PARALLEL ALGORITHMS

1	Course Title:	PARALLEL ALGORITHMS
2	Course Code:	BM5111
3	Type of Course:	Optional
4	Level of Course:	Second Cycle
5	Year of Study:	1
6	Semester:	1
7	ECTS Credits Allocated:	6.00
8	Theoretical (hour/week):	3.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	none
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Doç. Dr. Murtaza CİCİOĞLU
15	Course Lecturers:	yok
16	Contact information of the Course Coordinator:	Bilgisayar müh. bölüm binası 1. kat oda 110 pinarkirci@uludag.edu.tr
17	Website:	
18	Objective of the Course:	To introduce the advanced techniques for parallel algorithm analysis and design.
19	Contribution of the Course to Professional Development:	Especially in recent years, it has been highly observed that parallel algorithms are used extensively in optimization approaches in problem solving. This course will be especially useful for students who want to study in this field.
20	Learning Outcomes:	
	1	parallel algorithms that can be used in parallel architectures will be examined
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21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Balanced trees, pointers	
2	pipeline and layered structure	
3	lists and trees	
4	selection problem and parallel selection algorithm	

5	merge problem	
6	parallel merge algorithm	
7	sort problem	
8	parallel sort algorithm	
9	search problem	
10	parallel search algorithm on EREW, CREW and CRCW	
11	search algorithm on trees	
12	search algorithm on trees	
13	matrixes and graph algorithm	
14	strings	

22	Textbooks, References and/or Other Materials:	Paralel Algoritmalar: Modeller ve Yöntemleri Yüksek Başarımlı Hesaplama Prof. Dr. Abdulsamet Haşıloğlu
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	50.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	50.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		50.00
Contribution of Final Exam to Success Grade		50.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		written exam

24 ECTS / WORK LOAD TABLE

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	2.00	28.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	50.00	50.00
Others	0	0.00	0.00
Final Exams	1	60.00	60.00
Total Work Load			230.00
Total work load/ 30 hr			6.00
ECTS Credit of the Course			6.00

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	1	3	1	1	4	1	1	1	1	1	1	1	1	1	1	1
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low		2 low			3 Medium			4 High			5 Very High				