



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Fundamental Scientific Calculations							
Course Code		AEK119		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Developing scientific calculation compateny of students from the Alternative Energy Resources.							
Course Content		Raising awareness and developing competency and ensuring preparation for students for different calculation needs required by various domains of natural sciences.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)		Ins. Emre IŞIKLI							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Temel ve Genel Matematik Yazar:Kolektif Yayınevi:Nobel Akademik Yayıncılık
2	Temel Bilimler için İstatistik Yazar: Selahattin Maden, Mehmet Korkmaz Yayınevi: Seçkin Yayıncılık

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction
2	Theoretical	Alternative Energy Resources and scientific calculation needs in this domain
3	Theoretical	Thermodynamic, fluids and heat transfer domain and relevant calculation needs
4	Theoretical	Thermodynamic, fluids and heat transfer domain and relevant calculation needs
5	Theoretical	Electrical measures and relevant required calculations
6	Theoretical	Electrical measures and relevant required calculations
7	Theoretical	Physical measures, distance, area, volume calculations
8	Theoretical	Physical measures, distance, area, volume calculations
9	Theoretical	Rate, proportion and percentage calculations
10	Theoretical	Rate, proportion and percentage calculations
11	Theoretical	Coordinate calculations, slope and distance
12	Theoretical	First-order equations
13	Theoretical	First-order equations
14	Theoretical	Analytic geometry calculations
15	Theoretical	Analytic geometry calculations
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	2	3	2	10
Seminar	1	1	0	1
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				75
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Preparation for thermodynamic and heat transfer calculations
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2	Preparation for electrical calculations
3	Preparation for physical calculations
4	Rate, proportion and percentage calculations
5	Coordinate calculations, slope and first-order equations,

Programme Outcomes (Call Center Services)

1	Ability to use information and communication technology tools and other professional tools and techniques
2	Ability to plan and implement professional processes
3	Foreign language communication skills
4	Professional confidence
5	Entrepreneurship Skills
6	Ability to use theoretical domain knowledge in practice
7	Ability to manage a process to meet requirements
8	Work skills in teams, including interdisciplinary
9	Ability to identify and solve problems in professional practice
10	Professional ethics and accountability

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P1	3	3	3	3	3
P2	3	3	3	3	3
P4	3	3	3	3	3
P5	3	3	3	3	3
P6	3	3	3	3	3
P7	3	3	3	3	3
P8	3	3	3	3	3
P9	3	3	3	3	3
P10	3	3	3	3	3

