

MEMORANDUM

TO: Deans and Chairs
 FROM: Becky Bitter, Sr. Assistant Registrar
 DATE: February 28, 2018
 SUBJECT: Minor Change Bulletin No. 9

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
CPT S	111	Revise	[QUAN] Introduction to Algorithmic Problem Solving 3 (2-3) Course Prerequisite: MATH 101 with a C or better, MATH 103 with a C or better, or higher level MATH course with a C or better, or a minimum ALEKS math placement score of 45%. Elementary algorithmic problem solving, computational models, sequential, iterative and conditional operations, parameterized procedures, array and list structures and basic efficiency analysis. Typically offered Fall and Spring.	[QUAN] Introduction to Computer Programming 3 (2-3) Course Prerequisite: MATH 101 with a C or better, MATH 103 with a C or better, or higher level MATH course with a C or better, or a minimum ALEKS math placement score of 45%. Elementary algorithmic problem solving, computational models, sequential, iterative and conditional operations, parameterized procedures, array and list structures and basic efficiency analysis. Typically offered Fall and Spring.	5-18
ENVR SCI	464	Drop	Introductory Physical Oceanography 3 Course Prerequisite: MATH 140, PHYSICS 101, or graduate standing. Climate, ocean currents, waves, mixing, and erosion, driven by salinity, temperature, winds, gravity, and earth's rotation.	--N/A--	8-18
ENVR SCI	490	Drop	Special Topics V 1-3 May be repeated for credit; cumulative maximum 6 hours. Typically offered Fall.	--N/A--	8-18
ENVR SCI	585	Drop	Aquatic System Restoration 3 Study of natural, damaged and	--N/A--	8-18

			constructed ecosystems with emphasis on water quality protection and restoration of lakes, rivers, streams and wetlands. (Crosslisted course offered as CE 585, BSYSE 554, ENVR SCI 585). Required preparation must include CHEM 345; MBIOS 101. Cooperative: Open to UI degree-seeking students.		
ENVR SCI	590	Drop	Special Topics 2 May be repeated for credit; cumulative maximum 6 hours. Typically offered Fall and Summer. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	221	Drop	Field Trip 1 (0-3) May be repeated for credit. Course Prerequisite: GEOLOGY 210. One-week field trip to study geology of a selected area of the western United States. S, F grading.	--N/A--	8-18
GEOLOGY	285	Drop	Introduction to Astrobiology 3 Origins, distribution, evolution and future of life in the universe. Typically offered Fall.	--N/A--	8-18
GEOLOGY	323	Drop	Geology of the Pacific Northwest 4 (3-3) Course Prerequisite: GEOLOGY 101 or 102. Physical geology of the Pacific Northwest focusing on geological processes important to its evolution. Field trips required. Credit not granted for both GEOLOGY 322 and 323.	--N/A--	8-18
GEOLOGY	356	Drop	Igneous and Metamorphic Petrology 4 (2-6) Course Prerequisite: GEOLOGY 350. Origin, evolution, and eruption of magmas and crustal rocks; mineralogy, textures and chemical composition of igneous and metamorphic rocks. Field trips required. Typically offered Spring.	--N/A--	8-18
GEOLOGY	445 / 545	Drop	Astrobiology 3 Origin, evolution, distribution and future of life in the universe; fundamental concepts of life and habitable environments on	--N/A--	8-18

