COURSE SYLLABUS AND COURSE REQUIREMENTS
ACADEMIC YEAR 2023/2024 SEMESTER 2ND

Course title	*Construction Technology 1.*
Course Code	MSB062AN
Hours/Week: le/pr/lab	1/1/0
Credits	2
Degree Programme	Civil Engineering BSc
Study Mode	*full time course*
Requirements	examination grade
Teaching Period	4th
Prerequisites	-
Department(s)	*Department of Engineering Studies*
Course Director	Balázs Füredi dr.
Teaching Staff	*Balázs Füredi dr.*

COURSE DESCRIPTION

Neptun: Instruction/Subjects/Subject Details/Basic data/Subject description

The subject of Construction Technology 1 provides theoretical and practical training in the Civil Engineering BSc degree program. During lectures and practical sessions of the semester, students will gain competitive knowledge in the field of construction implementation and construction management.

SYLLABUS

Neptun: Instruction/Subjects/Subject Details/Syllabus

1. GOALS AND OBJECTIVES

Neptun: Instruction/Subjects/Subject Details/Syllabus/Goal of Instruction

The course will focus on:

- Developing engineering thinking
- Learning how to prepare a budget
- Getting to know the basics of workplace organization planning (Site plan)

2. COURSE CONTENT

Neptun: Instruction/Subjects/Subject Details/Syllabus/Subject content

	TOPICS
LECTURE	1. *topic: characteristics of the construction* 2. *topic: earthworks* 3. *topic: making foundations* 4. *topic: Vertical loadbearing structures*
LABORATORY PRACTICE	1. *topic: the plan of the buildings* 2. *topic: persons and roles in the construction industry* 3. *topic: the systems of the technological instructions* 4. *topic: preparation works of a site*

During the lectures students will learn about the basic construction processes, the finishing works of the construction trade, and the order of construction of monolithic and prefabricated building structures. Besides the lectures, they are going to attend construction site visits where they can learn the practical knacks of the trade.

The Course includes:

- Regular (weekly) supervisions by teacher of the Department of Engineering Studies.
- Preparation for the mid -term paper
- Organizational analysis at the site plan, its presentation and analysis of alternative solutions

The requirements are issued according to the course syllabus, which are uploaded to the Neptun and MS Teams interfaces of the course, as well as to the "witch" server of the Faculty, together with the lecture materials and help documents. Information related to the subject will also be available on these interfaces.

DETAILED SYLLABUS AND COURSE SCHEDULE

LECTURE

week	**Topic**	**Compulsory reading; page number (from … to …)**	**Required tasks (assignments, tests, etc.)**	**Completion date, due date**
1.	Introduction – The syllabus of the semester	lecture notes	-	05.02.2024
2.	The characteristics of the construction	lecture notes	preparation from the previous lecture	12.02.2024.
3.	The characteristics of the construction – The method of the construction technology	lecture notes	preparation from the previouslecture	19.02.2024.
4.	Earthworks 1.	lecture notes	preparation from the previous lecture	26.02.2024.
5.	Earthworks 2.	lecture notes	preparation from the previous lecture	04.03.2024.
6.	Earthworks 3.	lecture notes	preparation from the previous lecture	11.03.2024.
7.	Earthworks 4.	lecture notes	preparation from the previous lecture	18.03.2024.
8.	Making of foundations	lecture notes	preparation from the previous lecture	25.03.2024.
9.	SPRING HOLIDAY	-	-	01.04.2024.
10.	Making of foundations	lecture notes	preparation from the previous lecture	08.04.2024.
11.	Making of foundations	lecture notes	preparation from the previous lecture	15.04.2024.
12.	Vertical loadbearing structures	lecture notes	preparation from the previous lecture	22.04.2024.
13.	Vertical loadbearing structures	lecture notes	preparation from the previous lecture	29.04.2024.
14.	Vertical loadbearing structures	lecture notes	preparation from the previous lecture	06.05.2024.

PRACTICE, LABORATORY PRACTICE

week	**Topic**	**Compulsory reading; page number (from … to …)**	**Required tasks (assignments, tests, etc.)**	**Completion date, due date**
1.	The plan of the building	lecture notes	-	05.02.2024
2.	The plan of the building – The system of the planning	lecture notes	preparation from the previous lecture	12.02.2024.
3.	Persons and roles in the construction industry	lecture notes	preparation from the previous lecture	19.02.2024.

