

MEMORANDUM

TO: Deans and Chairs

FROM: Becky Bitter, Sr. Assistant Registrar

DATE: January 26, 2021

SUBJECT: Minor Change Bulletin No. 8

The courses listed below reflect the minor curricular changes approved by the catalog editor since approval of the last Minor Change Bulletin. The column to the far right indicates the date each change becomes effective.

Subject	Course Number	Revise Drop	Current	Proposed	Effective Date
ME	220	Revise	Materials Laboratory 1 (0-3) Course Prerequisite: CE 215 or concurrent enrollment. Mechanical behavior of materials and application to engineering structures. Typically offered Fall, Spring, and Summer.	Materials Laboratory 1 (0-3) Course Prerequisite: CE 215 or concurrent enrollment, <u>or MSE 202 or concurrent enrollment.</u> Mechanical behavior of materials and application to engineering structures. Typically offered Fall, Spring, and Summer.	8-21
ME	416	Revise	[CAPS] Mechanical Systems Design 3 (1-6) Course Prerequisite: Admitted major in Mechanical Engineering; ME 304; ME 348; ME 415; senior standing; OR admitted major in Materials Science Engineering; MSE 320; MSE 413 or concurrent enrollment; one of MSE 401, 402, or 403; senior standing. Integrative design in mechanical engineering; multidisciplinary design project considering both technical and non-technical contexts; organizational dynamics and communications. Typically offered Fall and Spring.	[CAPS] Mechanical Systems Design 3 (1-6) Course Prerequisite: Admitted major in Mechanical Engineering; ME 304; ME 348; ME 415; senior standing; OR admitted major in Materials Science Engineering; <u>MSE 202 with a C or better;</u> MSE 318 <u>with a C or better;</u> MSE 413 or concurrent enrollment. Integrative design in mechanical engineering; multidisciplinary design project considering both technical and non-technical contexts; organizational dynamics and communications. Typically offered Fall and Spring.	8-21
MSE	316	Revise	Thermodynamics and Kinetics of Materials 3 Course Prerequisite: MSE 201. Laws of thermodynamics, solution thermodynamics, free energy composition diagrams, mechanisms and kinetics of diffusion; solidification behavior, interfaces	Thermodynamics and Kinetics of Materials 3 Course Prerequisite: <u>MSE 202 with a C or better.</u> Laws of thermodynamics, solution thermodynamics, free energy composition diagrams, mechanisms and kinetics of diffusion; solidification behavior, interfaces	8-21

			and phase boundaries, phase transformations in solids, oxidation, and corrosion. Typically offered Fall.	and phase boundaries, phase transformations in solids, oxidation, and corrosion. Typically offered Fall.	
MSE	320	Revise	[M] Materials Structure - Properties Lab 3 (1-6) Course Prerequisite: MSE 201- or concurrent enrollment . Principles and techniques of optical metallography and other laboratory methods used in modern materials science and engineering. Typically offered Fall.	[M] Materials Structure - Properties Lab 3 (1-6) Course Prerequisite: MSE 201; <u>MSE 202 or concurrent enrollment</u> . Principles and techniques of optical metallography and other laboratory methods used in modern materials science and engineering. Typically offered Fall.	8-21
MSE / ME	413	Revise	Mechanics of Solids 3 Course Prerequisite: CE 215; MSE 201. Elasticity, elastic stress distributions; plastic deformation of single and polycrystals; introduction to dislocation theory and its applications; creep, fracture, fatigue. (Crosslisted course offered as MSE 413, ME 413).	Mechanics of Solids 3 Course Prerequisite: CE 215 and <u>MSE 201; OR MSE 202</u> . Elasticity, elastic stress distributions; plastic deformation of single and polycrystals; introduction to dislocation theory and its applications; creep, fracture, fatigue. (Crosslisted course offered as MSE 413, ME 413).	8-21
MSE	425	Revise	[M] Senior Thesis I 3 (0-9) Course Prerequisite: MSE 320 ; MSE 323; admitted to the major in Materials Science Engineering; senior standing. Research in materials science and engineering.	[M] Senior Thesis I 3 (0-9) Course Prerequisite: <u>MSE 318</u> ; MSE 323; two from <u>MSE 331, 332, or 333</u> ; admitted to the major in Materials Science Engineering; senior standing. Research in materials science and engineering.	8-21
SOE	101	Revise	[PSCI] Introduction to Geology 4 (3-3) Course Prerequisite: Enrollment not allowed if credit already earned for SOE 102. Introductory physical geology for non-science majors; emphasis on western US. Credit not granted for both SOE 101 and 102. Typically offered Fall, Spring, and Summer.	[PSCI] <u>Welcome to the Earth: An Introduction to Geology 4</u> (3-3) Course Prerequisite: Enrollment not allowed if credit already earned for SOE 102. Introductory physical geology for non-science majors; emphasis on western US. Credit not granted for both SOE 101 and 102. Typically offered Fall, Spring, and Summer.	8-21
SOE	102	Revise	Physical Geology 4 (3-3) Course Prerequisite: MATH 103, 106, 140, 171, 201, or 202, or concurrent enrollment in any of these, or a minimum ALEKS math placement score of 40%. Enrollment not allowed if credit already earned for SOE 101. Modern concepts of earth	<u>Geology for Science Majors 4</u> (3-3) Course Prerequisite: MATH 103, 106, 140, 171, 201, or 202, or concurrent enrollment in any of these, or a minimum ALEKS math placement score of 40%. Enrollment not allowed if credit already earned for SOE 101.	8-21

			science; mineral rock, resource, and map study. Field trip required. Credit not granted for both SOE 101 and 102. Typically offered Fall and Spring.	Modern concepts of earth science; mineral rock, resource, and map study. Field trip required. Credit not granted for both SOE 101 and 102. Typically offered Fall and Spring.	
SOE	474	Revise	[CAPS] [M] Physics and Chemistry of the Earth 4 (3-3) Course Prerequisite: CHEM 101 or 105; CHEM 102 or 106; MATH 171 ; PHYSICS 101 or 201; SOE 101, 102, or 210; junior standing. Earth's operations as described by sub-disciplines of geology, chemistry, physics, and mathematics; earth's composition as related to solar system formation. Typically offered Odd Years - Spring.	[CAPS] [M] Physics and Chemistry of the Earth 4 (3-3) Course Prerequisite: CHEM 101 or 105; CHEM 102 or 106; PHYSICS 101 or 201; SOE 101, 102, or 210; junior standing. Earth's operations as described by sub-disciplines of geology, chemistry, physics, and mathematics; earth's composition as related to solar system formation. Typically offered Odd Years - Spring.	8-21