## MEMORANDUM

Faculty Senate approved September 20, 2018
TO: Deans and Chairs
FROM: Becky Bitter, Sr. Assistant Registrar
DATE: August 28, 2018
SUBJECT: Minor Change Bulletin No. 1
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 <br> Number | Revise Drop | Current | Proposed | Effective Date |
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| AGRI | 587 | Revise | Research and Extension in Agriculture 3 Ways to effectively communicate research and extension information to diverse audiences; and to plan and assess effective extension programs. Typically offered Fall and Summer. | Research and Extension Communications in Agriculture 3 Ways to effectively communicate research and extension information to diverse audiences, including scientific writing and oral presentations in each style. Typically offered Fall and Summer. | 8-18 |
| ANTH | 303 | Revise | Religious Experience 3 Body, meaning, and power in religion cross culturally. Typically offered Spring. | The Anthropology of Religious Experience 3 Body, meaning, and power in religion cross culturally. Typically offered Spring. | 1-19 |
| ANTH | $\begin{gathered} 463 / \\ 563 \end{gathered}$ | Revise | Anthropology of Life and Death 3 Demography, dynamies of evolution, human ecology, and their relationships to the biology of living, historical, and archaeological populations. Credit not granted for both ANTH 463 and ANTH 563. Recommended preparation: ANTH 260. Offered at 400 and 500 level. Cooperative: Open to UI degree-seeking students. | Introduction to <br> Anthropological Demography and Epidemiology 3 Smallscale population dynamics; culture change; event history analysis; evolutionary life history; risk; reproduction; morbidity; and mortality in ethnographic, historical, and archaeological populations. Credit not granted for both ANTH 463 and ANTH 563. Recommended preparation: ANTH 260. Offered at 400 and 500 level. Cooperative: Open to UI degree-seeking students. | 1-19 |


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| CE | $\begin{gathered} 405 / \\ 505 \end{gathered}$ | Revise | Sustainability: Green <br> Engineering 3 Course <br> Prerequisite: Senior standing; certified major in Architecture, Construction Management, Civil Engr, Electrical Engr, Bioengineering, Chemical Engr, Mechanical Engr, Computer Science, Materials Science Engr, or Computer Engr. Focus on the LEED green building rating system with topics on sustainable site selection, alternative transportation, heat island effect, light polletion, water and energy efficiency/use, regional and global climate/uir issues, use/reuse of many material and resources, and indoor environmental quality. Credit not granted for both CE 405 and CE 505. Offered at 400 and 500 level. Typically offered Fall and Spring.Cooperative: Open to UI degree-seeking students. | Decision-Making for <br> Sustainable and Resilient Civil Infrastructure 3 Course <br> Prerequisite: Senior standing; certified major in Architecture, Construction Management, Civil Engr, Electrical Engr, Bioengineering, Chemical Engr, Mechanical Engr, Computer Science, Materials Science Engr, or Computer Engr. Decision analysis framework within the context of civil engineering; mathematical (probabilistic) formulations for decisionmaking; life-cycle assessment; life-cycle cost analysis; theory of sustainability and resilience. Credit not granted for both CE 405 and CE 505. Offered at 400 and 500 level. Typically offered Fall and Spring. Cooperative: Open to UI degree-seeking students. | 8-18 |
| CE | 466 | Revise | Fundamentals of Engineering Examination Review 1 Course Prerequisite: Senior standing; certified major in Civil Engr, Electrical Engr, <br> Bioengineering, Chemical Engr, Mechanical Engr, Computer Science, Materials Science Engr, or Computer Engr. Review of topics to prepare for the Fundamentals of Engineering Examination. Typically offered Fall and Spring. S, F grading. | Fundamentals of Civil Engineering Examination Review 1 Course Prerequisite: Senior standing; certified major in Civil Engr, Construction Engr, Electrical Engr, Bioengineering, Chemical Engr, Mechanical Engr, Computer Science, Materials Science Engr, or Computer Engr. Review of topics to prepare for the Civil Engineering Fundamentals of Engineering Examination. Typically offered Fall and Spring. S, F grading. | 8-18 |
| CES | 353 | Revise | [M] Ghicana/o- Latina/o Literature 3 Ghicana/o and Latina/o literature, narrative, novel, autobiography, poetry, short story, and drama. | [M] Contemporary Latina/o Literatures 3 Latina/o literature, narrative, novel, autobiography, poetry, short story, and drama. (Crosslisted | 8-18 |