4.	Persons and roles in the construction industry – Responsibilities, positions	lecture notes	preparation from the previous lecture	26.02.2024.
5.	The system of the technological instructions	lecture notes	preparation from the previous lecture	04.03.2024.
6.	The system of the technological instructions	lecture notes	preparation from the previous lecture	11.03.2024.
7.	Preparation works of a site	lecture notes	preparation from the previous lecture	18.03.2024.
8.	Preparation work of a site	lecture notes	preparation from the previous lecture	25.03.2024.
9.	SPRING HOLIDAY	-	-	01.04.2024.
10.	Site visit	lecture notes	preparation from the previous lecture	08.04.2024.
11.	Site visit	lecture notes	preparation from the previous lecture	15.04.2024.
12.	Midsemester test	lecture notes	preparation from the previous lecture	22.04.2024.
13.	Site visit	lecture notes	preparation from the previous lecture	29.04.2024.
14.	Retaking of the test	lecture notes	preparation from the previous lecture	06.05.2024.

3. ASSESSMENT AND EVALUATION

(Neptun: Instruction/Subjects/Subject Details/Syllabus/Examination and Evaluation System)

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.

Method for monitoring attendance

Method for monitoring attendance: attendance sheet, which led to lectures and practices, every time

ASSESSMENT

Course-unit with final examination

Mid-term assessments, performance evaluation and their weighting as a pre-requisite for taking the final exam

Type	Assessment	*Weighting as a proportion of the pre-requisite for taking the exam*
1. *Test*	*max 79 points*	*50%*
2. *Attendance at lectures and practices*	*max 13 points*	
3. *Visiting optional construction site tours*	*max 8 points*	
4. *Exam*	*max 100 points*	*50 %*

Requirements for the end-of-semester signature

The conditions for successful completion of the semester are active class attendance, attendance at construction site visits in appropriate protective equipment, and successful completion of the mid-semester test and the exam.

Certified attendance at practical sessions is done in accordance with the regulations laid down in the topic! The practice leaders keep an attendance sheet/consultation sheet, with published and not attended/didn't prepare for class. The maximum number of absences allowed during practical classes is 30% according to the Annex 5 of the Statutes of the University of Pécs, the Code of Studies and Examinations (CSE) of the University of Pécs shall prevail (https://english.mik.pte.hu/codes-and-regulations), 2 occasion.

During the semester, students report on their work and knowledge several times.

Attendance at lectures and laboratory practices are worth a total of 13 points during the semester (13 lectures and 13 practices). During the semester, we organize on-site visits and construction visits, with an educational purpose. Their time and group assignments are determined individually and announced during the first education week. During the semester, the student can confirm his participation in two optional tours of the construction site at a time determined in advance by the instructors by signing the attendance led by the Organizer. Therefore, 4-4 points are awarded, which are included in the semester score

Re-takes for the end-of-semester signature

The semester closes at the end of the 15th week. Mid-semester tests that do not reach the minimum score can be corrected once during the due diligence period.

Points of exam:

85 p – 100 p	85-100% (5, excellent)
70 p – 85 p	70-85% (4, good)
55 p – 70 p	55-70% (3, avarage)
40 p – 55 p	40-55% (2, satisfactory)
0 p – 40 p	-40% (1, fail)

Type of examination *(written, oral):* *oral*

The exam is successful if the result is minimum 40 %.

Calculation of the grade

The mid-term performance accounts for ***50*** %, the performance at the exam accounts for ***50*** % in the calculation of the final grade.

Calculation of the final grade based on aggregate performance in 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

(In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

COMPULSORY READING AND AVAILABILITY

[1.] R. Chudley, R. Greeno - Building construction handbook seventh edition (2008), ISBN: 978-0-7506-86228

RECOMMENDED LITERATURE AND AVAILABILITY

[1.] Sidney Levy - Construction process planning and Management (2010), ISBN : 978-1-85617-548-7
[2.] Emad Elbeltagi - Lecture notes on construction project management (2009)
[3.] S.W. Nunnally – Construction Methods and Management (2007), ISBN 0-13-171685-9
[4.] Frank R. Dagostino, Steven J. Peterson - Estimating in Building Construction (2011), ISBN-13: 978-0-13-119952-1
[5] Københavns Erhvervsakademi and VIA University College, Horsens(E-BOOK) (2011)