M E M O R A N D U M

Faculty Senate Approved October 9, 2014

TO: Deans and Chairs

FROM: Becky Bitter, Sr. Assistant Registrar

DATE: September 30, 2014

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 Number	New Revise Drop	Current	Proposed	Effective Date
AMDT	**488**	**Revise**	**Internship Preparation** 1 May be repeated for credit; cumulative maximum 2 hours. ~~Course Prerequisite: AMDT 307 with a C or better, or AMDT 314 with a C or better; AMDT 492 with a C or better or concurrent enrollment.~~ Orientation and practical information for students in preparation for an internship.	**Internship Preparation** 1 May be repeated for credit; cumulative maximum 2 hours. Orientation and practical information for students in preparation for an internship.	**8-14**
AMDT	**519**	**Revise**	**Research Methods** 3 ~~Course Prerequisite: AMDT 508 or concurrent enrollment.~~ Analysis and understanding of research methods, exploration of thesis topic as applicable to the fields of apparel, merchandising, design and textiles.	**Research Methods** 3 Analysis and understanding of research methods, exploration of thesis topic as applicable to the fields of apparel, merchandising, design and textiles.	**1-15**
ANIM SCI	**313**	**Revise**	**Feeds and Feeding** 4 (3-3) Course Prerequisite: BIOLOGY 106; MATH 106. Utilization, practices, requirements, nutritive characteristics, and calculations of rations for animals. Field trip required. Cooperative: Open to UI degree-seeking students.	**Feeds and Feeding** 4 (3-3) Course Prerequisite: BIOLOGY 106; MATH 106, 107, 140, 171, 172, 182, or 202. Utilization, practices, requirements, nutritive characteristics, and calculations of rations for animals. Field trip required. Cooperative: Open to UI degree-seeking students.	**8-14**

ANIM SCI	**330**	**Revise**	**Animal Genetics** 3 (2-3) Course Prerequisite: STAT 212; BIOLOGY ~~106~~. Basic genetic concepts and methods for the genetic improvement of Mendelian and polygenic traits in animals. Cooperative: Open to UI degree-seeking students.	**Animal Genetics** 3 (2-3) Course Prerequisite: BIOLOGY 107; STAT 212. Basic genetic concepts and methods for the genetic improvement of Mendelian and polygenic traits in animals. Cooperative: Open to UI degree-seeking students.	**8-15**
ANIM SCI	**460**	**Revise**	**Advanced Meat Science** 3 (2-3) Course Prerequisite: ~~ANIM SCI 345, 346, or 360~~. Structure and development of skeletal muscle, postmortem biological changes, meat quality, meat processing, food safety, and meat industry. Cooperative: Open to UI degree-seeking students.	**Advanced Meat Science** 3 (2-3) Course Prerequisite: CHEM 102 or 106; junior standing. Structure and development of skeletal muscle, postmortem biological changes, meat quality, meat processing, food safety, and meat industry. Cooperative: Open to UI degree-seeking students.	**8-15**
BIOLOGY	**298**	**Revise**	**[BSCI] Honors Biology for Non-Science Majors** 4 (3-3) Understanding the natural world from a biological perspective for non-science majors.	**[BSCI] Honors Biology for Non-Science Majors** 4 (3-3) Course Prerequisite: Must be an Honors student. Understanding the natural world from a biological perspective for non-science majors.	**5-14**
BIOLOGY	**410**	**Revise**	**Marine Ecology** 3 Course Prerequisite: BIOLOGY ~~107~~. The ecology and conservation of marine organisms, communities, and ecosystems.	**Marine Ecology** 3 Course Prerequisite: BIOLOGY 106. The ecology and conservation of marine organisms, communities, and ecosystems.	**8-14**
CHE	**499**	**Revise**	**Special Problems** V 1-4 May be repeated for credit. Course Prerequisite: Sophomore standing. 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. S, F grading.	**Special Problems** V 1-4 May be repeated for credit. Course Prerequisite: Sophomore standing; instructor permission. 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. S, F grading.	**1-15**
COMSTRAT	**566**	**Drop**	**Masters Capstone Course** 3 Tying together key learning objectives that faculty expect the student to have learned during the program.	**--N/A--**	**1-15**