			Earth and other planetary bodies within and outside of the solar system. Credit not granted for both GEOLOGY 445 and GEOLOGY 545. Offered at 400 and 500 level. Typically offered Fall.		
GEOLOGY	467 / 567	Drop	Volcanology 3 (2-3) Course Prerequisite: GEOLOGY 320; GEOLOGY 356. Volcanic process, eruption mechanisms, volcanic deposits, hazard assessment. Field trip required. Credit not granted for both GEOLOGY 467 and GEOLOGY 567. Offered at 400 and 500 level. Typically offered Fall. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	480	Drop	Introductory Geochemistry 3 Course Prerequisite: CHEM 106; GEOLOGY 350. The chemistry of Earth materials and processes. Typically offered Spring.	--N/A--	8-18
GEOLOGY	490	Drop	Undergraduate Research V 1-3 May be repeated for credit; cumulative maximum 6 hours. Course Prerequisite: GEOLOGY 101; GEOLOGY 210. Research and advanced laboratory experience with a geology faculty member; oral presentation and written thesis. Typically offered Fall, Spring, and Summer.	--N/A--	8-18
GEOLOGY	499	Drop	Special Problems V 1-4 May be repeated for credit. Independent study conducted under the jurisdiction of an approving faculty member; may include independent research studies in technical or specialized problems; selection and analysis of specified readings; development of a creative project; or field experiences. Typically offered Fall, Spring, and Summer. S, F grading.	--N/A--	8-18
GEOLOGY	521	Drop	Clastic Depositional Systems 3 (2-3) Clastic sedimentary	--N/A--	8-18

			environments; architectural elements and facies analysis. Field trip required. Cooperative: Open to UI degree-seeking students.		
GEOLOGY	523	Drop	Advanced Topics in Stratigraphy 3 May be repeated for credit. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	525	Drop	Carbonate Depositional Systems 3 (2-3) Modern carbonate environments and processes; ancient carbonate rock sequences; carbonate platform-to-basin transition; diagenesis of carbonate rocks. Field trip required. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	538	Drop	Orogenic Systems I 3 Field-base course examines tectonic processes active in the northern Cordillera. Field trip required and final research paper. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	540	Drop	Tectonics 3 Nature and origin of the Earth's major tectonic features. Typically offered Fall and Spring. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	550	Drop	Advanced Mineralogy 3 Elements of crystal chemistry and crystal physics. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	552	Drop	Analytical Methods in Earth Sciences 3 (2-3) Theory and practical experience in EMPA, XRD, XRF, and ICPMS analysis. Typically offered Spring. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	578	Drop	Groundwater Geobiology 3 (2-3) Interaction of groundwater geology and the environment including microbial populations with emphasis on microbial transport in the sub-surface and bioremediation approaches.	--N/A--	8-18

GEOLOGY	579	Drop	Groundwater Geochemistry V 2-4 May be repeated for credit; cumulative maximum 4 hours. Organic and inorganic aqueous geochemistry; controls on groundwater contaminant fate. Cooperative: Open to UI degree-seeking students.	--N/A--	8-18
GEOLOGY	588	Drop	Methods in Radiogenic Isotope Geochemistry 3 (1-6) Course Prerequisite: GEOLOGY 583. Laboratory-based course in modern analytical methods in radiogenic isotope geochemistry. Typically offered Spring.	--N/A--	8-18
GEOLOGY	595	Drop	Advanced Topics in Geology V 1-4 May be repeated for credit; cumulative maximum 6 hours. Topics of current interest in geology. Typically offered Fall and Spring.	--N/A--	8-18
GEOLOGY	596	Drop	Advanced Topics in Geology V 1-4 May be repeated for credit; cumulative maximum 6 hours. Topics of current interest in geology. Typically offered Fall and Spring.	--N/A--	8-18
GEOLOGY	700	Drop	Master's Research, Thesis, and/or Examination V 1-18 May be repeated for credit. Independent research and advanced study for students working on their master's research, thesis and/or final examination. Students must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 700 credit. Typically offered Fall, Spring, and Summer. S, U grading.	--N/A--	8-18
GEOLOGY	702	Drop	Master's Special Problems, Directed Study, and/or Examination V 1-18 May be repeated for credit. Independent research in special problems, directed study, and/or examination credit for students in a non-thesis master's degree program. Students	--N/A--	8-18

