UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 7

Spring 2016

---COURSES---

Faculty Senate Approved February 25, 2016

The courses listed below reflect the undergraduate major curricular changes approved by the Catalog Subcommittee since approval of the last Undergraduate Major Change Bulletin. All new and revised courses are printed in their entirety under the headings Current and Proposed, respectively. The column to the far right indicates the date each change becomes effective.

Subject	Course Number	New Revise Drop	Current	Proposed	Effective Date
AG ED	110	New	--N/A--	**Introduction to Agricultural Education** 2 Introduction to Agricultural Education Model, requirements for becoming an agricultural teacher; roles of the agricultural teacher. Typically offered Fall.	8-16
B A	500	New	--N/A--	**Data Analysis for Managers** V 1-3 Course Prerequisite: Admission to the MBA program at Washington State University. Descriptive statistics, probability, common, discrete, and continuous distribution functions, sampling and estimation, and statistical inference. Typically offered Fall, Spring, and Summer.	5-16
BIOLOGY	486	Revise	**Marine Invertebrate Communities** 2 (0-6) Course Prerequisite: BIOLOGY 106; BIOLOGY 107. Survey of marine invertebrates and their habitats. One-week field/lab course at a marine station.	**[M] Marine Invertebrate Communities** 3 (2-3) Course Prerequisite: BIOLOGY 106; BIOLOGY 107. Survey of marine invertebrates and their habitats. One-week field/lab course at a marine station. Typically offered Summer.	5-16
COM	309	Revise	**Quantitative Research Methods** 3 Course Prerequisite: Certified major or minor in Communication. Measurement, questionnaire construction, sampling, data collection techniques, analysis and hypothesis testing in communication research.	**(COMSTRAT) Quantitative Research Methods** 3 Course Prerequisite: Certified major or minor in Communication. Measurement, questionnaire construction, sampling, data collection techniques, analysis and hypothesis testing in communication research. Typically	8-16

			Typically offered Fall, Spring, and Summer.	offered Fall, Spring, and Summer.	
COM	486	Revise	**Crisis Communication** 3 Course Prerequisite: Certified major in Communication; junior standing. Crisis communication in health, environment, public safety, animal health, and other topics. Case studies and application of principles to in-class practice cases. Typically offered Fall and Spring.	**(COMSTRAT 478) Crisis Communication** 3 Course Prerequisite: Certified major in Communication; junior standing. Crisis communication in health, environment, public safety, animal health, and other topics. Case studies and application of principles to in-class practice cases. Typically offered Fall and Spring.	**8-16**
COMSOC	325	Revise	**Environmental Communication** 3 Course Prerequisite: Certified ~~in any~~ major; junior standing. How communication shapes human understanding and decision making concerning the natural environment in local, national, and global contexts. Typically offered Fall and Spring.	**(476) Environmental Communication** 3 Course Prerequisite: Certified major <u>or minor in Communication</u>; junior standing. How communication shapes human understanding and decision making concerning the natural environment in local, national, and global contexts. Typically offered Fall and Spring.	**8-16**
CPT S	321	New	--N/A--	**Object-Oriented Software Principles** 3 Course Prerequisite: CPT S 223 with a C or better; certified major in Software Engineering, Computer Science, Computer Engineering, or Electrical Engineering. Object-oriented programming for flexibility, efficiency, and maintainability; logic and UI decoupling; complexity analysis, data structures, and algorithms for industry-quality software.	**8-16**
CPT S	476	New	--N/A--	**Software Construction and Maintenance** 3 Course Prerequisite: CPT S 322 with a C or better; certified major in Software Engineering, Computer Science, Computer Engineering, or Electrical Engineering. Software quality, construction (API design and use, object-oriented runtime issues), and maintenance (refactoring, reengineering, reverse engineering).	**8-16**
CPT S	478	New	--N/A--	**Software Process and**	**8-16**

				Management 3 Course Prerequisite: CPT S 322 with a C or better; certified major in Software Engineering, Computer Science, Computer Engineering, or Electrical Engineering. Software Engineering Process (definition, assessment, and improvement); Software Engineering Management; Software Configuration Management.	
CPT S	479	New	--N/A--	**Mobile Application Development** 3 Course Prerequisite: CPT S 322 with a C or better; certified major in Software Engineering, Computer Science, Computer Engineering, or Electrical Engineering. Mobile application development; user interface; location and maps; sensor; camera; cross platform mobile application development tools.	**8-16**
CPT S	484	New	--N/A--	**Software Requirements** 3 Course Prerequisite: CPT S 322 with a C or better; certified major in Software Engineering, Computer Science, Computer Engineering, or Electrical Engineering. Elicitation, analysis, specification, and validation of software requirements as well as the management of requirements during the software life cycle.	**8-16**
CPT S	487	New	--N/A--	**Software Design and Architecture** 3 Course Prerequisite: CPT S 321 with a C or better; CPT S 322 with a C or better; certified major in Software Engineering, Computer Science, Computer Engineering, or Electrical Engineering. Software design; design principles, patterns, and anti-patterns; design quality attributes and evaluation; architectural styles, architectural patterns and anti-patterns.	**8-16**
HORT	351	Revise	**Plant Propagation** 4 (3-3) Course Prerequisite: BIOLOGY 106, BIOLOGY 107,	**(251) Plant Propagation** 4 (3-3) Course Prerequisite: BIOLOGY 106, BIOLOGY 107, BIOLOGY	**1-17**

			BIOLOGY 120, or HORT 202. ~~Principles and methods of multiplying herbaceous and woody plants and their handling up to useable size. Typically offered Spring.~~	120, or HORT 202. <u>Physiological and biochemical basis for sexual and asexual propagation of plants by seed, cutting, layering, grafting, budding, specialized plant structures and micropropagation. Field trip required. Typically offered Spring.</u>	
JAPANESE	**180**	**Revise**	**Special Topics: Study Abroad** V 1-6 May be repeated for credit; cumulative maximum 6 hours. ~~S, F grading.~~	**Special Topics: Study Abroad** V 1-6 May be repeated for credit; cumulative maximum 6 hours.	**5-16**
MUS	**429**	**New**	--N/A--	**[ARTS] Tenor/Bass Choir** 1 (0-2) Vocal ensemble whose membership sings tenor or bass; no audition required; all students welcome; placement assessments will be administered first week of classes. Typically offered Fall and Spring.	**8-16**
MUS	**430**	**New**	--N/A--	**[ARTS] Treble Choir** 1 (0-2) Vocal ensemble whose membership sings soprano or alto; no audition required; all students welcome; placement assessments will be administered first week of classes. Typically offered Fall and Spring.	**8-16**
STAT	**380**	**New**	--N/A--	**Decision Making and Statistics** 3 Course Prerequisite: MATH 171 or MATH 202. Concepts and methods of decision science using simple mathematical, statistical and computer based tools to solve complex problems for sound decision making. Typically offered Fall.	**8-16**
STAT	**419**	**New**	--N/A--	**Introduction to Multivariate Statistics** 3 Course Prerequisite: MATH 220; 300-400-level STAT. Introductory course covering multidimensional data, multivariate normal distribution, principal components, factor analysis, clustering, and discriminant analysis. Typically offered Spring.	**8-16**

| STAT | 436 | New | --N/A-- | **Statistical Computing with SAS and R** 3 (2-2) Course Prerequisite: 300-400-level STAT. Introduction to the SAS and R statistical software packages; covers data entry, variable creation, debugging, graphics, and basic statistical methods. Typically offered Fall. | 8-16 |