CPT S	**121**	**Revise**	**Program Design and Development** 4 (3-3) Course Prerequisite: ~~MATH 106 with a C or better, or~~ MATH 108, 171, 172, 182, 201, 202, 206, 220~~, 273, 315,~~ or ALEKS math placement score of ~~70%~~ or higher. Formulation of problems and top-down design of programs in a modern structured language for their solution on a digital computer.	**Program Design and Developmen**t 4 (3-3) Course Prerequisite: MATH 107, 108, 171, 172, 182, 201, 202, 206, or 220 with a C or better, or ALEKS math placement score of 80%, or higher, or adequate CPT S placement test score determined by the department. Formulation of problems and top-down design of programs in a modern structured language for their solution on a digital computer.	**8-15**
DTC	**499**	**Revise**	**Special Problems** V 1-4 May be repeated for credit; cumulative maximum 12 hours. Course Prerequisite: Certified major in Digital Technology and Culture; junior standing~~. Advanced understanding of the various tools, design approaches, and scripting languages for creating dynamic multimedia objects for a variety of platforms, including mobile phones and tablets~~. S, F grading.	**Special Problems** V 1-4 May be repeated for credit; cumulative maximum 12 hours. Course Prerequisite: Certified major in Digital Technology and Culture; junior standing. 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. S, F grading.	**5-14**
E E	**221**	**Revise**	**Numerical Computing for Engineers** 2 Course Prerequisite: MATH 172 or 182 with a C or better; MATH 220 with a C or better. Solutions to engineering problems using modern software tools such as Matlab.	**Numerical Computing for Engineers** 2 Course Prerequisite: MATH 172 or 182 with a C or better; MATH 220 or 230 with a C or better. Solutions to engineering problems using modern software tools such as Matlab.	**8-14**
E E	**486**	**Revise**	**Power Electronics** 3 Course Prerequisite: E E 311 with a C or better; E E 321 with a C or better; certified major in Electrical Engineering, Computer Science, or Computer Engineering~~. High power semiconductor devices; analysis and design of linear and switching power supplies, high frequency magnetics, controller design.~~ Cooperative: Open to UI degree-seeking students.	**Power Electronics** 3 Course Prerequisite: E E 311 with a C or better; E E 321 with a C or better; certified major in Electrical Engineering, Computer Science, or Computer Engineering. Analysis and modeling of power electronics-based converters, steady state operation, converter topologies, non-ideal effects; power supplies; applications. Cooperative: Open to UI degree-seeking students.	**1-15**

E E	**523**	**Revise**	**Power Systems Stability and Control** 3 Dynamic analysis of interconnected electric power system; modeling of synchronous generators, loads and transmission network; small-signal stability and transient stability analysis; dynamic stability controls.	**Power Systems Stability and Control** 3 Course Prerequisite: E E 521 with a B- or better. Dynamic analysis of interconnected electric power system; modeling of synchronous generators, loads and transmission network; small-signal stability and transient stability analysis; dynamic stability controls. Recommended preparation: E E 489 with a B- or better.	**1-15**
ECE	**101**	**Revise**	**Introduction to Electrical Engineering** 2 (1-3) Course Prerequisite: MATH 106 ~~or concurrent enrollment~~. Introduction to the field of electrical engineering and the fundamental concepts behind electronic devices and systems.	**Introduction to Electrical Engineering** 2 (1-3) Course Prerequisite: MATH 106, MATH 171 or concurrent enrollment, or ALEKS math placement score of 80% or better. Introduction to the field of electrical engineering and the fundamental concepts behind electronic devices and systems.	**5-14**
ECE	**214**	**Revise**	**Design of Logic Circuits** 3 (2-3) Course Prerequisite: ECE 101; MATH 106. Design and application of combinational logic circuits with exposure to modern methods and design tools; introduction to sequential logic circuits.	**Design of Logic Circuits** 3 (2-3) Course Prerequisite: ECE 101; MATH 106, MATH 171 or concurrent enrollment, or ALEKS math placement score of 80% or better. Design and application of combinational logic circuits with exposure to modern methods and design tools; introduction to sequential logic circuits.	**5-14**
ECE	**451**	**Revise**	**Capstone Design** I 2 Course Prerequisite: ECE 325; ENGLISH 402; senior standing; certified major in Electrical Engineering. First of a two-course senior design project sequence; design for manufacture, schedule estimation and tracking, costing, ethics and proposal writing.	**Capstone Design** I 2 Course Prerequisite: ECE 325; ECE 370; ENGLISH 402; senior standing; certified major in Electrical Engineering. First of a two-course senior design project sequence; design for manufacture, schedule estimation and tracking, costing, ethics and proposal writing.	**8-15**
ECONS	**490**	**Revise**	**[CAPS] [M] Economics Capstone** ~~3 May be repeated for credit; cumulative maximum 6 hours.~~ Course Prerequisite: ECONS 301;	**[CAPS] [M] Economics Capstone** 3 Course Prerequisite: ECONS 301; ECONS 302; ECONS 311; average of these three courses needs to be a 2.0	**8-14**