|  |  |  | (Crosslisted course offered as CES 353, ENGLISH 345). | course offered as CES 353, ENGLISH 345). |  |
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| CHEM | 101 | Revise | [PSCI] Introduction to Chemistry 4 (3-3) Course Prerequisite: MATH 103, or placement into MATH 105, a minimum ALEKS math placement score of $45 \%$, өf concurrent enrollment in-or credit for MATH 105, 106, 107, 108, 140, 171, 172, 182, 201, 202, ENGR 107, STAT 205 or 212. Basic chemical concepts; atomic theory, periodicity, reaction stoichiometry, gases, solutions, acids, basis, pH , equilibrium, kinetics, energy, applications to life sciences. Typically offered Fall, Spring, and Summer. | [PSCI] Introduction to Chemistry 4 (3-3) Course Prerequisite: MATH 103, or a minimum ALEKS math placement score of $45 \%$, or concurrent enrollment in or credit for MATH 105, 106, 107, $108,140,171,172,182,201$, 202, ENGR 107, STAT 205 or 212. Atomic and molecular structure, elementary organic nomenclature and reactions, quantitative relationships, periodicity, states of matter, solutions, acids, bases, pH , equilibrium, applications to life sciences. Not recommended as preparation for CHEM 105. Typically offered Fall, Spring, and Summer. | 8-18 |
| CHEM | 102 | Revise | Chemistry Related to Life Sciences 4 (3-3) Course Prerequisite: CHEM 101 with a C or better, or CHEM 105 with C or better. Organic functional groups and their reactions; polymers, macro-molecules; carbohydrates, lipids, proteins, enzymes, nucleic acids, hormones, applications to life sciences. Typically offered Spring and Summer. | Chemistry Related to Life Sciences 4 (3-3) Course Prerequisite: CHEM 101 with a C or better, or CHEM 105 with C or better. Organic functional groups and their reactions; thermodynamics, kinetics, and redox reactions, polymers, macro-molecules; carbohydrates, lipids, proteins, enzymes, nucleic acids, hormones, applications to life sciences. Typically offered Fall, Spring, and Summer. | 8-18 |
| CHEM | 105 | Revise | [PSCI] Principles of Chemistry I 4 (3-3) Course Prerequisite: Credit for or concurrent enrollment in one of the following courses: MATH 106, 108, 140, 171, 172, 182, 202, or ENGR 107, or a minimum ALEKS math placement score of $80 \%$. Stoichiometry, structure, gases, liquids, solids, solutions, thermodymamics, kinetics, equilibrium, volumetric, and | [PSCI] Principles of Chemistry I 4 (3-3) Course Prerequisite: Credit for or concurrent enrollment in one of the following courses: MATH $106,108,140,171,172,182$, 202, or ENGR 107, or a minimum ALEKS math placement score of $80 \%$. Atomic and molecular structure, states of matter, quantitative relationships, thermodynamics, quantum | 8-18 |


|  |  |  | gravimetric malysis. <br> Recommended preparation: One year high school chemistry or CHEM 101. Typically offered Fall, Spring, and Summer. | mechanics, periodicity, bonding. Recommended preparation: One year rigorous high school chemistry or CHEM 103. Typically offered Fall, Spring, and Summer. |  |
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| CHEM | 106 | Revise | Principles of Chemistry II 4 (3-3) Course Prerequisite: CHEM 105 with a grade of C or better; MATH 106, 107, or 108 with a grade of C or better, or MATH 108 or concurrent enrollment, or a minimum ALEKS math placement score of $80 \%$. Acid-base, ionic, molecular, solubility, oxidation/reduction equilibria; kinetics, electrochemistry; systematic chemistry of the elements; coordination eompounds. Credit not granted for both CHEM 106 and 116. Typically offered Fall, Spring, and Summer. | Principles of Chemistry II 4 (3-3) Course Prerequisite: CHEM 105 with a grade of C or better; one of MATH 106, 107 , or 108 with a grade of C or better, or eoneurrent enrollment im-MATH 108 or concurrent enrollment, or a minimum ALEKS math placement score of $80 \%$. Intermolecular forces, solutions, kinetics, equilibrium, acids and bases, thermodynamics, electrochemistry, radiochemistry. Credit not granted for both CHEM 106 and 116. Typically offered Fall, Spring, and Summer. | 8-18 |
| CHEM | 116 | Revise | Chemical Principles Honors II 4 (3-3) Course Prerequisite: By department permission. Pescriptive inorganic themistry, organic chemistry principles, acid/base, ionic and molecular equilibrium, electrochem, thermodynamies, kinetics. Laboratory interfaced with computers. Credit not granted for both CHEM 106 and 116. Typically offered Spring. | Chemical Principles Honors II 4 (3-3) Course Prerequisite: By department permission. Honors-level second semester general chemistry; topics generally identical to CHEM 106, with additional advanced topics at discretion of instructor. Credit not granted for both CHEM 106 and 116. Typically offered Spring. | 8-18 |
| COM | 561 | Revise | Multimedia Content Creation 3 Course Prerequisite: Admitted to the online master's program in strategic communication. Exploration and application of strategies to communicate ideas clearly, concisely, and effectively through multimedia content. | Multimedia Content Creation 3 Course Prerequisite: Admitted to an online degree program or graduate certificate in communication. Exploration and application of strategies to communicate ideas clearly, concisely, and effectively through multimedia content. | 8-18 |
| COM | 562 | Revise | Crisis Communication in Global Contexts 3 Course Prerequisite: Admitted to the | Crisis Communication in Global Contexts 3 Course Prerequisite: Admitted to an | 8-18 |


|  |  |  | online master's program im strategie communication. Prepare, plan, and execute crisis communication and management to protect the continuity of an organization's image and mission. | online degree program or graduate certificate in communication. Prepare, plan, and execute crisis communication and management to protect the continuity of an organization's image and mission. |  |
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| COM | 563 | Revise | Ethics for Professionals 3 Course Prerequisite: Admitted to the online master's program in strategic communication. The understanding, discussion, and application of key theories of individual and institutional ethics; the articulation and defense of ethical reasoning. | Ethics for Professionals 3 <br> Course Prerequisite: Admitted to an online degree program or graduate certificate in communication. The understanding, discussion, and application of key theories of individual and institutional ethics; the articulation and defense of ethical reasoning. | 8-18 |
| COM | 564 | Revise | Research Methods for Professionals 3 Course Prerequisite: Admitted to the online master's program in strategic communication. Understanding the role of research in media and related organizations and its application to organizational decision making through quantitative and qualitative research methods including research design, questionnaire construction, sampling, data collection techniques, and variable measurement. | Research Methods for Professionals 3 Course Prerequisite: Admitted to an online degree program or graduate certificate in communication. Understanding the role of research in media and related organizations and its application to organizational decision making through quantitative and qualitative research methods including research design, questionnaire construction, sampling, data collection techniques, and variable measurement. | 8-18 |
| COMSTRAT | 561 | Revise | Persuasion for Professional Communicators 3 Course Prerequisite: Admitted to the online master's program in strategic communication. Introduction to theories, concepts, strategies, and processes of persuasion and social influence. | Persuasion for Professional Communicators 3 Course Prerequisite: Admitted to an online degree program or graduate certificate in communication. Introduction to theories, concepts, strategies, and processes of persuasion and social influence. | 8-18 |
| COMSTRAT | 562 | Revise | Creative Media Strategies and Techniques 3 Course Prerequisite: Admitted to the online master's program in strategic communication. The strategies, processes, | Creative Media Strategies and Techniques 3 Course Prerequisite: Admitted to an online degree program or graduate certificate in communication. The strategies, | 8-18 |


