

**MSE 480: Materials Selection in Design**  
**Schedule for Fall Semester, 2023**  
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#	date	topic	Reading Assignment (completed before class)	in class exercises	senior design project events	deliverable due dates
1	8/23/2023	Course Overview & Structure		Ice-Breaker		
2	8/30/2023	Introduction: Materials & Design, Engineering Materials & Their Properties	Chapters 1 & 2	TBD		submit ranking of project preferences to Canvas
3	9/6/2023	Materials Property Charts; Materials Selection - The Basics	Chapters 3 & 4	EduPack Exploration Task I	projects and teams assigned	
4	9/13/2023	Processes and their Effects on Properties; Processes Selection & Costs	Chapters 6 & 7	EduPack Exploration Task II		
5	9/20/2023	Student Case Study Presentations	Chapter 5			submit presentation slides for case study to Canvas; submit written report for case study to Canvas
6	9/27/2023	Multiple Constraints & Conflicting Objectives	Chapters 8 & 14	Radar Plots		
7	10/4/2023	Midterm Exam				
8	10/11/2023	Senior Design Project			1st weekly meeting with faculty mentor; meet with industrial liaison; motivation, objectives & scope	
9	10/18/2023	Senior Design Project			2nd weekly meeting with mentor; review of literature for materials and processes	
10	10/25/2023	Senior Design Project			3rd weekly meeting with mentor; explicit consideration of multiple constraints (economic, environmental, societal)	

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11	11/1/2023	Senior Design Project			4th weekly meeting with mentor; tasks as needed, informed by mentor's input	
12	11/8/2023	Senior Design Project			5th weekly meeting with mentor; tasks as needed, informed by mentor's input; potentially preliminary experiments	
13	11/15/2023	Senior Design Project			6th weekly meeting with faculty mentor; discuss report and presentation plans	submit first draft of written report to faculty mentor
14	11/22/2023	No Class - Thanksgiving				
15	11/29/2023	Senior Design Project			7th weekly meeting with faculty mentor; rehearse presentations with team faculty mentor	submit first draft of slides to faculty mentor
16	12/6/2023	Final Project Presentations			deliver final project presentations	submit final presentation slides to Canvas
17	12/13/2023	Finals Week				submit final report to Canvas