



Study abroad.

SYLLABUS

ENDURING BOOKS: RACHEL CARSON'S SILENT SPRING

Instructor: Professor Frank von Hippel

Contact Hrs: 52

Language of Instruction: English

ROSARIO, ARGENTINA

Course Description

This course explores Rachel Carson's masterpiece *Silent Spring*, as well as the political, social, legal and scientific developments that followed its publication. The book is widely credited with launching the environmental movement. Students study how this movement developed in tandem with scientific discoveries and what the latest research demonstrates about the effects of contaminants on human and environmental health. The course includes field trips in Rosario, as well as exercises integrated into other program excursions in Argentina.

Course Objectives

- To gain an in-depth understanding of one of the most important books of the 20th Century, and how that book influenced the political, social and legal landscapes in an industrializing world.
- To gain scientific fluency in ecotoxicology in order to understand how contaminants affect human and environmental health.
- To appreciate the complex interplay between science, social movements, politics and law, and the role that each of these plays in the development of the others.
- To learn to critically evaluate claims by competing groups, as well as laws and regulations.
- To improve the student's ability to write well and concisely.

Instructional methodology

This course will include a combination of lectures, discussions and excursions. Lectures will be illustrated with photographs, short video clips, and modeling and mapping exercises. Questions and discussions will be encouraged. Students will be trained to think deeply about topics, and as part of this training students will engage in formal classroom debates. Students will have the opportunity to discuss controversial topics with local environmental experts, as well as see examples of concepts covered in class during field trips.

Method of Evaluation (Grading)

The course will have two essays, each worth 15% of the grade, as well as a final exam worth 15%. The exam will cover material from lectures and reading. Evidence of preparation for the two classroom debates, delivery of the debates and debate outlines will be worth 20% of the grade. Each student will also lead a classroom exercise at a local school, and this exercise will be worth 15% of the grade. Exercises from excursions will comprise 10% of the grade, and participation will comprise of the remaining 10% of the grade.

Course Readings

- Carson, R. (1962). *Silent Spring*. Available in various editions in English and Spanish.
- Colborn, T., Dumanoski, D. & Meyers, J.P. (1997). *Our Stolen Future*. Plume, 336 pp.
- Cronon, W. (2008). *DDT, Silent Spring, and the Rise of Environmentalism: Classic Texts*. University of Washington Press, 150 pp.
- United Nations Environmental Program: *Stockholm Convention on Persistent Organic Pollutants*.

For students with sufficient Spanish ability, supplemental readings in Spanish will be available, and students may read *Silent Spring* and the *Stockholm Convention* in Spanish.

Course Schedule

Week 1

Introduction to *Silent Spring*; What issues do not receive enough attention?

Week 2

Social & political developments following the publication of *Silent Spring*; Regulatory developments

Week 3

Advocacy & community-based science on contaminants; Concise writing

Week 4

All levels of government and pesticides; *Silent Spring* discussion

Week 5

Timeline: 1962 vs. Today; *Silent Spring* wrap-up

Week 6

Environmental justice and the Stockholm Convention on Persistent Organic Pollutants; Contaminated military sites

Week 7

Endocrine disruption; Assault on the male

Week 8

Case studies: Atrazine, perchlorate

Week 9

Discussion on the media; Communication: Introduction to debate

Week 10

Debate 1: The Use of DDT should be banned worldwide; Perceived economic benefits of DDT

Week 11

Q&A on Our Stolen Future; Legal issues

Week 12

Stockholm Convention revisited; Debate 2: The U.S. should ratify the Stockholm Convention

Week 13

The American Experience: Silent Spring; GIS & contaminants