|  |  |  | procedures and steps involved in creating marketing communications materials for a variety of different media. | processes, procedures and steps involved in creating marketing communications materials for a variety of different media. |  |
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| COMSTRAT | 563 | Revise | Professional Digital Content Promotion 3 Course Prerequisite: Admitted to the online master's program in strategie communication. The application of writing, critical thinking, and persuasion skills to the practice and promotion of PR and advertising in both digital and social media outlets. | Professional Digital Content Promotion 3 Course Prerequisite: Admitted to an online degree program or graduate certificate in communication. The application of writing, critical thinking, and persuasion skills to the practice and promotion of PR and advertising in both digital and social media outlets. | 8-18 |
| COMSTRAT | 564 | Revise | Consumer Behavior and Brand Development 3 Course Prerequisite: Admitted to the online master's program in strategic communication. Tactics and strategies for consumer analysis and brand development; skills necessary for uncovering consumer insights to link client objectives, account management, creative development, and media planning. | Consumer Behavior and Brand Development 3 Course Prerequisite: Admitted to an online degree program or graduate certificate in communication. Tactics and strategies for consumer analysis and brand development; skills necessary for uncovering consumer insights to link client objectives, account management, creative development, and media planning. | 8-18 |
| COMSTRAT | 565 | Revise | Professional Marketing Communication Management and Campaigns 3 Course Prerequisite: Admitted to the online master's program im strategie communication. An overview of behavior change theories with a focus on strategic marketing campaign design and evaluation; learning to use theory and research to more effectively plan, design, execute and evaluate strategic communication campaigns. | Professional Marketing Communication Management and Campaigns 3 Course Prerequisite: Admitted to an online degree program or graduate certificate in communication. An overview of behavior change theories with a focus on strategic marketing campaign design and evaluation; learning to use theory and research to more effectively plan, design, execute and evaluate strategic communication campaigns. | 8-18 |
| COMSTRAT | 701 | Revise | Master's Independent Capstone Project and /or Examination V 1-6 May be repeated for credit. Capstone project or final examination for | Master's Independent Capstone Project and /or Examination V 1-6 May be repeated for credit. Course Prerequisite: Admitted to an | 8-18 |


|  |  |  | professional master's degree under the Graduate School. The credits will include a balloted evaluation of the student's completion of the program's capstone/examination requirements by the program's graduate faculty. Students must have graduate degree-seeking status and obtain approval from their major advisor/committee chair before enrolling for 701 credit. S, U grading. | online degree program or graduate certificate in communication. Capstone project or final examination for professional master's degree under the Graduate School. The credits will include a balloted evaluation of the student's completion of the program's capstone/examination requirements by the program's graduate faculty. Students must have graduate degree-seeking status and obtain approval from their major advisor/committee chair before enrolling for 701 credit. S, U grading. |  |
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| $\begin{aligned} & \text { CROP SCI / } \\ & \text { ANIM SCI / } \\ & \hline \text { BIOLOGY / } \\ & \text { HORT / PLP } \end{aligned}$ | 545 | Revise | Statistical Genomics 3 (2-3) Develop concepts and analytical skills for modern breeding by using GenomeWide Association Study and genomic prediction in framework of mixed linear models and Bayesian approaches. Recommended preparation: BIOLOGY 474; MBIOS 478. Typically offered Spring. | Statistical Genomics 3 (2-3) Develop concepts and analytical skills for modern breeding by using GenomeWide Association Study and genomic prediction in framework of mixed linear models and Bayesian approaches. (Crosslisted course offered as ANIM SCI 545, CROP SCI 545, BIOLOGY 545, HORT 545, PL P 545.) Recommended preparation: BIOLOGY 474; MBIOS 478. Typically offered Spring. | 8-18 |
| DANCE | 210 | Drop | Jazz Dance I 1 (0-3) May be repeated for credit; cumulative maximum 6 hours. Basic jazz dance techniques, stage choreography, and performance. | --N/A-- | 8-18 |
| DANCE | 211 | Drop | Modern Dance I 1 (0-3) May be repeated for credit; cumulative maximum 6 hours. Basic modern dance techniques, stage choreography, and performance. | --N/A-- | 8-18 |
| DANCE | 310 | Drop | Jazz Dance II 1 (0-3) May be repeated for credit; cumulative maximum 6 hours. Course Prerequisite: By audition only. Advanced jazz dance | --N/A-- | 8-18 |


