

MSE 220 Fall 2015 Schedule and Syllabus All Reading Assignments from Callister's 9th edition (You must purchase the book on the Wiley.com website)

Week and Month	Date	Reading (this will change)		Topic	DUE	Activity	Project (These may all change)
1 Sept.	8			Class Organization		Introduction	
	10	Ch 2 and 19.3		Bonding		LearningCatalytics	Project 1: presentation
2	15	Ch 3.1-3.17		Crystallography		LearningCatalytics	
	17	Ch 4.1-4.11		Crystallography and defects	P1 proposal due	LearningCatalytics	
3	22	Ch 5.1-5.4		Defects and steady state diffusion	PS 1: Bonding and Crystallography	PS 1 discussion (Ch 2, 19.3, and 3)	
	24	Ch 5.5-5.7		Non steady state Diffusion		RAA 1 (Ch 2, 19.3, and 3)	
4	29	Ch 9.1-9.10		Phase diagrams		LearningCatalytics	
	1 Oct.	Ch 9.11-9.15, 9.17-9.20		Phase Diagrams		LearningCatalytics	
5	6	Ch 10.1-10.9		Phase Transformations	PS 2: Defects, Diffusion and Phase Diagrams	PS 2 discussion (Ch 4, 5 and 9)	
	8	Ch 11.1-11.8		Phase Transformations and processing of metals		RAA 2 (Ch 4, 5 and 9)	
6	13	Ch 6.1-6.12		Mechanical Properties	P1: Whiteboard Video due (link to YouTube)	LearningCatalytics	Project 2: poster
	15	Ch 7.1-7.13		Strengthening	P1: Individual Report: electronic submission	LearningCatalytics Project Presentations	
7	20	Fall Break				Fall Break - No Class	
8	22	Ch 8.1-8.13		Strengthening and Failure		LearningCatalytics Project Presentations	
	27	Ch 12.1-12.4		Failure and Ceramics	PS 3: Phase Transformations, Mechanical Properties, and Strengthening	PS 3 Discussion (Ch 10, 11, 6, 7)	
	29	12.5 -12.11		Ceramics	P2: electronic project plan submission	RAA 3 (Ch 10, 11, 6, 7)	
9 Nov.	3	Ch 13.1-13.5, 13.10		Ceramics and Ceramic processing		LearningCatalytics	
	5	Ch 14.1-14.14		Polymers		LearningCatalytics	
10	10	Ch 15.1-15.9		Mechanical Properties of Polymers	PS 4: Failure, Ceramics,	PS 4 Discussion (Ch 8, 12, 13)	
	12	Ch 15.10-15.19		Polymer processing	P2: Poster file: will put on stick	RAA 4 (Ch 8, 12, 13)	Project 3: video
11	17	Ch 16.1-16.16		Composites		LearningCatalytics	
	19	Ch 17.1-17.4		Electrochemistry	P2 Team Report: electronic submission	LearningCatalytics	
12	24	Ch 17.5-17.13		Electrochemistry	PS 5: Polymers, Mech. Prop of Polymers, Composites P3 :electronic proposal submission	PS 5 Discussion (Ch 14, 15 and 16), Project Poster Fair	
	26	Thanksgiving				Thanksgiving - No Class	
13 Dec.	1	Ch 18.1-18.9		Electronic Properties		RAA 5 (Ch 14, 15 and 16)	
	3	Ch 18.10-18.17		Electronic Properties		LearningCatalytics	
14	8			Electronic Properties	PS 6: Electrochemistry and Electronic Properties	LearningCatalytics PS 6 Discussion (Ch 17 and 18)	
	10				P3: Video due (link to YouTube)	LearningCatalytics RAA 6 (Ch 17 and 18), Project Video Fair	