			ECONS 302; ECONS 311; average of these three courses needs to be a 2.0 GPA or better; senior standing. Integration of economic theory and field courses; assessment.	GPA or better. Integration of economic theory and field courses; assessment.	
GEOLOGY	**467/567**	**Revise**	**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.	**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. Cooperative: Open to UI degree-seeking students.	**8-14**
HISTORY/ WOMEN ST	**399**	**Revise**	**[DIVR] ~~[H,D]~~ Lesbian and Gay History: Culture, Politics and Social Change in the US** 3 ~~Course Prerequisite: HISTORY 110, HISTORY 111, WOMEN ST 101, or WOMEN ST 201.~~ History and theory of same-sex sexuality in the United States including identity formation, community development, politics and culture. (Crosslisted course offered as HISTORY 399, WOMEN ST 399).	**[DIVR] Lesbian and Gay History: Culture, Politics and Social Change in the US** 3 History and theory of same-sex sexuality in the United States including identity formation, community development, politics and culture. (Crosslisted course offered as HISTORY 399, WOMEN ST 399).	**8-14**
HISTORY	**453/553**	**Revise**	**~~Conservatism, Liberalism, and Socialism: Europe, 1815-1870~~** 3 The consolidation of industrial society and the nation-state in 19th-century Europe. Credit not granted for both HISTORY 453 and HISTORY 553. Offered at 400 and 500 level.	**Age of Revolution: Europe, 1815-1871** 3 The consolidation of industrial society and the nation-state in 19th-century Europe. Credit not granted for both HISTORY 453 and HISTORY 553. Offered at 400 and 500 level.	**1-15**
HISTORY	**454/554**	**Revise**	**~~Nationalism and National Conflict: Europe, 1870-1914~~** 3 The rise of Europe to world predominance and the crisis of the European order. Credit not granted for both HISTORY 454 and HISTORY 554. Offered at 400 and 500 level.	**Age of Empire: Europe, 1871-1914** 3 The rise of Europe to world predominance and the crisis of the European order. Credit not granted for both HISTORY 454 and HISTORY 554. Offered at 400 and 500 level.	**1-15**
HONORS	**198**	**Revise**	**Honors First-Year**	**Honors First-Year Experience**	**5-14**

			Experience 1 Making a successful transition to college including advising, schedule planning and undergraduate research opportunities. S, F grading.	1 Course Prerequisite: Must be an Honors student. Making a successful transition to college including advising, schedule planning and undergraduate research opportunities. S, F grading.	
HONORS	**270**	**Revise**	**Principles and Research Methods in Social Science** 3 Scholarship in social sciences; exposure to theoretical frameworks.	**Principles and Research Methods in Social Science** 3 Course Prerequisite: Must be an Honors student. Scholarship in social sciences; exposure to theoretical frameworks.	**5-14**
HONORS	**280**	**Revise**	**Contextual Understanding in the Arts and Humanities** 3 Scholarship in the arts/humanities; exposure to theoretical frameworks.	**Contextual Understanding in the Arts and Humanities** 3 Course Prerequisite: Must be an Honors student. Scholarship in the arts/humanities; exposure to theoretical frameworks.	**5-14**
HONORS	**290**	**Revise**	**Science as a Way of Knowing** 3 Course Prerequisite: Any B, BSCI, P, PSCI, or SCI lab or concurrent enrollment. Exploration of how scientific knowledge is acquired, refined and advanced; hands-on experience with scientific scholarship. Recommended preparation: For science or engineering majors.	**Science as a Way of Knowing** 3 Course Prerequisite: Any B, BSCI, P, PSCI, or SCI lab or concurrent enrollment; must be an Honors student. Exploration of how scientific knowledge is acquired, refined and advanced; hands-on experience with scientific scholarship. Recommended preparation: For science or engineering majors.	**5-14**
HONORS	**301**	**Revise**	**University Scholars Lecture Series** 1 May be repeated for credit; cumulative maximum 3 hours. Themed lecture series and discussion seminar.	**University Scholars Lecture Series** 1 May be repeated for credit; cumulative maximum 3 hours. Course Prerequisite: Must be an Honors student. Themed lecture series and discussion seminar.	**5-14**
HONORS	**370**	**Revise**	**Case Study: Global Issues in Social Sciences** 3 Course Prerequisite: HONORS 270 or ECONS 198. Using research skills to analyze a global case study or international perspective in the social sciences.	**Case Study: Global Issues in Social Sciences** 3 Course Prerequisite: HONORS 270 or ECONS 198; must be an Honors student. Using research skills to analyze a global case study or international perspective in the social sciences.	**5-14**
HONORS	**380**	**Revise**	**Case Study: Global Issues in the Arts and Humanities** 3 Course Prerequisite: HONORS 280. Using research skills to	**Case Study: Global Issues in the Arts and Humanities** 3 Course Prerequisite: HONORS 280; must be an Honors student.	**5-14**

