

**\*Presentations will be prepared by Power Point and submitted electronically. (1 file for each group).**

**EVALUATION CRITERIA OF PRESENTATIONS**

1. Mastery of the subject and linking with materials science: 30%
2. The level and wealth of research of the subject: 25%
3. Visuality and richness of presentation slides (usage of animation or video etc.): 20%
4. Correct answering to questions: 20%
5. Team study: 5%

Group No	Student No	Name	Topic	Date
1	1405C002	MERT KANTARCI	Metal, ceramic, polymer and composite materials that are predominantly used/will be used in the 21st century will be exemplified by examining the structure-property-usage area.	14.12.2021
	1805C012	YASİN ATAKAN GÜLER		
	1805C701	SİNAN BULSUN		
	1905C014	HİLAL MERAL SOYAK		
	1905C042	TOLGA YILMAZ		
	2005C913	ANIL TATLISOZ		
	2005C917	ENDER DİNÇER		
	2005C923	JARRED WELSH		
	2005C929	RAMAZAN ONUR ÖZTÜRK		
2	1605C001	HÜSEYİN EREN TUTAR	#Atomic structure and models, #electrons in atoms and quantum numbers, #Valance electrons and importance, #periodic table (electronegativity, electron afinity, atomic radius), #primary bonds, #secondary bonds and forces , #binding energy	14.12.2021
	1705C043	ATAKAN YILMAZ		
	1805C001	HÜMEYRA TOPÇI		
	1805C042	EMİNE CEYDA GÜLER		
	1805C051	SUDE KÖMÜR		
	1905C025	İREM SU AKTUĞ		
	1905C050	NURİYE YARAR		
	1905C703	REMZİ AYDIN		
	1905C038	KEMAL METEHAN KENDİR		
3	1805C039	CEYDA APAYDIN	<u>Structures of Metals and Ceramics:</u> #Crystaline and noncrystalline materials, #Unit cells, crystal systems and lattice parameers, #Cubic Systems, #hexagonal systems, #Intestitial points in latice structures, #ceramic structures, # Allotropi and Polimorfizm, #Points, Directions, and planes in crystal structures, #Liner and planar density, Closed packed structures,#Stacking of planes, #interspacing of planes and X-ray diffraction analysis	14.12.2021
	1805C913	TAMERLAN RAHİM-ZADA		
	1905C017	ALİ MERT ÜSTÜNALP		
	1905C030	TALHA KEREM ÇETİN		
	1905C034	GÜLSÜM GÖZDE BAYRAKTAROĞLU		
	1905C037	ALEYNA BİR		
	1905C049	ELİF YALÇIN		
	1905C909	ORHAN TÜRKAN		
	2005C013	EGE UZ		
	2005C018	İBRAHİM MERT CAN		
	2005C021	CEYDA DEMİR		
	2005C029	DOĞA ERSOY		
4	1805C020	BARIŞ ÇİFÇİ	<u>Defects in Solids:</u> #Point defects, #Line Defects ( Dislocations), #Interfacial defects, #Plastic deformation with slip and twin, # Slip and twin systems, #Schmid Law	21.12.2021
	1905C005	İBRAHİM MADAN		
	1905C009	BİLGE AÇIK		
	1905C039	AYLİN TÜRK		
	1905C041	MERVE YILMAZ		
	1905C043	DENİZ TÜRKYILMAZ		
	1905C046	VEYSEL OLUKDERE		
	1905C908	KADİR KABASAKAL		
	2105C602	AYŞIN ÖZGEN		
	2005C932	MEHMET FATİH ERKAN		
	2105C603	SEYİTHAN AKBULUT		
5	1905C002	AZİZE BİLGE ÖZCAN	<u>Diffusion in Solids:</u> #Diffusion and importance in material science, #Diffusion mechanisms: self diffusion, #Diffusion mechanisms: substitutional (vacancy) diffusion, #Diffusion mechanisms: Interstitial diffusion, #Diffusion, phase transformation, alloying, #Steady State diffusion-Fick Law 1st, #Non-Steady State diffusion-Fick Law 2nd, #Effects of Temperature on Diffusion	21.12.2021
	1905C015	KAAN OCAK		
	1905C019	EMİNE ÖZTÜRK		
	1905C021	KADİR ARDA UĞURLU		
	1905C023	ERGİNCAN MUTAF		
	1905C026	CANAN TAŞKALE		
	1905C029	ŞEVVAL GÜNEŞ		
	1905C051	BÜŞRA KAYRA ÖZDEMİR		
	1905C052	MUHAMMED ALİ ETA AKAY		
	1905C013	SEVBAN İNCE		
	1905C040	ÖZÜM GEROĞLU		

6	1605C019	BERAT GÜL	<b>Strengthening Mechanisms:</b> #plastic deformation and strengthening concept, #Works hardening mechanism, #Anealing (Recovery, Recrystallization, Grain growth), #Grain size reduction mechanism, #Solid Solution Hardening mechanism, # Precipitation hardening mechanism, # Dispersion hardening mechanism, #Deformation and Strengehing in Polymers	28.12.2021
	1705C022	AYGÜN EREN BAŞARAN		
	1705C703	DEMET CENDEK TAMER		
	1805C013	ÖMER CAN KOVALAK		
	1805C021	EGEMEN DEMİRBAŞ		
	1805C030	ATAKAN YORULMAZ		
	1805C046	ALPER ENES DOĞAN		
	1805C902	AHMET KARADENİZ		
	1905C001	SHAK BERKE ÖZ		
	1905C003	İREM BELGE		
	1905C006	SÜMEYYE GÜLSÜM ŞEN		
	1905C012	ALASU ES		
7	1905C901	MARIA MOUSSA	<b>Mechanical Properties:</b> #Stress concept and types, #strain concept and types, #Stress-strain diagram, #True stress-strain and Engineering stress-strain, #Elastic deformation, #Plastic deformation-structure relation, #Ductility and toughness-structure relation, #Hardnes-structure relation, #Bending behaviour-structure relation, #Creep behaviour-structure relation, #Fatigue behavior-structure relation	28.12.2021
	1905C903	BABANIYAZ CHERKEZOV		
	1905C905	JAVID SARIYEV		
	2005C006	ÖNDER KAYA		
	2005C015	MELEK ELVİN DOKUYUCU		
	2005C038	BERHAN CAN		
	2005C039	KAAN BÜK		
	2005C045	BERK TAVŞANOĞLU		
	2005C704	BARIŞ YILDIZ		
	2005C901	MEHRDAD TAHER GHOLI		
	2005C902	NURUDEEN LAMINI		