Syllabus – Elective Course

Course title:

Introduction to Environmental Science

Credits:

6 ECTS credits

Teaching language:

English

Target students:

Undergraduate students from all study who would like to learn about the physical world in which we live, with a focus on sustainability and protection of natural systems.

Teacher in charge of the course:

KT Moran, P.G.

COURSE PRESENTATION

Prerequisite:

To take this course, the students should have a good university level and should normally have completed at least one semester at university. They must have some ability to work as a group and be able to communicate easily in English at a standard university level. In other respects, the course is intended to serve a mix of profiles and learning backgrounds for a more diverse international learning experience.

Content:

This course will provide students with an overview of Earth's natural systems and the impacts of human interactions therewith.

Topics to be covered will normally include:

- Scientific Observation and Theory.
- Natural Systems.
- Population Ecology.
- Energy; Renewable and non-renewable.
- Supply and Agricultural Dynamics.
- Waste Management.
- Pollution.
- Climate Change.

Learning Outcomes:

At the completion of this course, students should be able to demonstrate knowledge of general environmental science concepts and be able to:

- Understand basic biological/geological concepts as they relate to environmental science topics.

- Apply the scientific method and interdisciplinary approaches to define and analyze natural conditions and situations from local and global perspectives.
- Engage in problem solving to explore solutions to sustainability issues.
- Identify, analyze, and integrate environmental concepts, theories, and processes to actively participate in discussions related to environmental issues.
- Critically evaluate scientific issues as a basis for informed decision-making.
- Demonstrate competency in analyzing data to interpret results.
- Use laboratory experiences and materials to demonstrate competency with environmental concepts and applications.
- Explain the dynamics of ecosystems and discuss the diverse and complex relationships between humans and the environment.
- Demonstrate the ability to interpret or apply appropriate scientific terminology.
- Engage in collaborative tasks (i.e. work in teams).

WORKLOAD

French contact hours = 60 minutes (in some countries/institutions, 1 contact hour = 45-50 minutes)

Form	Number of hours	Comments
Face-to-face, in-class, on-site learning	39 hours	Class sessions, field trips.
Approximate personal work/homework	15 hours	Project preparation, study, quizzes.
Student total workload	**54 hours**	

EDUCATIONAL METHODS

Lecture, discussion, presentations, laboratory activities, sharing of experiences, group work, guided visits, self-directed research, and on-site education. Hybrid course modality.

RESOURCES

All course materials will be supplied in class. References may be made to the following resources:

- Online Textbook (no cost to student).
- PowerPoint and Video materials.
- Independent Research as assigned.
- Professor Lectures.

ASSESSMENT

Form	Number and amount	Minimum points possible	20 Point Equivalent
Labs/Exercises	Top 10 of 12 at 30 points each	300	6
Concept Exams	Top 2 of 3 at 100 points each	200	4
Project	Multiple portions, a total of 250 points	250	5
Class Participation	Top 10 of 13 at 20 points each	200	4
Coastal Field Trip	1 at 50 points	50	1
	Total Course Points	**1000**	**20**

The course grade is based on total POINTS accrued. No averages or percentages of any kind are used to calculate the grade.

This syllabus is based on information available at the time of publication (February 2025). Changes may occur.

For updated information about course content, please contact us: lilleprograms@univ-catholille.fr