

MSE 480: Materials Selection in Design
Schedule for Fall Semester, 2022
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#	date	topic	Reading Assignment (completed before class)	in class exercises	senior design project events	deliverable due dates
1	8/29/2022	Course Overview & Structure		Ice-Breaker		
2	9/5/2022	NO CLASS - LABOR DAY			distribute project descriptions	
3	9/12/2022	Introduction: Materials & Design, Engineering Materials & Their Properties	Chapters 1 & 2	TBD		submit ranking of project preferences to Canvas
4	9/19/2022	Materials Property Charts; Materials Selection - The Basics	Chapters 3 & 4	EduPack Exploration Task I	projects and teams assigned	
5	9/26/2022	Processes and their Effects on Properties; Processes Selection & Costs	Chapters 6 & 7	EduPack Exploration Task II		
6	10/3/2022	Student Case Study Presentations	Chapter 5			submit presentation slides for case study to Canvas; submit written report for case study to Canvas
7	10/10/2022	Multiple Constraints & Conflicting Objectives	Chapters 8 & 14	Radar Plots		
8	10/17/2022	Midterm Exam				
9	10/24/2022	Senior Design Project			1st weekly meeting with faculty mentor; meet with industrial liaison; motivation, objectives & scope	
10	10/31/2022	Senior Design Project			2nd weekly meeting with mentor; review of literature for materials and processes	

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11	11/7/2022	Senior Design Project			3rd weekly meeting with mentor; explicit consideration of multiple constraints (economic, environmental, societal)	
12	11/14/2022	Senior Design Project			4th weekly meeting with mentor; tasks as needed, informed by mentor's input	
13	11/21/2022	Senior Design Project			5th weekly meeting with mentor; tasks as needed, informed by mentor's input; potentially preliminary experiments	submit first draft of written report to faculty mentor
14	11/28/2022	Senior Design Project			6th weekly meeting with faculty mentor; rehearse presentations with team faculty mentor	submit first draft of slides to faculty mentor
15	12/5/2022	Final Project Presentations			deliver final project presentations	submit final presentation slides to Canvas
16	12/12/2022	Finals Week				submit final report to Canvas