

DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

Course Details				
<b>Code</b>		<b>Academic Year</b>		<b>Semester</b>
NWI401		4		7
<b>Title</b>		<b>T</b>	<b>A</b>	<b>L</b>
Scientific Study Methods		2	0	0
<b>Language</b>	German			
<b>Level</b>	<b>Undergraduate</b>	X	<b>Graduate</b>	<b>Postgraduate</b>
<b>Department / Program</b>	Materials Science and Technology			
<b>Forms of Teaching and Learning</b>	Face to face			
<b>Course Type</b>	<b>Compulsory</b>	X	<b>Elective</b>	
<b>Objectives</b>	To provide the student with the ability to analyze the problem/system with which he/she is dealing and to develop solution ideas considering theoretical knowledge. To provide a useful experience through a self study to take the first step to his/her new career which will start after graduation. The student will communicate his/her study efficiently, verbal and written, so he/she will learn to express himself/herself better.			
<b>Content</b>	To provide the student with the ability to analyze the problem/system with which he/she is dealing and to develop solution ideas considering theoretical knowledge. ii. To provide a useful experience through a self study to take the first step to his/her new career which will start after graduation. iii. The student will communicate his/her study efficiently, verbal and written, so he/she will learn to express himself/herself better.			
<b>Prerequisites</b>				
<b>Coordinator</b>				
<b>Lecturer(s)</b>	Asist Prof.Dr. Duygu Ekinci			
<b>Assistant(s)</b>				
<b>Work Placement</b>	No			
Recommended or Required Reading				
<b>Books / Lecture Notes</b>				
<b>Other Sources</b>				
Additional Course Material				
<b>Documents</b>				
<b>Assignments</b>				
<b>Exams</b>				
Course Composition				
<b>Mathematics und Basic Sciences</b>				%
<b>Engineering</b>				40%

DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

Engineering Design		40%
Social Sciences		%
Educational Sciences		%
Natural Sciences		%
Health Sciences		%
Expert Knowledge		20%

**Assessment**

Activity	Count	Percentage (%)
Midterm Exam	1	40
Quiz		
Assignments		
Attendance		
Recitations		
Projects		
Final Exam	1	60
<b>Total</b>		<b>100</b>

**ECTS Points and Work Load**

Activity	Count	Duration	Work Load (Hours)
Lectures	14	2	28
Self-Study	5	4	20
Assignments			
Presentation / Seminar Preparation	1	10	10
Midterm Exam	1	2	2
Recitations			
Laboratory			
Projects			
Final Exam	1	2	2
<b>Total Work Load</b>			<b>62</b>
<b>ECTS Points (Total Work Load / Hours)</b>			<b>2</b>

**Learning Outcomes**

1	Formulate and analyze a problem by examining the current status
2	Develop applicable suggestions and/or solution methods for the problem dealt with, considering theoretical knowledge.
3	Gain the ability to implement a solution method to an existing problem and will be able to evaluate the results.
4	Learn to express himself/herself by reporting and presenting the work.
5	Learn to defend the idea that underlines the results of the study.

DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

6	
7	
8	
9	
10	
11	
12	

**Weekly Content**

1	Project work, literature search, presentations of exemplary studies from the methods of Materials science;
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

**Contribution of Learning Outcomes to Program Objectives (1-5)**

	P1	P2	P3	P4	P5	P6	P7
1	5	5	5	5	5	5	5
2							
3							
4							
5							
6							
7							
8							
9							
10							



DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY  
COURSE SYLLABUS

11							
12							
<b>Contribution Level</b>	1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High						
<b>Compiled by:</b>							
<b>Date of Compilation:</b>							