

## MEMORANDUM

**Faculty Senate approved October 31, 2019**

TO: Deans and Chairs  
FROM: Becky Bitter, Sr. Assistant Registrar  
DATE: October 22, 2019  
SUBJECT: Minor Change Bulletin No. 4

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
CHEM	333	Revise	<b>Physical Chemistry Laboratory for Chemists 1</b> (0-3) Course Prerequisite: CHEM 331 with a C or better or concurrent enrollment. Experiments selected to meet the individual needs of students in biology, <del>civil</del> engineering, chemistry, or materials science. Typically offered Fall and Spring.	<b>Physical Chemistry Laboratory for Chemists 1</b> (0-3) Course Prerequisite: CHEM 331 with a C or better or concurrent enrollment. Experiments selected to meet the individual needs of students in biology, <u>chemical</u> engineering, chemistry, or materials science. Typically offered Fall and Spring.	8-20
ECE	295	Drop	<b>Digital Communications I</b> 3 Course Prerequisite: ECE 214; ECE 260 or concurrent enrollment. Hardware and protocols for digital communications systems; Ethernet, ATM, physical and media access layer; encoding and modulation techniques.	--N/A--	8-20
ECE	345	Revise	<del><b>Digital Communications II</b></del> 3 Course Prerequisite: ECE 295; STAT 360 or concurrent enrollment. Digitally modulated signals and their spectral characteristics, modulation/demodulation techniques, coherent/non-coherent detection methods; source and channel coding, spread-spectrum and multiple access techniques.	<b><u>Introduction to Digital Communications</u></b> 3 Course Prerequisite: ECE <u>214</u> ; STAT 360 or concurrent enrollment. Digitally modulated signals and their spectral characteristics, modulation/demodulation techniques, coherent/non-coherent detection methods; source and channel coding, spread-spectrum and multiple access techniques.	8-20

ECE	475	Drop	<b>Electro-optical Devices and Systems</b> 3 Course Prerequisite: ECE 370; STAT 360. Electromagnetic reflection and refraction, waveguide theory; theory and application of optical source and sensor devices; coupling, dispersion and loss in waveguides and optical fiber.	--N/A--	8-20
ECE	477	Drop	<b>VLSI Testing and Design for Test</b> 3 (2-3) Course Prerequisite: ECE 324; ECE 366. Test pattern generation for digital devices, controllability and observability; tester characteristics and capabilities; fault modeling and analysis of test coverage; built-in self-test techniques.	--N/A--	8-20
FIN	427	Revise	[M] <b>Investment Analysis</b> 3 Course Prerequisite: FIN 325; certified major or minor in the College of Business. Investment objectives, modern portfolio theory, valuation, equilibrium, market efficiency and asset classes. Typically offered Fall and Spring.	[M] <b>Investment Analysis</b> 3 Course Prerequisite: FIN 325; certified major or minor in the College of Business. <u>Enrollment not allowed if credit already earned for FIN 437.</u> Investment objectives, modern portfolio theory, valuation, equilibrium, market efficiency and asset classes. <u>Credit not granted for more than one of FIN 427 and 437.</u> Typically offered Fall and Spring.	1-20
FIN	437	Revise	[M] <b>Cougar Investment Fund I</b> 3 Course Prerequisite: FIN 325; certified major or minor in the College of Business. Students manage a portion of the university's endowment; including security analysis, valuation, equilibrium, market efficiency, and modern portfolio theory.	[M] <b>Cougar Investment Fund I</b> 3 Course Prerequisite: FIN 325; certified major or minor in the College of Business. <u>Enrollment not allowed if credit already earned for FIN 427.</u> Students manage a portion of the university's endowment; including security analysis, valuation, equilibrium, market efficiency, and modern portfolio theory. <u>Credit not granted for more than one of FIN 427 and 437.</u>	1-20
NEP / <u>SOC</u>	560	Revise	<b>Geographic Information Systems in Health and Social Sciences</b> 3 Utilizing Geographical Information Systems (GIS) and mapping tools to examine and visualize	<b>Geographic Information Systems in Health and Social Sciences</b> 3 Utilizing Geographical Information Systems (GIS) and mapping tools to examine and	1-20

			epidemiological and social science data; assess public health, social, and policy issues including obesity, cardiovascular disease, and drug use; explore how this work can be applied to interventions. Required preparation must include a college-level statistics course. Typically offered Spring.	visualize epidemiological and social science data; assess public health, social, and policy issues including obesity, cardiovascular disease, and drug use; explore how this work can be applied to interventions. Required preparation must include a college-level statistics course. ( <u>Crosslisted course offered as NEP 560, SOC 560</u> ). Typically offered Spring.	
SOE	304	Revise	<b>Ecosystem Field Measurements 4</b> (3-3) Course Prerequisites: SOE 204; SOE 300 or BIOLOGY 372 or concurrent enrollment in either; SOE 301 or concurrent enrollment. Fixed-area sampling and analytical techniques for assessing <del>count and continuous</del> variables are presented; variable radius sampling methods for forests and biomass estimation procedures for <del>grassland and shrub lands</del> are introduced. Typically offered Fall.	<b>Ecosystem Field Measurements 4</b> (3-3) Course Prerequisites: SOE 204; SOE 300 or BIOLOGY 372 or concurrent enrollment in either; SOE 301 or concurrent enrollment. Fixed-area sampling and analytical techniques for assessing <u>various ecological variables and wildlife habitat</u> ; variable radius sampling methods for forests and biomass estimation procedures for <u>ecosystems</u> . Typically offered Fall.	8-20
SOE	441	Revise	<b>Population Ecology and Conservation 4</b> (3-3) Course Prerequisite: BIOLOGY 372 or SOE 300 with a C or better in either; STAT 212 with a C or better and concurrent enrollment in STAT 412, or STAT 412 with a C or better. Ecology, conservation, management of vertebrate populations, especially threatened and endangered species; designed for wildlife and conservation biology majors. Typically offered Spring.	<b>Population Ecology and Conservation 4</b> (3-3) Course Prerequisite: BIOLOGY 372 or SOE 300 with a C or better in either; <u>SOE 435 with a C or better</u> ; STAT 212 with a C or better and concurrent enrollment in STAT 412, or STAT 412 with a C or better. Ecology, conservation, management of vertebrate populations, especially threatened and endangered species; designed for wildlife and conservation biology majors. Typically offered Spring.	8-20