

This syllabus was developed for a conservation biology course for second-year undergraduate students in the Department of Biology and Environment, Faculty of Life Sciences, University of Haifa–Oranim campus.

TiME for Conservation

Course Description

The TiME for Conservation course is based on the TiME initiative (this-is-my-earth.org), where every citizen of the world can contribute to purchasing and protecting biodiversity hotspots and vote on the TiME website for the particular habitat they wish to protect. To make an educated vote (votes translate into the amount of donations a proposed habitat purchase receives), students need to carefully learn about the different habitats available for purchase and thereby put into practice basic terms and ideas in ecology and conservation biology. Most of this short course, which can be part of a full course in conservation biology, is based on self-learning and group work. It also allows students to practice debate skills.

Course Level

- For 2nd-year university students majoring in biology

Prerequisite

- Ecology course

Course Goals

Students who complete this course successfully will be able to:

- Deeply understand basic terms in ecology and conservation biology
- Enhance their writing and debating skills in conservation biology
- Take real action to protect biodiversity hotspots

Required Texts, Materials, or Equipment

- TiME website: www.this-is-my-earth.org
- IUCN website: www.iucnredlist.org
- BioData Base website: biodb.com
- at least 3 computers/laptops/tablets

Major Assignments: Descriptions

The final assignment of this course is a short group presentation that aims to persuade the class to vote for the group's assigned habitat, one of the three biodiversity hotspots that are presented on the TiME website.

Time	Topics
15 min	(Tutor) Lecture: Offer an introduction to species extinctions and to the major causes of species extinctions today, in particular, the loss of habitats.
10 min	(Tutor) Lecture: Explain the concept of a biodiversity hotspot, and the TiME (This is My Earth) initiative.
5 min	(Tutor) Split the class into 3 groups. Make sure that a group has no more than 4 members. If the class is large, then try to split the class into multiple groups of 3 (6, 9, etc.). Each group will be assigned one of the habitats presented on the TiME website. For each of the underlined terms below, ask the students to provide a definition on a separate page. By the end of this short course, each group should have its own list of terms and definitions.
15 min	(Students) Assignment for the students: Describe the geography and physical structure of the habitat that you were assigned. To which <u>biome</u> does it belong? How much of this biome is protected? How would you define the <u>habitat type</u> ? Is the habitat <u>fragmented</u> ? What is the shape of the proposed protected area? How severe would you say the <u>edge effect</u> is?
30 min	(Students) Assignment for the students: Why do you think this habitat is considered a <u>biodiversity hotspot</u> ? Which <u>endangered species</u> does this habitat hold? According to the IUCN, what is the conservation status of each of these species? Define each of the conservation statuses (<u>CR, EN, VU, NT, CD, LC, DD</u>). For each of the species, note if it can serve as a <u>flagship, umbrella, keystone, indicator, or an economic species</u> . Define a <u>species</u> . Provide different definitions for this concept.
30 min	(Students) Assignment for the students: What is the long-run management plan for the proposed protected area? What are threats to this habitat? Are there any <u>disturbances</u> within the habitat that may expand? What are the main reasons to protect this habitat? In what specific ways does preserving the habitat address these reasons? What are some of the <u>ecosystem services</u> that the protected habitat will provide: in general, for the locals, and for the world? Does the habitat serve as a <u>biological corridor</u> ? Does the habitat have the necessary characteristics to qualify as a <u>UNESCO biosphere reserve</u> ?

Time	Topics
	(Students) Additional discussion topics: Discuss the price of the habitat. What is the local currency? How strong is it? How stable is the country politically? Why is political stability important for conservation?
If you have more than a single group assigned to each habitat, merge the groups that were assigned the same habitat and have them work together in the next section.	
40 min	(Students) Assignment: Summarize all the main points that can help you make the case to protect the habitat you have been assigned. Choose the most convincing arguments. Based on these arguments, prepare a 5-minute presentation for the class and try to persuade them to vote to protect your group's habitat. Choose one or two group members to present your arguments and practice the presentation.
20 min	(Students) Representatives of each group will present their arguments for why others should vote to protect their habitat (in no more than 5 minutes). Allow 1–2 minutes of questions from classmates.
15 min	(Tutor & Students) Class discussion about the habitats and a vote (with the proviso that students cannot vote for their own assigned habitat).
20 min	(Tutor & Students) Class discussion of the terms. Each group will suggest their definition for each of the terms and a final definition for each of the terms will be determined.

Optional additional activity

If the students would like to take this exercise into the real world, they can actually vote on the TiME website and thus both contribute to purchasing the next habitat that TiME protects and help to choose which habitat it protects. It takes only a single US dollar to participate in the vote. Students can opt to raise more, either individually or as part of a class activity.

Suggested grading

It is possible to grade this assignment as part of the final grade in the course. Grades can be given for the group's final presentation or any written product. Consideration should be given to:

- Correct use of terms
- Extensive use of terms
- Timing
- Aesthetics
- Speech (rate, tone, volume, pitch, eye contact)
- Structure of the argument