COURSE SYLLABUS AND COURSE REQUIREMENTS ACADEMIC YEAR 2024/2025 SEMESTER AUTUMN

Course title Programming 1.

Course Code IVB053ANMI

Hours/Week: le/pr/lab 2/0/2

Credits 5

Degree Programme Computer Science Engineering / BSc

Study Mode Full time

Requirements Mid-semester grade

Teaching Period Autumn

Prerequisites -

Department(s) Department of System Software Technology

Course Director

Teaching Staff Péter Novák

COURSE DESCRIPTION

A short description of the course (max. 10 sentences).

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

Basic programming concepts. Programming in C: data types, number representation, control structures, operations, precedence, arrays, pointers, strings, pointer arithmetic, complex data structures, recursive algorithms, file handling.

SYLLABUS

Neptun: Instruction/Subjects/Subject Details/Syllabus

1. GOALS AND OBJECTIVES

Goals, student learning outcome.

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

The course introduces students to the basic concepts of programming, using the C language as a tool to practice data types, control structures, standard I/O and file handling techniques.

2. COURSE CONTENT

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

TOPICS

LECTURE

- 1. Introduction, data entry and printing
- 2. Control structures
- 3. Operations, type conversion, functions
- 4. Pointers, arrays, strings
- 5. structures, complex data types, pointers
- 6. Recursive algorithms, file handling

LABORATOR Y PRACTICE

Practise what you have learned in the lecture

DETAILED SYLLABUS AND COURSE SCHEDULE

ACADEMIC HOLIDAYS INCLUDED

LECTURE				
week	Topic	Compulsory reading; page number (from to)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	Introduction			
2.	Data entry and printing	[1] – Chap 1, 7		
3.	Control structures	[1] – Chap 1, 3		
4.	Mathematical operators	[1] – Chap 2		
5.	Relational and logical operators	[1] – Chap 2		
6.	Arrays, functions, variable scopes	[1] – Chap 4, 5		
7.	Structures, pointers, types	[1] – Chap 5, 6		
8.	Structures, pointers, types	[1] – Chap 5, 6		
9.	Input and output	[1] – Chap 7		
10.	Input and output	[1] – Chap 7		
11.			Quiz and	
			Practical	
			programming	
			exercise	
12.			Retake of Quiz	
			and Practical	
			programming	
			exercise	
13.			Retake of Quiz	
			and Practical	
			programming	
			exercise	

PRACTICE, LABORATORY PRACTICE				
week	Торіс	Compulsory reading; page number (from to)	Required tasks (assignments, tests, etc.)	Completion date, due date
1.	Introduction	(1		
2.	Data entry and printing	[1] – Chap 1, 7		
3.	Control structures	[1] – Chap 1, 3		
4.	Mathematical operators	[1] – Chap 2		
5.	Relational and logical operators	[1] – Chap 2		
6.	Arrays, functions, variable scopes	[1] – Chap 4, 5		
7.	Structures, pointers, types	[1] – Chap 5, 6		
8.	Structures, pointers, types	[1] – Chap 5, 6		
9.	Input and output	[1] – Chap 7		
10.	Input and output	[1] – Chap 7		
11.			Quiz and Practical programming exercise	
12.	Consultation			

13.	Retake of Quiz and Practical
	programming
	exercise

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 (e.g.: attendance sheet / online test/ register, etc.)

Attendance at 70% of classes is mandatory. The participation rate does not affect the grade, but an absence of more than 30% results in the subject being failed.

Attendance is checked on the basis of an attendance sheet

ASSESSMENT

Cells of the appropriate type of requirement is to be filled out (course-units resulting in mid-term grade or examination). Cells of the other type can be deleted.

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

Mid-term assessments, performance evaluation and their ratio in the final grade (The samples in the table to be deleted.)

Туре	Assessment	Ratio in the final grade
Quiz	Good answer +1 point, Bad or no answer -1 point According to Dean's order if the result of this assessment component is below 40% then it should be retaken	70 %
Practical programming exercise	Prerequisite: successful quiz Min requirements: The program can be compiled The program performs the required task According to Dean's order if the result of this assessment component is below 40% then it should be retaken	30 %

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

The specific regulations for improving grades and resitting tests must be read and applied according to the general Code of Studies and Examinations. E.g.: all tests and assessment tasks can be repeated/improved at least once every semester, and the tests and home assignments can be repeated/improved at least once in the first two weeks of the examination period.

The quiz and the practical programming exercise can be retaken on Week 13 and in the first week of the exam period.

Grade calculation as a percentage

based on the aggregate performance according to the following table

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 order of relevance. (In Neptun ES: Instruction/Subject/Subject details/Syllabus/Literature)

COMPULSORY READING AND AVAILABILITY

[1.] BRIAN W KERNIGHAN and DENNIS M. RITCHIE: The C programming language, 2nd edition, Prentice Hall, ISBN 0-13-110370-9