

Ecology and Wildlife Conservation

Discover ecology and learn how we can protect wildlife to conserve our natural world.

If your students are completing the whole of this course online then they can complete useful and engaging activities, or a test based on the content covered.

You can choose for your students to complete individual tasks by themselves or encourage group work. Though you may have your own ideas about what your students can do with the course content, we've made things easy for you by suggesting some activities that you can submit to your students below. Choose whichever suits your students and needs.

Each task has student-facing instructions you can use (found later in this pack).

Individual student tasks taken from the course

Reflection: Students write a 500-word reflection on what they learned from the course, including anything they might do differently now as a result of their learning and anything additional they found out from their own reading around the topic. They will submit this reflection as a written essay, podcast or video.

Activity 1: Students complete the data exercise on Step 1.6 analysing bird flight paths and their relationship with wind farms.

Activity 2: Students complete the ecosystem exercise on Step 2.4 exploring how the death of different species affects the wider ecosystem.

Research task: Students identify one population or community that needs conserving and explain what has led to it needing help (Step 1.7) and how they might be studied and conserved (Step 1.4).

Group tasks based on the course

Research task: Allocate students to a group or allow them to choose who they want to work with (no more than 3 per group). Ask each group to create a collaborative slideshow proposition explaining why one population or community needs help to survive, and how it could be studied and conserved. They will submit their presentation to you alongside a brief summary of how they worked together as a team.

Collaborative task: Allocate students to a group or allow them to choose who they want to work with (no more than 3 per group). Ask each group to create a collaborative poster which summarises arguments for and against conserving nature. They will submit their poster to you alongside a brief summary of how they worked together as a team.

Test

You can use the test questions listed in the student instructions below as a short assessment to enable your students to demonstrate what they have learned on the course. The assessment has 15 marks in total.

The questions have been designed to be flexible and open. The questions indicate which steps the answers can be found on. The marks available reflect the likely length and complexity of the answer expected, and how many points they are likely to make. For example, a 5-mark question might reflect a longer, more complex question, or one where they have asked to describe or explain a number of elements. Depending on the level and ability of your students, you can decide how you wish to award the marks, so they are appropriate for your class.

Each question suggests which steps the students may wish to return to answer the questions. You can decide if you want to include this information when you share the assessment with your students.

Additional support

You can use the <u>How to use Futurelearn guide</u> with your students to get started. If you have any more questions, please refer to the <u>FAQ</u> section.

Student instructions

Reflection

Write a 500-word reflection on what you have learned from the course. It should include anything you might do differently now because of what you learned and anything additional you found out in your reading around the topic. Submit this reflection to your teacher as a written essay, podcast or video.

Activity 1

Complete the data exercise on Step 1.6 of the course. You will be asked to analyse the data of bird flight paths near offshore windfarms and answer some questions. Submit your answers to your teacher.

Activity 2

Complete the ecosystem exercise on Step 2.4 of the course. You will explore how the ecosystem presented is affect by changes to certain species. Submit your answers to your teacher.

Research task

- 1. Choose a population or community that needs conserving. You might want to look at the list of examples in Step 1.4 of the course to help you find a population to research.
- 2. Explain what has led to it needing help. Think about these areas:
 - what it eats
 - how it reproduces
 - the habitat that it requires

- whether it is at risk from disease
- any other traits you can think of.
- 3. Describe how you might study and conserve them.

Create a slideshow to present what you've found and submit it to your teacher.

Group collaboration task

Your group needs to create a collaborative poster which summarises arguments for and against conserving nature. You may find the video in Step 1.2 of the course helpful to get you started.

You should also write a brief summary of how your team worked together to create the poster – who contributed which parts and how you reviewed each other's work. Submit your poster and your summary to your teacher.

Group research task

- 1. You group should choose a population or community that needs conserving. You might want to look at the list of examples in Step 1.4 of the course to help you find a population to research.
- 2. Explain what has led to it needing help. Think about these areas:
 - what it eats
 - how it reproduces
 - the habitat that it requires
 - · whether it is at risk from disease
 - any other traits you can think of.
- 3. Describe how you might study and conserve them.

Create a slideshow to present what you've found and submit it to your teacher. Your presentation should also include a brief summary of how your team worked together to produce the slideshow – who contributed to which parts and how you reviewed each other's work.

Test

Complete the assessment questions below to demonstrate your understanding of the course. You can refer back to the course to find the answers or more detail as you need to. You should not however share your answers with other students.

Your answers should be written in full sentences and be appropriately detailed. Make sure you read the questions carefully before starting to answer. Each question shows how many marks are available – use this to guide how much detail or how many points you need to include.

The questions also indicate where you can start to look to find the answer. You can also include information from other steps if that is relevant.

1. What do you have to consider when studying an ecosystem? (3 marks) [Step 1.4]

- 2. What impact did the wind farms have on the seabirds in the North Sea? (3 marks) [Step 1.5]
- 3. Describe the key relationships in the coral reef ecosystem and why they may be in danger. (6 marks) [Step 2.2]

4. Explain two methods of measuring complex ecosystems. (2 marks) [Step 2.7]