improve their knowledge about current issues around environmental sustainability, pollution and industrialization
- Understand, synthesize, and analyze the major themes and debates in the history of technology and the environment during the 20th and 21st Centuries.
Assessment: Students are expected to:

- **Attend** every class: Also, arrive on time. (10 % of final grade)
- **Participate**: Answer the Question of the Day at least 5 times during the semester. (10 % of final grade)
- **Read**: Students are expected to read 100-125 pages per week for this class. Quizzes will assess reading comprehension. Six quizzes, worth 4 points each, you may drop your lowest score (20 % of final grade)
- **Complete homework**: Students will be asked to complete 5 homework assignments. (10 % of final grade)
- **Write a book review**: A 450-500 word book review is due during week 10. (10 % of final grade)
- **Go on a field trip**: Around week 9 we will make a class field trip to a local institutions to learn about their conservation efforts. Students unable to attend the field trip can complete an (extensive, time consuming) alternate assignment. (20 % of final grade)
- **Research and write a final paper**: A 2000-2500 word paper (8-10 pages) is due on the day you are scheduled to take your final exam for this class (December 9). (20 % of final grade)

Books:
Richard White, *The Organic Machine*
Keith Basso, *Wisdom Sits in Places: Landscape and Language Among the Western Apache*
Mary Mycio, *The Wormwood Forest*
Rachel Carson, *Silent Spring*
Ramachandra Guha, *Environmentalism: a Global History*

**UNIT ONE: Water & Power**

**Week One August 19 & 21**: Course Introduction, Hand out syllabus, Lecture on Water and Power
Read *The Organic Machine* pp. 3-59, *Environmentalism, a Global History* Ch 1 & 2
Week Two: August 26 & 28: Lecture on dams in other places, and water rights in arid places, Read The Organic Machine, pp. 60-114, *Environmentalism* Ch. 3, Donald Worster, "The Flow of Empire: Comparing Water Control in the United States and China,” RCC Perspectives 2011, no 5 (available online in the resources section)

Week Three: Sept. 2 & 4: Lecture on nuclear waste, Quiz on unit readings
(N.B. I will not be here on September 4. You do not need to attend class, but you need to watch the movie *Chinatown* by Tuesday, Sept. 9)

UNIT TWO: Landscape & Memory

Week Four: Sept. 9 & 11: Lecture on Landscape and Memory, Land Use by Pastoralists, Farmers and Hunters
Read *Wisdom Sits in Places*, Ch 1 & 2

Homework #1 (Sept. 9, in class) Chinatown quiz
Homework #2 (Sept. 11) Read: Come prepared to share the history of a place-name

Week Five: September 16 & 18: Lecture on Athabaskan Cultural Continuities, How to read an industrial Landscape
Read *Wisdom Sits in Places*, Ch 3 & 4

UNIT THREE: A Century of Oil

Week Six: September 23 & 25: Quiz on *Wisdom Sits in Places*, Lecture on Energy Regimes, Lecture on Commons and Privatization
Readings: *Something New Under the Sun*: Ch. 10, 296-324, Harding, *The Tragedy of the Commons* “The Oil We Eat,” and “Letting the Grandchildren Do it” (available on T-square)
Week Seven: September 30 & October 2: Lecture on 21st Century Oil Regimes and the Future of Oil, Oil in Nigeria and in other developing countries

Homework #3: watch either Crude (2009) or Sweet Crude (2010)

Week Eight: October 7 & 9: Go over homework, Quiz on the readings, Lecture on offshore oil, pipelines, and environmental debates

UNIT FOUR: Conservation, Extinction & De-Extinction

Week 9: October 14 & 16: ***Field Trip Week*** The History of Conservation: Hunters & Tree-huggers, field trip discussion and wrap-up

Readings: Silent Spring Ch. 1-9 & 17

Week 10: October 21 & 23: Conservation in Africa, wildlife documentaries of Jacques Cousteau and Marty Stouffer

Book Review is Due October 23

Readings: The Myth of Wild Africa (available on T-square)

Week 11: October 28 & 30: recent extinctions and planned resurrections

Readings: online and film: Jacques Cousteau’s Mammals of the Deep
UNIT FIVE: Sacrificial Landscapes

Week 12: November 4 & 6: quiz on readings, Lecture on Major industrial accidents of the past 100 years
Reading: Wormwood Forest Ch. 1-3
**Homework Assignment #4: understand radiation exposure**
(N.B.: I will be out of town on November 6)

Week 13: November 11-13: Lecture on BPA and Regulation of toxicity, risk and uncertainty, Lecture on Chernobyl
Readings: Wormwood Forest Ch. 4-6

Week 14: November 18 & 20: Pollution and native territories in North America and elsewhere, quiz on readings, aftereffects of nuclear pollution,
Readings: Wormwood Forest Ch. 7-8

UNIT SIX: Feeding the World

Week 15: November 25: Quiz on reading, the environmental history of famine in the 20th Century
**Homework Assignment #5 Assess your own food security: pick 10 foods in your pantry to analyze**

Week 16: December 2 & 4: Go over homework, Lecture on the history of GMOs, The Green Revolution and other biotech miscalculations,
Readings: John McNeill, *Something New Under the Sun*, “Eat or Be Eaten” Ch. 7, Michael Pollan “Power Steer” *NY Times* March, 2002 (available on T-square)