

## COURSE SYLLABUS AND COURSE REQUIREMENTS

### ACADEMIC YEAR 2024/2025 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>       | 2024/2025 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 open to students who are interested in concepts of sustainability and how they can introduce these concepts into their studies and future professional work. Our world is constantly changing and it is important for globally conscious engineers to take into consideration concepts of sustainability when making decisions regarding design, material use and waste. The UN has set out the Agenda 2030 Sustainable Development Goals which are necessary if humanity is to thrive in the future and this course includes many of the ideas mentioned.

## 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 | TOPICS  |
|---------|---|
|         | <ol style="list-style-type: none"> <li>1. Introduction to sustainability</li> <li>2. Environmental ethics</li> <li>3. Population</li> <li>4. Sustainable Development Goals</li> <li>5. Biomimicry</li> <li>6. Natural building materials and techniques</li> <li>7. Biodiversity</li> <li>8. Consumption, waste and waste management</li> <li>9. Food production</li> </ol> |

## DETAILED SYLLABUS AND COURSE SCHEDULE

### LECTURE

| week | Topic  | Compulsory reading; page number | Required tasks (assignments , tests, etc.) | 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   | Material uploaded to Teams      | <i>Fieldtrip</i>                           | <i>*Important: the exact date of the fieldtrip will depend on the Delkom</i> |
| 8.   | Waste management and the circular economy/Biodiversity                             | Material uploaded to Teams      |  |  |
| 9.   | Autumn Break   |                                 |  |  |
| 10.  | Food production for a growing population   | Material uploaded to Teams      |  |  |
| 11.  | Test   |                                 | Test                                       | November 11 <sup>th</sup>  |
| 12.  | To be decided upon student request   |                                 |  |  |
| 13.  | Presentations OR Report Submission + Interview                                     |                                 | Presentations OR Report Submission         | November 25 <sup>th</sup>  |
| 14.  | Presentations OR Report Submission + Interview                                     |                                 | Presentations OR Report Submission         | December 2 <sup>nd</sup>   |

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

## 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**

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**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 |
|---|------------------|--------------------------|
| <i>Class attendance, submission of homework, fieldtrip</i>                          | <i>10 points</i> | <i>10 %</i>              |
| <i>Test</i>   | <i>45 points</i> | <i>45 %</i>              |
| <i>Either i) presentation OR ii) report AND spoken interview in two final weeks</i> | <i>45 points</i> | <i>45 %</i>              |
| <i>Total</i>  |                  | <i>100%</i>              |

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

There will be the chance to resit the test in week 14. 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.

## 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>