			must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 702 credit. Typically offered Fall, Spring, and Summer. S, U grading.		
GEOLOGY	800	Drop	Doctoral Research, Dissertation, and/or Examination V 1-18 May be repeated for credit. Course Prerequisite: Admitted to the Geology PhD program. Independent research and advanced study for students working on their doctoral research, dissertation and/or final examination. Students must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 800 credit. Typically offered Fall, Spring, and Summer. S, U grading.	--N/A--	8-18
NATRS	419	Drop	Topics in Natural Resource Sciences V 1-3 May be repeated for credit; cumulative maximum 9 hours. Topical issues in natural resource sciences. Typically offered Fall, Spring, and Summer.	--N/A--	8-18
NATRS	455	Drop	Elements of Range Management Sciences 3 Course Prerequisite: BIOLOGY 107. Systems science, ecology, wildlife, livestock, social science, concept design, and their contributions to a management science involving rangelands. Typically offered Fall.	--N/A--	8-18
NATRS	479	Drop	Natural Resource Management Internship V 2-12 May be repeated for credit; cumulative maximum 12 hours. An elective opportunity for select students to supplement their academic training with practical field experience. Typically offered Fall, Spring, and Summer.	--N/A--	8-18
NATRS	519	Drop	Advanced Topics V 1-3 May be repeated for credit; cumulative	--N/A--	8-18

			maximum 6 hours. Typically offered Fall, Spring, and Summer.		
NATRS	535	Drop	Wildlife Ecology 4 (3-3) The ecology of wildlife species and the contributing biological processes. Credit not granted for both NATRS 435 and NATRS 535. Overnight field trip required. Offered at 400 and 500 level. Typically offered Fall.	--N/A--	8-18
NATRS	550	Drop	[M] Conservation Biology 3 Patterns of biological diversity, factors producing changes in diversity, values of diversity, management principles applied to small populations, protected areas, landscape linkages, biotic integrity, restoration, legal issues and funding sources. Credit not granted for both NATRS 450 and NATRS 550. Offered at 400 and 500 level. Typically offered Spring.	--N/A--	8-18
NATRS	560	Drop	Watershed Management 3 Principles and practices of management of forest and rangelands for protection, maintenance, and improvement of water resource values. Field trip required. Recommended preparation: NATRS 204 or sufficient background in spreadsheets. Offered at 400 and 500 level. Typically offered Spring.	--N/A--	8-18
NATRS	595	Drop	Seminar in Natural Resource Sciences 1 May be repeated for credit. Literature review; preparation and presentation of reports in natural resource sciences. Typically offered Fall and Spring.	--N/A--	8-18
NATRS	700	Drop	Master's Research, Thesis, and/or Examination V 1-18 May be repeated for credit. Independent research and advanced study for students working on their master's research, thesis and/or final	--N/A--	8-18

			examination. Students must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 700 credit. Typically offered Fall, Spring, and Summer. S, U grading.		
NATRS	800	Drop	Doctoral Research, Dissertation, and/or Examination V 1-18 May be repeated for credit. Course Prerequisite: Admitted to the Environmental and Natural Resource Sciences PhD program. Independent research and advanced study for students working on their doctoral research, dissertation and/or final examination. Students must have graduate degree-seeking status and should check with their major advisor/committee chair before enrolling for 800 credit. Typically offered Fall, Spring, and Summer. S, U grading.	--N/A--	8-18
VET PH	308	Revise	Functional Anatomy of Domestic Animals 4 (3-3) Course Prerequisite: BIOLOGY 107; junior standing. Macroscopic functional morphology of domestic animals. Typically offered Spring.	Functional Anatomy of Domestic Animals 4 (3-3) Course Prerequisite: BIOLOGY 107; junior standing. Macroscopic <u>and microscopic</u> functional morphology of <u>the cell, tissues, and organ systems of</u> domestic animals; <u>emphasis on veterinary application</u> . Typically offered Spring.	5-18