

COURSE SYLLABUS AND COURSE REQUIREMENTS

ACADEMIC YEAR 2025/2026 SEMESTER I

| | |
|------------------------------|-------------------------------------|
| <i>Course title</i> | Basics of Sustainability |
| <i>Course Code</i> | SZE074AN |
| <i>Hours/Week: le/pr/lab</i> | 2 hr/week |
| <i>Credits</i> | 2 |
| <i>Degree Programme</i> | All |
| <i>Study Mode</i> | Full time |
| <i>Requirements</i> | Midterm Mark |
| <i>Teaching Period</i> | 2025/2026 I |
| <i>Prerequisites</i> | Upper intermediate level of English |
| <i>Department(s)</i> | Department of Civil Engineering |
| <i>Course Director</i> | Marcus Juby |
| <i>Teaching Staff</i> | Marcus Juby |

COURSE DESCRIPTION

This course is designed for students who want to explore the principles of sustainability and learn how to integrate them into their studies and future professional practice. In a rapidly changing world, globally minded engineers must consider sustainability when making decisions about design, resource use, and waste management. Guided by the United Nations' *Sustainable Development Goals*, the course examines key ideas and strategies that are essential for ensuring a thriving and resilient future.

SYLLABUS

1. GOALS AND OBJECTIVES

Although sustainability has become a buzzword in the last few decades, many people know exactly what it means. This course introduces some of the challenges that are facing humanity and discusses options for sustainable solutions to solve these challenges.

Objectives:

- Students learn the key concepts of sustainability and why it is important for our generation and future generations.
- Students become familiar with the UN Sustainable Development Goals and how it affects their country.
- Students discover solutions in the critical fields of food production, biodiversity, shelter that are needed to ensure an existence for future generations.

Generic learning outcomes:

- Reading and understanding a range of authentic texts.
- Exploring how sustainability affects you and your region.
- Effectively communicate in group work

2. COURSE CONTENT

TOPICS

LECTURE

1. Introduction to sustainability
2. Environmental ethics
3. Population
4. Sustainable Development Goals
5. Biomimicry
6. Natural building materials and techniques
7. Biodiversity
8. Consumption, waste and waste management
9. Food production

DETAILED SYLLABUS AND COURSE SCHEDULE

LECTURE

| week | Topic | Compulsory reading; page number | Required tasks | Completion date, due date |
|------|--|------------------------------------|------------------------------------|---|
| 1. | Introduction, Defining sustainability | Material uploaded to Teams | | |
| 2. | Environmental ethics, tragedy of the commons, limits to growth, effective altruism | Material uploaded to Teams | | |
| 3. | Population | Material uploaded to Teams | | |
| 4. | Sustainable Development Goals | Material uploaded to Teams | | |
| 5. | Biomimicry | Material uploaded to Teams | | |
| 6. | Nature based solutions for buildings | Material uploaded to Teams | | |
| 7. | *Field trip to DélKom–Waste Management Centre | Material uploaded to Teams | Fieldtrip | *Important: the exact date of the fieldtrip will depend on the Delkom |
| 8. | Autumn Break | | | |
| 9. | Waste management and the circular economy/Biodiversity | Material uploaded to Teams | | |
| 10. | Food production for a growing population | Material uploaded to Teams | | |
| 11. | Test | | Test | November 17 th |
| 12. | To be decided upon student request | | | |
| 13. | *Presentations OR Report Submission + Interview | | Presentations OR Report Submission | December 1st |
| 14. | *Presentations OR Report Submission + Interview | | Presentations OR Report Submission | December 8 th |

Important: All material will be uploaded to Teams in the class materials folder

* Students can choose to either give a short presentation in class OR hand in a report and have a personal interview on that report

3. ASSESSMENT AND EVALUATION

ATTENDANCE

In accordance with the Code of Studies and Examinations of the University of Pécs, Article 45 (2) and Annex 9. (Article 3) a student may be refused a grade or qualification in the given full-time course if the number of class absences exceeds 30% of the contact hours stipulated in the course description or does not participate effectively in groupwork.

Method for monitoring attendance

Register

ASSESSMENT

Course resulting in mid-term grade (PTE TVSz 40§(3))

Mid-term assessments, performance evaluation and their ratio in the final grade

| Type | Assessment | Ratio in the final grade |
|--|------------|--------------------------|
| Class attendance, submission of homework, fieldtrip | 10 points | 10 % |
| Test | 45 points | 45 % |
| Either i) presentation and questions OR ii) report AND spoken interview in two final weeks | 45 points | 45 % |
| Total | | 100% |

Opportunity and procedure for re-takes (PTE TVSz 47§(4))

There will be the chance to resit the test in week 15. Contact the teacher if you would like to request an extension for late submission of assignments.

Grade calculation as a percentage

| Course grade | Performance in % |
|------------------|------------------|
| excellent (5) | 85 % ... |
| good (4) | 70 % ... 85 % |
| satisfactory (3) | 55 % ... 70 % |
| pass (2) | 40 % ... 55 % |
| fail (1) | below 40 % |

The lower limit given at each grade belongs to that grade.

AI Policy: AI tools (e.g., ChatGPT, Copilot) may be used **for limited purposes** such as brainstorming, searching for information, clarifying concepts, or proofreading. However, the final work you submit must be your own, and you are fully responsible for its accuracy. Any AI contributions must be acknowledged and cited. AI is **not allowed in exams, quizzes, or tests**.

Additional note: Where possible, you should prefer AI tools that provide verifiable sources (e.g., *Perplexity AI*, *Elicit*) rather than purely generative models.

4. SPECIFIED LITERATURE

COMPULSORY READING AND AVAILABILITY

[1.] Unless otherwise notified all course materials and links will be uploaded to MS-Teams

RECOMMENDED LITERATURE AND AVAILABILITY

[2.] United Nations Sustainable Development Goals <https://sdgs.un.org/goals>