|  |  |  | techniques, stage choreography, and performance. |  |  |
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| E M | 587 | Revise | Managing Work Design for Safety and Productivity 3 An integrated approach to time-and-motion studies, human factors, and ergonomics to design work that simultaneously improves both productivity and safety. | Managing Human Factors for Safety and Productivity 3 An integrated approach to time-and-motion studies, human factors, and ergonomics to design work that simultaneously improves both productivity and safety. | 8-18 |
| ENTRP | 492 | Revise | [CAPS] Small Business Strategy and Planning 3 Course Prerequisite: FIN 325; MGMT 301; MKTG 360; certified major or minor in the College of Business. Application of management theory and principles to small firms; applied consulting experience with operating businesses. Typically offered Fall, Spring, and Summer. | [CAPS] Small Business Strategy and Planning 3 Course Prerequisite: FIN 325; MGMT 301; MKTG 360; certified major or minor in the College of Business; senior standing. Application of management theory and principles to small firms; applied consulting experience with operating businesses. Typically offered Spring. | 8-18 |
| HORT / CROP SCI | 480 | Revise | Plant Genomics and Biotechnology 3 Course Prerequisite: BЮLOGY 420. Advanced concepts in plant genomics and biotechnology with emphasis on approaches, techniques, and application. (Crosslisted course offered as HORT 480 and CROP SCI 480). Recommended preparation: MBIOS 301 or GROP SCI 444. Typically offered Even Years - Fall. | Plant Genomics and Biotechnology 3 Course Prerequisite: MBIOS/BIOLOGY 301. <br> Advanced concepts in plant genomics and biotechnology with emphasis on approaches, techniques, and application. (Crosslisted course offered as HORT 480, CROP SCI 480). Recommended preparation: BIOLOGY 420 or HORT 416. Typically offered Even Years Fall. | 1-19 |
| KINES | 305 | Revise | Nutrition Related to Fitness and Sport 3 Course <br> Prerequisite: BIOLOGY 140 with a C or better, or 233 with a C or better; certified major in Athletic Training, Health and Fitness, Movement Studies, of Sport Science. Identification of energy, nutrient, and fluid requirements during exercise; evaluation of dietary regimens for competition, and healthy | Nutrition Related to Fitness and Sport 3 Course <br> Prerequisite: BIOLOGY 140 with a C or better, or 233 with a C or better; certified major in Sport Science or Sports Medicine. Identification of energy, nutrient, and fluid requirements during exercise; evaluation of dietary regimens for competition, and healthy weight maintenance. Typically offered Fall. | 8-18 |


|  |  |  | weight maintenance. Typically offered Fall. |  |  |
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| KINES | 311 | Revise | Strength Training 3 Course Prerequisite: BIOLOGY 315 with a C or better, or KINES 262 with a C or better; KINES 264 with a C or better; certified major in Athletic Training, Health and Fitness, Movement Studies, or Sport Science. Basic information and guidelines for enhancement of athletic performance, injury prevention, rehabilitation and general fitness. Typically offered Fall, Spring, and Summer. | Strength Training 3 Course Prerequisite: BIOLOGY 315 with a C or better, or KINES 262 with a C or better; KINES 264 with a C or better; certified major in Sport Science or Sports Medicine. Basic information and guidelines for enhancement of athletic performance, injury prevention, rehabilitation and general fitness. Typically offered Fall, Spring, and Summer. | 8-18 |
| KINES | 312 | Revise | [M] Research and Assessment in Kinesiology 3 (2-3) Course Prerequisite: STAT 212 with a C or better, STAT 401 with a C or better, or PSYCH 311 with a Cor better; certified major in Athletic Training, Health and Fitness, Movement Studies, or Sport Science. Introduction to common quantitative and qualitative research methods used in the discipline; research project. Typically offered Fall, Spring, and Summer. | [M] Research and Assessment in Kinesiology 3 (2-3) Course Prerequisite: PSYCH 311 with a C or better, STAT 212 with a C or better, or STAT 401 with a C or better; certified major in Sport Science or Sports Medicine. Introduction to common quantitative and qualitative research methods used in the discipline; research project. Typically offered Fall, Spring, and Summer. | 8-18 |
| KINES | 313 | Revise | Psychological Aspects of Physical Movement 3 Course Prerequisite: PSYCH 105 with a C or better, or SOC 101 with a C or better; certified major in Athletic Training, Health and Fitness, Movement Studies, or Sport Science. Social and psychological factors related to participation and performance on physical activity (e.g., sport, exercise, recreation, rehabilitation). Typically offered Fall, Spring, and Summer. | Psychological Aspects of Physical Movement 3 Course Prerequisite: PSYCH 105 with a C or better, or SOC 101 with a C or better; certified major in Sport Science or Sports Medicine. Social and psychological factors related to participation and performance on physical activity (e.g., sport, exercise, recreation, rehabilitation). Typically offered Fall, Spring, and Summer. | 8-18 |
| KINES | 314 | Revise | Philosophical Dimensions of Human Movement 3 Course Prerequisite: Certified major in | Philosophical Dimensions of Human Movement 3 Course Prerequisite: Certified major in | 8-18 |


