

Course Calendar for Mechanical and Nuclear Engineering Materials (EGMN604) for Spring 2020.

(Please treat this as a general guideline. You may expect small changes to it)

Class	Date	Topic	Reading
1	January 14, 2020	Introduction and Syllabus	Chapter 1
2	January 16, 2020	Atomic Structure and Bonding	Chapter 2
3	January 21, 2020	Crystalline Structure	Chapter 3
4	January 23, 2020	Imperfections in Crystalline Structures	Chapter 4
5	January 28, 2020	Diffusion	Chapter 5
6	January 30, 2020	Mechanical Behavior and Properties of Materials	Chapter 6
7	February 4, 2020	Dislocations and Strengthening Mechanisms	Chapter 7
8	February 6, 2020	Failure	Chapter 8
9	February 11, 2020	Microstructure and Phase Diagrams	Chapter 9
10	February 13, 2020	Phase Transformations in Metals	Chapter 10
11	February 18, 2020	Phase Transformations in Metals conti....	Chapter 10
12	February 20, 2020	Principles of Solidification	Chapter 10
13	February 25, 2020	Review	
14	February 27, 2020	Reading Day	
13	March 3, 2020	Midterm EXAM	
15	March 5, 2020	Electrical Properties of Materials	Kittel/Callister
16	March 8, 2020	Spring Break	
17	March 15, 2020		
18	March 17, 2020	Magnetic Properties of Materials	Jiles
19	March 19, 2020	Optical Properties of Materials	Kittel/Callister
20	March 24, 2020	Thermal Properties of Materials	Kittel/Callister
21	March 26, 2020	Structures and Properties of Ceramics	Chapter 12
22	March 31, 2020	Structures and Properties of Polymers	Class Notes/Callister
23	April 2, 2020	Applications and Processing of Metals and Alloys	Chapter 11
24	April 7, 2020	Corrosion, Degradation and Wear of Materials	Chapter 17
25	April 9, 2020	Nuclear Materials	Class Notes
26	April 14, 2020	Composites	Callister
27	April 16, 2020	In class presentations	
28	April 21, 2020	In class presentations	
29	April 23, 2020	Review	
30	April 28, 2020	Review	
31	April 30, 2020	FINAL EXAM	