



# Israel and the Environment

Syllabus – Fall 2019

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## **The course description is:**

This course studies the relationship between people and the environment, and the effects of Israeli societies and industries have on the environment. Plant and animal community structure, renewable and non-renewable resources and environmental degradation will be studied along with regional cooperation and problems between Israel and her neighbors. This course provides an introduction for non-biology majors into current problems that Israel faces in maintaining the stability, productivity, and sustainability of its environment. This class will identify relevant environmental issues, explore root causes underlying the problems, and examine how national and international agencies are addressing and assessing potential solutions to these issues.

## **The objectives of this course are for students to acquire a better understanding of environmental issues. Specifically:**

- 1) to acquire knowledge of ecological concepts as they pertain to environmental problems.
- 2) to gain an awareness and understanding of environmental problems and their causes.
- 3) to learn about the possible solutions to these problems.
- 4) to recognize the importance of the interactions of the political, social, and economic aspects of the environmental issues.

## **Content covered:**

- 1) Ecology food webs and interactions
- 2) Ecosystems in Israel
- 3) Human Impact of Ecosystems from 1st Aliya towards statehood and beyond
- 4) The role of the J.N.F. and Israel Nature Authority
- 5) Environmental impact on Israel's ecosystems through Industry and Agriculture
- 6) Alternative energy sources and resources
- 7) Environmental cooperation between Israel and its neighbors
- 8) Israel and environmental legislation

### **Assignments and Dates:**

Test Format: Both tests are multiple choice.

- Midterm Test: Nov 19, 2019 (25%) – (in class)
- Final Test: December 17, 2019 (25%) – (in class)

Take Home Test: Two Options so choose one:

- 1) Short Answer Essays (40%): Choose 7 short answer essays from 20 questions. These will cover specific environmental themes based on class readings. Due December 10, 2019 (send via email). Questions will be available on Nov 20. Each short essay will be a minimum of 2 pages with a minimum of 3 references cited.
- 2) Research Report or Project (40%) –December 10, 2019 : send via email. Research Paper (**10 page minimum**) on an environmental problem for this course. This will be a group project (1-3 per group). Your group will identify and select an environmental problem and address possible or actual solutions. The paper should describe the problem in sound ecological terms; present possible solutions in an unbiased fashion; and it must include the social, political and economic interactions that are part of this problem

You can also opt for a hands-on project instead of a paper. See me for more information and project approval.

If you miss a class, please get the lecture notes from another student.

Selective readings will come from: “**Pollution in a Promised Land**”; Alon Tal (Online Text)

HYPERLINK will be listed on the Moodle Class Site.

Also from “**Between Ruin and Restoration – An Environmental History of Israel**”; edited by Orenstein, Tal, Miller. Hyperlink will be listed on Moodle Class Site

Additional Articles and PowerPoint Presentations are located on the course website as well

**As per guidelines from the OSP office, attendance is mandatory. 1% per absence will be taken off your final grade.**

### **In Class Field Trip**

November 10: The Steinhardt Museum of Natural History - Tel Aviv University  
We will have a guided tour of the museum starting at 13:00 -16:00. Attendance is mandatory for this trip. (5% of Course Grade)

### **Judean Desert Jeep Trek - Date TBD**

**(No obligation to attend)**

This is the field lab portion of the course. The time in the field will be 9-10 hours.

Where are we going?: We will be traveling to the Judean Desert.

Sites we will visit: Ein Fawwr (The pulsating spring), Mar Saba Monastery (only the overlook and not the Monastery), Har Azazel (Jebel Munta – Scapegoat mountain), Horikanya, Metzuke Dragot Overview, and Dead Sea Coast along Kibbutz Qumran to spot for desert animals at night.

Daytime Focus:

- A) Geology of Syrian African Rift
- B) Water Resources in the Judean Desert from 810M to -410M
- C) Plant Survival Techniques in a desert climate
- D) Medicinal Herbs of the Judean Desert
- E) Keystone species in Upper and Lower Judean Desert Regions
- F) Interactions of Man and Nature: Conflict and Cohabitation
- G) Oil Shale in the desert?

Nighttime Focus:

- A) Ecophysiological Adaptations in Animals in the Judean Desert
  - a. Visit a fox colony in Wadi Almog
  - b. Spotting Ibex, Gazelle, Fox, Porcupine and Hyena
  - c. Bats and night predators (birds)

### **A) Weekly Reading List: Pollution in a Promised Land**

Week 2: Reclaiming a homeland (pages 19-21, 28-34)

Week 3: Palestine's Environment: (pages 35-47,63-68)

Week 4: The Forest's Many Shades of Green: (pages 69-85)

Week 5: The Emergence of an Israeli Environmental Movement: (pages 113-120, 145-148)

Week 6: The Quality and Quantity of Israel's Water Resources: (Pages 209-215, 225-229)

Week 7: Israel's Urban Environment: (pages 243-246, 268-271)

Week 8: Toward a Sustainable Future: (pages 405-420)

### **B) Weekly Reading List: Between Ruin and Restoration – An Environmental History of Israel**

**Week 2: The Environment in Palestine and Late Ottoman Period (1798-1918); Ruth Kark and Noam Levin. Pages 1-24**

**Week 3: Human Impact on Wildlife in Israel Since the Nineteenth Century; Yoram Yom-Tov. Pages 53-76**

**Week 6: Agricultural Roots of Israel's Water Crisis; Hillel Shuval (Moodle Site – Reading Materials**

**B) Three videos on environmental issues will be posted in Moodle with links to answer questions based on these videos. (5% of course grade)**

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## **TAU International Course Guidelines**

### **Rules and Respectful Behavior**

- No cell phones or laptops permitted in class unless approved by instructor for use
- Tardiness to class is not permitted
- As our courses bring together students from many different styles of learning and from a wide variety of home institutions, we ask that students remain respectful to and patient with fellow classmates at all time as some students may be more familiar with certain course material or procedures than others.

### **Learning Accommodations**

In accordance to University guidelines, students with learning disabilities or accommodation requests must submit official documentation from their home country / university (translated into English by notary if not already in English) to TAU International ([tauacademic@tauex.tau.ac.il](mailto:tauacademic@tauex.tau.ac.il)) in advance of arrival describing in detail any specific needs they have. Students must also bring a copy of this documentation with them on-site and give it to their faculty on the first day of class while introducing themselves so that the faculty know who they are and what sorts of needs they may have. TAU International and its faculty cannot guarantee that all accommodations received at

the home school can be similarly met at TAU but certainly does the best it can to make any suitable accommodations possible that are needed.

### **In-class Exams**

TAU does not permit, under any circumstances, taking any in-class (including mid or final) exams early or later than the scheduled exam day. When selecting courses, it is thus very important to note below if there is an in-class midterm or final exam as this date/exam cannot be changed. Early departures from the program are not approved, nor are early or exception in-class exams.

### **TAU International Absence Policy**

Attendance is **mandatory** in all of the courses. Missing classes will be reflected in the final grade of the course. Up to three justified absences from classes will be accepted (for example: emergency matter or illness, both of which will require an official doctor's note sent to the faculty **on the day of the absence**). Such cases of absence should be reported to your lecturer immediately and again, a doctor's note is required. Students are required to arrive on time for classes. Teachers are entitled to treat any single case of lateness and/or repeated lateness as an unjustified absence. Please note that according to TAU Academic Policy, if a student's behavior or attendance during the semester is disagreeable his/her course participation may be cancelled at the discretion of TAU.

**Students are responsible for reading and adhering to the policies and procedures in the TAU International Academic Handbook [posted here](#) at all times.**