|  |  |  | Athletic Truining, Health and Fitness, Movement Studies, of Sport Science. The philosophical dimensions of human movement. Typically offered Fall, Spring, and Summer. | Sport Science or Sports Medicine. The philosophical dimensions of human movement. Typically offered Fall, Spring, and Summer. |  |
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| KINES | 361 | Revise | Health and Wellness 3 Course Prerequisite: Certified major in Athletic Training, Health and Fitness, Movement Studies, of Sport Science. Knowledge of the multi-dimensional aspects of wellness and concepts necessary for a positive lifestyle through self-assessment. Typically offered Fall, Spring, and Summer. | Health and Wellness 3 Course Prerequisite: Certified major in Sport Science or Sports Medicine. Knowledge of the multi-dimensional aspects of wellness and concepts necessary for a positive lifestyle through self-assessment. Typically offered Fall, Spring, and Summer. | 8-18 |
| KINES | 362 | Revise | Qualitative Biomechanics 3 Course Prerequisite: C or better in BIOLOGY 315 or KINES 262; certified major in Athletic Training, Health and Fitness, Movement Studies, or Sport Science. Qualitative analysis of human movement in everyday activities; introduction to physics principles and how they contribute to functional movements. Typically offered Fall, Spring, and Summer. | Qualitative Biomechanics 3 Course Prerequisite: C or better in BIOLOGY 315 or KINES 262; certified major in Sport Science or Sports Medicine. Qualitative analysis of human movement in everyday activities; introduction to physics principles and how they contribute to functional movements. Typically offered Fall, Spring, and Summer. | 8-18 |
| KINES | 380 | Revise | Introduction to Exercise Physiology 3 Course Prerequisite: BIOLOGY 251 with a C or better; certified major in Athletic Training, Health and Fitmess, Movement Studies, or Sport Science. Introduction to exercise physiology as it relates to sport, physical training, and performance. Typically offered Fall, Spring, and Summer. | Introduction to Exercise Physiology 3 Course Prerequisite: BIOLOGY 251 with a C or better; certified major in Sport Science or Sports Medicine. Introduction to exercise physiology as it relates to sport, physical training, and performance. Typically offered Fall, Spring, and Summer. | 8-18 |
| KINES | 390 | Revise | Sport Science Practicum or Research V 1 (0-3) to 4 (0-12) May be repeated for credit; cumulative maximum 8 hours. Course Prerequisite: KINES 264 with a C or better; certified | Sport Science Practicum or Research V 1 (0-3) to 4 (0-12) May be repeated for credit; cumulative maximum 8 hours. Course Prerequisite: KINES 264 with a C or better; certified | 8-18 |


|  |  |  | in Sport Science,Athletic Training, or Health and Fitmess programs. Supervised practicum or research. Typically offered Fall and Spring. S, F grading. | in Sport Science or Sports Medicine. Supervised practicum or research. Typically offered Fall and Spring. S, F grading. |  |
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| KINES | 461 | Revise | [M] Motor Learning and Control 3 Course Prerequisite: BIOLOGY 251 with a C or better; BIOLOGY 315 with a C or better, or KINES 262 with a C or better; certified major in Athletic Training, Health and Fitmess, Movement Studies, or Sport Science; completion of writing portfolio. Motor learning and motor control areas; neural mechanisms, practice, feedback, retention, and transfer application of theoretical concepts. Typically offered Fall and Spring. | [M] Motor Learning and Control 3 Course Prerequisite: BIOLOGY 251 with a C or better; BIOLOGY 315 with a C or better, or KINES 262 with a C or better; certified major in Sport Science or Sports Medicine; completion of writing portfolio. Motor learning and motor control areas; neural mechanisms, practice, feedback, retention, and transfer application of theoretical concepts. Typically offered Fall and Spring. | 8-18 |
| KINES | 484 | Revise | [CAPS] Exercise Prescription and Medical Conditions 3 <br> Course Prerequisite: BIOLOGY 315 with a C or better, or KINES 262 with a C or better; better; certified major in Athletic Training, Health and Fitness, Movement Studies, of Sport Science; junior standing. An integrated culmination of the knowledge, understanding, and skills for teaching movement activities to individuals with medical conditions. Typically offered Fall and Spring. | [CAPS] Exercise Prescription and Medical Conditions 3 <br> Course Prerequisite: BIOLOGY 251 with a C or better; BIOLOGY 315 with a C or better, or KINES 262 with a C or better; certified major in Sport Science or Sports Medicine; junior standing. An integrated culmination of the knowledge, understanding, and skills for teaching movement activities to individuals with medical conditions. Typically offered Fall and Spring. | 8-18 |
| ME | 401 | Revise | Mechatronics 3 (2-3) Course Prerequisite: E E 304; ME 348; certified major in Mechanical Engineering. Integration of mechanical and microprocessor-based systems; control theory implemented with data acquisition systems; sensors; actuators, signal conditioning, programmable | Mechatronics 3 (2-3) Course Prerequisite: E E 262; ME 348; certified major in Mechanical Engineering. Integration of mechanical and microprocessor-based systems; control theory implemented with data acquisition systems; sensors; actuators, signal conditioning, programmable | 8-18 |


|  |  |  | logic controllers. Typically offered Fall and Spring. | logic controllers. Typically offered Fall and Spring. |  |
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| MGMT | 491 | Revise | [CAPS] Strategic Management 3 Course Prerequisite: MGTOP 340; FIN 325; MGMT 301; MIS 250; MKTG 360; certified major or minor in the College of Business. Capstone course integrating diverse functional knowledge for strategy formulation, implementation and competitive advantage from the perspective of top management. Typically offered Fall, Spring, and Summer. | [CAPS] Strategic <br> Management 3 Course <br> Prerequisite: MGTOP 340; FIN 325; MGMT 301; MIS 250; MKTG 360; certified major or minor in the College of Business; senior standing. Capstone course integrating diverse functional knowledge for strategy formulation, implementation and competitive advantage from the perspective of top management. Typically offered Fall, Spring, and Summer. | 8-18 |
| MUS | 161 | Drop | [ARTS] Introduction to Theatre 3 An introduction to numerous areas of theatre, including: analysis, playwriting, directing, acting, technical theatre, and theatre history. | --N/A-- | 8-18 |
| MUS | 162 | Drop | Introduction to Acting 3 Introduction to the fundamentals of acting through exercises, writing, selfawareness, and attending theatre productions. | --N/A-- | 8-18 |
| NURS | 504 | Revise | Evidence-Based Practice 3 <br> Course prerequisite: Admission to Nursing graduate program. Exploration of evidence-based practice through the conduct of scientific inquiry and application of credible evidence. Typically offered Fall, Spring, and Summer. | Evidence-Based Practice 3 <br> Course prerequisite: Admission to Nursing graduate program. Exploration of evidence-based practice through the conduct of scientific inquiry and application of credible evidence, best practice guidelines and outcomes management reports. Typically offered Fall, Spring, and Summer. | 1-19 |
| NURS | 509 | Revise | Clinical Decision Making: Essential Concepts and Diagnostic Reasoning 3 Course Prerequisite: NURS 562 or concurrent enrollment; NURS 563; NURS 581; admission to the FNP program. | Clinical Decision Making: Essential Concepts and Diagnostic Reasoning 3 Course Prerequisite: NURS 562 or concurrent enrollment; NURS 563; NURS 581; admission to the FNP program. | 1-19 |


