



COURSE INFORMATION				
Course Code	MSN 599	Course Title	Term Project	
<i>Semester</i>	<i>Credits</i>	<i>ECTS</i>	<i>C + P + L Hour</i>	<i>Prerequisites</i>
Fall-Spring	-	30	0+0+0	-

Language of Instruction	Course Level	Course Type
English	Graduate	Core
Course Coordinator	Prof. Dr. Taner AKBAY	
Instructors	Academic staff of Materials Science and Nanotechnology Engineering Department	
Assistants	-	
Goals	In the Master's program without thesis, students are required to prepare a project in addition to their courses. Project work is non-credit and evaluated as successful or unsuccessful. The aim of this course is to enable the students to carry out an applied term project for any field of Materials Science and Nanotechnology Engineering.	
Content	The subject of the project to be carried out in the field of Materials Science and Nanotechnology is determined by the supervisor and the student. The research is carried out according to the planned study and the results are presented as a term project report.	
Contribution of the Course to the Professional Education		

Course Learning Outcomes	Detailed Program Outcomes	Teaching Methods	Assessment Methods
Students learn the basic and recent knowledge about the subject by doing literature survey.	1a, 6c, 8a, 9a, 11b	6	F
Students gain experience in interpreting results by using scientific research methods, collecting and discussing data.	1a, 7c	7	F
Students prepare and present a research report.	7b	10	F



Teaching Methods:	1: Lecture by instructor, 2: Lecture by instructor with class discussion, 3: Problem solving by instructor, 4: Use of simulations, 5: Problem solving assignment, 6: Reading assignment, 7: Laboratory work, 8: Term research paper, 9: Presentation by guest speaker, 10: Sample Project Review, 11: Interdisciplinary group working, 12: ...
Assessment Methods:	A: Written exam, B: Multiple-choice exam C: Take-home quiz, D: Experiment report, E: Homework, F: Project, G: Presentation by student, H:

COURSE CONTENT		
Week	Topics	Study Materials
1-14	1x14 Studies on project	-

RECOMMENDED SOURCES	
Textbook	
Additional Resources	

MATERIAL SHARING	
Documents	-
Assignments	-
Exams	-

ASSESSMENT		
IN-TERM STUDIES	NUMBER	PERCENTAGE
Term Project	1	100
Total		100
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE		-
CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE		-
Total		100

COURSE CATEGORY	Expertise
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COURSE'S CONTRIBUTION TO PROGRAM OUTCOMES		
No	Program Learning Outcomes	check √
1a	Adequate knowledge in mathematics, science and engineering subjects pertaining to the relevant discipline,	√
1b	Ability to use theoretical and applied knowledge in these areas in complex engineering problems.	
2a	Ability to identify, formulate, and solve complex engineering problems,	
2b	Ability to select and apply proper analysis and modeling methods for this purpose.	
3a	Ability to design a complex system, process, device or product under realistic constraints and conditions, in such a way as to meet the desired result,	
3b	Ability to apply modern design methods for this purpose.	
4a	Ability to devise, select and use modern techniques and tools needed for analyzing and solving complex problems encountered in engineering practice.	
4b	Ability to employ information technologies effectively.	
5a	Ability to design experiments for investigating complex engineering problems or discipline specific research questions,	
5b	Ability to conduct experiments, gather data, analyze and interpret results for investigating complex engineering problems or discipline specific research questions.	
6a	Ability to work efficiently in intra-disciplinary teams,	
6b	Ability to work efficiently in multi-disciplinary teams,	
6c	Ability to work individually.	√
7a	Ability to communicate effectively in Turkish, both orally and in writing,	
7b	Knowledge of a minimum of one foreign language,	√
7c	Ability to write effective reports and comprehend written reports, prepare design and production reports,	√
7d	Ability to make effective presentations,	√
7e	Ability to give and receive clear and intelligible instructions.	
8a	Recognition of the need for lifelong learning, ability to access information, ability to follow developments in science and technology,	√
8b	Ability to continue to educate him/herself.	
9a	Consciousness to behave according to ethical principles and professional and ethical responsibility.	√
9b	Knowledge on standards used in engineering practice.	
10a	Knowledge about business life practices such as project management, risk management, change management.	
10b	Awareness in entrepreneurship and innovation.	



10c	Knowledge about sustainable development.	
11a	Knowledge about the global and social effects of engineering practices on health, environment, and safety,	
11b	Knowledge about contemporary issues of the century reflected into the field of engineering.	√
11c	Awareness of the legal consequences of engineering solutions.	

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Term project	1	750	750
Total Work Load			750
Total Work Load / 25 (h)			30
ECTS Credit of the Course			30

Prepared by: Asst. Prof. Dr. Nebahat ARAL	Preparation date: 30/01/2021
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