SYSTEM PROGRAMMING

1	Course Title:	SYSTEM PROGRAMMING
2	Course Code:	BMB3018
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	3
6	Semester:	6
7	ECTS Credits Allocated:	5.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Doç. Dr. Murtaza CİCİOĞLU
15	Course Lecturers:	Dr. Ögr. Üyesi MURTAZA CİCİOĞLU
16	Contact information of the Course Coordinator:	ceydanur@uludag.edu.tr
17	Website:	
18	Objective of the Course:	To strengthen the acquired theoretical knowledge on operating systems with various system programming applications
19	Contribution of the Course to Professional Development:	Engineering Science: 60%, Engineering Design: 40%
20	Learning Outcomes:	

		1	Knowing operational differences between Windows and Linux operating systems
		2	Being able to manage processes and threads, and enable their interaction with each other
		3	
		4	
		5	
		6	
		7	
		8	
		9	
		10	

21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Introduction	
2	System calls and Windows API	
3	Linux kernel	
4	Processes	
5	Threads	
6	Task scheduling	

7	Petri nets	
8	Deadlock	
9	Interaction between processes and threads	
10	Classical problems	
11	Socket programming	
12	Memory management	
13	File systems	
14	Disk management	
22	Textbooks, References and/or Other Materials:	1. Avcı, M., Özyıldırım, B. M., Ülgen, O, 2019, İşletim Sistemleri ve Sistem Programlama, Karahan Kitabevi, 4th Edition, ISBN: 9786054454518.
23	Assesment	

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	10.00
Quiz	0	0.00
Home work-project	6	30.00
Final Exam	1	60.00
Total	8	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00

Activites	Number	Duration (hour)	Total Work Load (hour)
Measurement and Evaluation Techniques Used in the Course Theoretical	Programming assignments, written exams 14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	2.00	28.00
Homeworks	6	7.00	42.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	14.00	14.00
Others	0	0.00	0.00
Final Exams	1	18.00	18.00
Total Work Load			158.00
Total work load/ 30 hr			4.80
ECTS Credit of the Course			5.00

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	3	2	3	5	0	2	2	1	3	2	2	1	0	0	0	0
ÖK2	5	4	4	5	2	5	1	1	1	0	1	0	0	0	0	0

<div align="center">LO: Learning Objectives   PQ: Program Qualifications</div>

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High