|  |  |  | Provides a framework for conducting systematic clinical encounters, developing differential diagnoses, and planning patient-centered care. Typically offered Spring. | A primary care framework for conducting systematic clinical encounters, developing differential diagnoses, and planning care for individuals and families. Typically offered Spring. |  |
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| NURS | 513 | Revise | Primary Care I: Health Promotion, Disease Prevention, and Disease Detection 3 Course Prerequisite: NURS 508; NURS 509; concurrent enrollment in NURS 514. Primary care approaches to health promotion, disease prevention, risk reduction, and disease detection for individuals and families across the life span. Typically offered Spring. | Primary Care I: Health <br> Promotion, Disease <br> Prevention, and Disease <br> Detection Across the Lifespan <br> 3 Course Prerequisite: NURS 508; NURS 509; concurrent enrollment in NURS 514. <br> Primary care approaches to health promotion, disease prevention, risk reduction, and disease detection for individuals and families across the life span. Typically offered Spring. | 1-19 |
| NURS | 515 | Revise | Primary Care II: Acute Health Conditions 3 Course Prerequisite: NURS 513; NURS 514; concurrent enrollment in NURS 516. Primary care approaches to the assessment, diagnosis, and management of individuals and families across the lifespan with common acute conditions. Typically offered Spring. | Primary Care II: Acute Health Conditions Across the Lifespan 3 Course Prerequisite: NURS 513; NURS 514; concurrent enrollment in NURS 516. Clinical management and analysis of acute and common conditions presenting in the primary care setting, emphasizing a lifespan approach. Typically offered Spring. | 1-19 |
| NURS | 516 | Revise | Primary Care Practicum II 2 (0-8) Course Prerequisite: NURS 513; NURS 514; concurrent enrollment in NURS 515. Primary care elinical practicum that focuses on earing for individuals and families across the lifespan with common, acute health conditions. Typically offered Spring. | Primary Care Practicum II 2 (0-8) Course Prerequisite: NURS 513; NURS 514; concurrent enrollment in NURS 515. Primary care practicum experience focused on acute and common conditions in individuals and families across the lifespan. Typically offered Spring. | 1-19 |
| NURS | 521 | Revise | Teaching, Learning and Evaluation in Nursing 3 Course prerequisite: Admission to Nursing graduate program. Exploration of concepts related | Nursing Education: Teaching, Learning, Assessment, and Evaluation 3 Course prerequisite: Admission to Nursing graduate program. | 1-19 |


|  |  |  | to teaching=learning, assessment of diverse learning needs, instructional strategies and design, evaluation of performance outcomes. Typically offered Fall. | Exploration of concepts related to teaching and learning, assessment of diverse learning needs, instructional strategies and design, evaluation of performance outcomes. Typically offered Fall. |  |
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| NURS | 523 | Revise | Educational Issues and Gurrieulum Analysis 3 Course prerequisite: Admission to Nursing graduate program. Exploration of curriculum history, development, future predictions; program evaluation, instructional resources, leadership, and policy development in academic and service settings. Typically offered Spring. | Nursing Education: <br> Curriculum and <br> Accreditation 3 Course prerequisite: NURS 521; admission to Nursing graduate program. Exploration of curriculum and accreditation history, development, future predictions; leadership, and policy development in academic and service settings. Typically offered Spring. | 1-19 |
| NURS | 530 | Revise | Theory of Psychopharmacology and Safe Prescribing Practices 3 Course Prerequisite: NURS 563; NURS 581. Theoretical perspectives of psychopharmacology as they pertain to safe prescribing and monitoring patient outcomes in psychiatry. Typically offered Fall. | Theory of Psychopharmacology and Safe Prescribing Practices 3 Course Prerequisite: NURS 563; NURS 581. <br> Psychopharmacology across the lifespan for clinical practice including pharmacokinetics, pharmacodynamics, principles of prescribing, client education, and outcome monitoring. Typically offered Fall. | 1-19 |
| NURS | 533 | Revise | Trends and Isstes in <br> Healtheare Education: Workforce Diversity and Delivery Methods 3 Gourse prerequisite: Admission to Nursing graduate program. Synthesis and application of advanced adult education theory, competencies, instructional delivery technologies, and best practices in interprofessional healthcare education. | Nursing Education: Delivery Methods for Diversity, Inclusion, and Interprofessional Education 3 Synthesis and application of advanced instructional delivery technologies, and best practices in diversity, inclusion, and interprofessional healthcare education. | 1-19 |
| NURS | 537 | Revise | Primary Care III: Chronic and Complex Health <br> Conditions 3 Course <br> Prerequisite: NURS 515; <br> NURS 516; concurrent | Primary Care III: Chronic Health Conditions Across the Lifespan 3 Course Prerequisite: NURS 515; NURS 516; concurrent enrollment in NURS | 1-19 |


|  |  |  | enrollment in NURS 538. Synthesis of clinical management approaches for care of individuals with chronic and complex conditions across the lifespan and their families. Typically offered Spring. | 538. Synthesis of clinical management approaches for care of individuals with chronic and complex conditions across the lifespan. Typically offered Spring. |  |
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| NURS | 540 | Revise | Internship: Practicum in Advancing the FNP Primary Gare Role V 1-10 May be repeated for credit; cumulative maximum 10 hours. Course Prerequisite: NURS 514. Primary Care Practicum experience requiring the supervised provision of increasingly complex direct patient care. Typically offered Fall, Spring, and Summer. | NP Clinical Practicum V 1-10 <br> May be repeated for credit; cumulative maximum 10 hours. Course Prerequisite: NURS 514 or 547. Primary Care Practicum experience requiring the supervised provision of increasingly complex direct patient care. Typically offered Fall, Spring, and Summer. | 1-19 |
| NURS | 545 | Revise | Therapeutic Modalities II: Specialization in Therapy 3 Course Prerequisite: NURS 544. Focused training in theory of individual and group therapies applicable across lifespan and cross-culturally. Typically offered Spring. | Therapeutic Modalities II 3 Course Prerequisite: NURS 544. PMHNP practicum experience with focused training in theory of individual and group therapies applicable across lifespan and crossculturally. Typically offered Spring. | 1-19 |
| NURS | 547 | Revise | Introduction to Practice: Therapeutic Modalities 3 Course Prerequisite: NURS 545. PMHNP practicum experience emphasizes the development of the advanced practitioner role in developing therapeutic relationships with elients across the lifespan. Typically offered Spring. | Therapeutic Modalities in Practice 3 Course Prerequisite: NURS 545. PMHNP practicum clinical experience focused on development of therapy relationships in two modalities. Typically offered Spring. | 1-19 |
| NURS | 554 | Revise | Epidemiology and Biostatistics for Health Professions 3 Introduction to epidemiology: principles and methods of epidemiologic investigation including analysis of key elements of investigation of high risk populations. Required preparation must include college-level statistics course. Typically offered Fall. | Epidemiology and Biostatistics for Health Professions 3 Course Prerequisite: Admission to Nursing graduate program. Introduction to epidemiology: principles and methods of epidemiologic investigation including analysis of key elements of investigation of high risk populations. Required | 1-19 |


|  |  |  |  | preparation must include college-level statistics course. Typically offered Fall. |  |
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| NURS | 555 | Revise | PMHNP Practicum I 3 (1-8) Course Prerequisite: NURS 501; NURS 530; admission to PMHNP program. Psychiatric mental health practicum experience focused on developing initial eompetence in assessment, interview, diagnosis, and development of evidence-based approaches to treatment. Typically offered Spring. | PMHNP Practicum I 3 (1-8) Course Prerequisite: NURS 501; NURS 530; admission to PMHNP program. Psychiatric mental health practicum experience focused on developing initial competency in the comprehensive PMHNP nursing role across the lifespan. Typically offered Spring. | 1-19 |
| NURS | 558 | Revise | Practice Transformation Project I: Program Design and Data Collection 3 (1-6) <br> Course Prerequisite: NURS 557 with a grade B or better. Development of program design plan and collection of data for the DNP Practice Transformation Project. Typically offered Fall and Spring. | DNP Project II 3 (1-6) Course Prerequisite: NURS 557 with a grade B or better. Development of program design plan and collection of data for the DNP Project. Typically offered Fall and Spring. | 1-19 |
| NURS | 559 | Revise | Practice Transformation Project II: Implementation, Evaluation, and Dissemination 3 (1-6) Course Prerequisite: NURS 557 with a grade B or better; NURS 558 with a grade B or better. Implementation and evaluation of the DNP Practice Transformation Project. Typically offered Fall and Spring. | DNP Project III 3 (1-6) <br> Course Prerequisite: NURS 558 with a grade B or better. Implementation and evaluation of the DNP Project. Typically offered Fall and Spring. | 1-19 |
| NURS | 560 | Revise | PMHNP Practicum II 3 (0-12) <br> Course Prerequisite: NURS 501; NURS 502; NURS 555; admission to PMHNP program. Psychiatric mental health practicum experience focused on developing increased competence in assessment, diagnosis, and evidence-based treatment planning across the | PMHNP Practicum II 3 (0-12) <br> Course Prerequisite: NURS 501; NURS 502; NURS 555; admission to PMHNP program. Clinical practicum experience focused on ongoing development of proficiency in the comprehensive lifespan PMHNP nursing role. Typically offered Spring. | 1-19 |


|  |  |  | lifespan. Typically offered Spring. |  |  |
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| NURS | 562 | Revise | Advanced Health Assessment and Differential Diagnoses 3 (2-3) Course prerequisite: NURS 581 or concurrent enrollment. Applying health assessment and differential diagnostic skills to individuals, families, and populations in rural, urban, and medically under-served areas. Typically offered Spring. | Advanced Health Assessment and Differential Diagnoses 3 (2-3) Course prerequisite: NURS 581 or concurrent enrollment; admission to Nursing graduate program. Applying health assessment and differential diagnostic skills to individuals, families, and populations in rural, urban, and medically under-served areas. Typically offered Spring. | 1-19 |
| NURS | 563 | Revise | Advanced Pharmacological Goncepts and Practice 3 <br> Course prerequisite: Admission to Nursing graduate program. Pharmacology for clinical practice including decision making, prescribing, drug monitoring, and patient education associated with prescriptive authority. Typically offered Spring. | Advanced Pharmacology 3 Course prerequisite: Admission to Nursing graduate program. Pharmacology for clinical practice including decision making, prescribing, drug monitoring, and patient education associated with prescriptive authority. Typically offered Spring. | 1-19 |
| NURS | 583 | Revise | Population Health Nursing Internship V 1-5 May be repeated for credit; cumulative maximum 10 hours. Course Prerequisite: Admission to Master of Nursing or DNP Population Health programs. Application and integration of theoretical content, research, assessment, and intervention strategies into practice. | DNP Population Health Practicum V 1-5 May be repeated for credit; cumulative maximum 10 hours. Course Prerequisite: Enrollment in DNP Population Health program. Application and integration of theoretical content, research, assessment, and intervention strategies into practice. | 1-19 |
| NURS | 591 | Revise | Mixed Methods for Program Development, Implementation, and Evaluation 3 Course Prerequisite: NURS 503, NURS 504, and NURS 554; or admission to post-master's DNP program and NURS 554. A mixed-methods approach to program development, implementation, and outcomes evaluation in healthcare. | Introduction to Mixed Methods and Evaluation 3 Course Prerequisite: NURS 503, NURS 504, and NURS 554; or admission to postmaster's DNP program and NURS 554. Program development, implementation, and outcomes evaluation in healthcare, primarily from a mixed methods and perspective. Typically offered Summer Session. | 1-19 |


|  |  |  | Typically offered Summer <br> Session. |  |  |
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| PHARMACY | $\mathbf{5 4 6}$ | Drop | Selected Topics in Pharmacy <br> Practice 2 Course Prerequisite: <br> PHARMACY 516. Interactive <br> course addressing economic, <br> ethical and professional aspects <br> of health care delivery. H, S, F <br> grading. | --N/A-- |  |


|  |  |  | traced through various philosophical schools and psychological movements. | traced through various philosophical schools and psychological movements. Cooperative: Open to UI degree-seeking students. |  |
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| PSYCH | 533 | Revise | Adult Psychopathology 3 Course Prerequisite: Ph.D. student in Psychology. Theoretical and empirical approaches to diagnosis, etiology and treatment of mental disorders. Gooperative: Open to UI degree-seeking students. | Adult Psychopathology 3 Course Prerequisite: Ph.D. student in Psychology. Theoretical and empirical approaches to diagnosis, etiology and treatment of mental disorders. | 8-18 |
| PSYCH | 544 | Revise | Clinical Health and Primary Care Psychology 3 Course Prerequisite: Ph.D. student in Clinical or Counseling Psychology. Principles and practice of clinical health and primary care psychology. Gooperative: Open to UI degree-seeking students. | Clinical Health and Primary Care Psychology 3 Course Prerequisite: Ph.D. student in Clinical or Counseling Psychology. Principles and practice of clinical health and primary care psychology. | 8-18 |
| PSYCH | 575 | Revise | Foundations of Neuropsychology 3 Course Prerequisite: Ph.D. student in Psychology. Foundations in brain/behavior relationships and neuropathological syndromes; preparation for advanced training in neuropsychological assessment. Gooperative: Open to UI degree-seeking students. | Foundations of Neuropsychology 3 Course Prerequisite: Ph.D. student in Psychology. Foundations in brain/behavior relationships and neuropathological syndromes; preparation for advanced training in neuropsychological assessment. | 8-18 |
| PSYCH | 584 | Revise | Sensory Bases of Behavior 3 Sensory and physiological aspects of vision, audition, and other senses. Gooperative: Open to UI degree-seeking students. | Sensory Bases of Behavior 3 Sensory and physiological aspects of vision, audition, and other senses. | 8-18 |
| PSYCH | 592 | Revise | Cognition and Affective Basis of Behavior 3 Course Prerequisite: Ph.D. student in Psychology. Experimental approaches to human information processing, memory, and cognition. | Cognition and Affective Basis of Behavior 3 Course Prerequisite: Ph.D. student in Psychology. Experimental approaches to human information processing, memory, and cognition. Cooperative: Open to UI degree-seeking students. | 8-18 |


| SOE | 105 | Revise | [PSCI] Natural Resources and Natural Hazards 3 Gourse Prerequisite: MATH 103 or higher with a $C$ or better, of a minimum ALEKS math placement score of $45 \%$. Survey of key natural resources, the physical processes by which nature and society produce those resources, and the processes of related natural hazards. (Formerly ENVR SCI 102.) | [PSCI] Natural Resources and Natural Hazards 3 Survey of key natural resources, the physical processes by which nature and society produce those resources, and the processes of related natural hazards. Recommended Preparation: MATH 103 or higher with a C or better, or a minimum ALEKS math placement score of $45 \%$. (Formerly ENVR SCI 102.) | 8-18 |
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| SOE | 542 | Revise | Extensional Tectonics 3 Case study of Western US Basin and Range Province to explore processes and dynamics of extensional tectonics. Field trip required. Recommended preparation: B.S. in Geology or a related field. | Extensional Tectonics 3 Case study of Western US Basin and Range Province to explore processes and dynamics of extensional tectonics. Field trip required. Recommended preparation: B.S. in Geology or a related field. Cooperative: Open to UI degree-seeking students. | 8-18 |
| VET MED | 523 | Revise | Veterinary Toxicology 3 <br> Course Prerequisite: VET MED 522. Pharmacology and toxicology of the systems of domestic animals. Continuation of VET MED 522P. Typically offered Spring. S, M, F grading. | Veterinary Pharmacology and Toxicology 3 Course Prerequisite: VET MED 522. Pharmacology and toxicology of the systems of domestic animals. Continuation of VET MED 522. Typically offered Spring. S, M, F grading. | 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. | Functional Anatomy of Domestic Animals 4 (3-3) <br> Course Prerequisite: BIOLOGY 107 or junior standing. <br> Macroscopic and microscopic functional morphology of the cell, tissues, and organ systems of domestic animals; emphasis on veterinary application. | 5-18 |