			analyze a global case study or international perspective in the arts/humanities.	Using research skills to analyze a global case study or international perspective in the arts/humanities.	
HONORS	**390**	**Revise**	**Case Study: Global Issues in the Sciences** 3 Course Prerequisite: HONORS 290, SCIENCE 299, CHEM 116, MATH 182, PHYSICS 205, or PHYSICS 206. Using research skills to analyze a global case study or international perspective in the sciences.	**Case Study: Global Issues in the Sciences** 3 Course Prerequisite: HONORS 290, CHEM 116, MATH 182, PHYSICS 205, PHYSICS 206, or SCIENCE 299; must be an Honors student. Using research skills to analyze a global case study or international perspective in the sciences.	**5-14**
HONORS	**398**	**Revise**	**Honors Thesis Proposal Seminar** 1 Course Prerequisite: Sophomore standing. Seminar to complete the honors thesis proposal for HONORS 450. S, F grading.	**Honors Thesis Proposal Seminar** 1 Course Prerequisite: Must be an Honors student; sophomore standing. Seminar to complete the honors thesis proposal for HONORS 450. S, F grading.	**5-14**
HONORS	**399**	**Revise**	**Honors Thesis Seminar** 1 Course Prerequisite: HONORS 398. Seminar to complete honors thesis for HONORS 450. S, F grading.	**Honors Thesis Seminar** 1 Course Prerequisite: HONORS 398; Must be an Honors student. Seminar to complete honors thesis for HONORS 450. S, F grading.	**5-14**
HONORS	**430**	**Revise**	**Education Abroad Research** V 1-4 May be repeated for credit; cumulative maximum 6 hours. Special assignments and research related to education abroad.	**Education Abroad Research** V 1-4 May be repeated for credit; cumulative maximum 6 hours. Course Prerequisite: Must be an Honors student. Special assignments and research related to education abroad.	**5-14**
HONORS	**450**	**Revise**	**Honors Thesis or Project** V 1-4 May be repeated for credit; cumulative maximum 4 hours. Thesis or project directed by student's major department. S, F grading.	**Honors Thesis or Project** V 1-4 May be repeated for credit; cumulative maximum 4 hours. Course Prerequisite: Must be an Honors student. Thesis or project directed by student's major department. S, F grading.	**5-14**
HONORS	**499**	**Revise**	**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	**Special Problems** V 1-4 May be repeated for credit. Course Prerequisite: Must be an Honors student. Independent study conducted under the jurisdiction of an approving faculty member; may include independent research studies in technical or specialized	**5-14**

			and analysis of specified readings; development of a creative project; or field experiences. S, F grading.	problems; selection and analysis of specified readings; development of a creative project; or field experiences. S, F grading.	
I BUS	**482**	**Revise**	**[M] International Marketing** 3 Course Prerequisite: ~~I BUS 380;~~ certified major or minor in the College of Business. Opportunities, characteristics, trends in foreign markets; alternative methods; strategies; organizational planning, control; problems of adapting American marketing concepts and methods.	**[M] International Marketing** 3 Course Prerequisite: MKTG 360; certified major or minor in the College of Business. Opportunities, characteristics, trends in foreign markets; alternative methods; strategies; organizational planning, control; problems of adapting American marketing concepts and methods.	**8-15**
MATH	**110**	**Revise**	~~**Mathematics Tutorial for MATH 106/108**~~ 1 (0-3) Course Prerequisite: ~~Concurrent enrollment in either MATH 106 or MATH 108~~. ~~Student-centered group tutorial focusing on mathematics skill improvement necessary for success in MATH 106 or MATH 108.~~ S, F grading.	**Mathematics Acceleration** 1 (0-3) Course Prerequisite: ALEKS math placement score of 25%. Individualized instruction on mathematical skills to enhance the mathematical background necessary for success in one of Math 103, 106, or 171. S, F grading.	**5-14**
MECH	**467/567**	**Revise**	**Automation** 3 (2-3) Course Prerequisite: MECH 304 or ECE 260; MECH 348. ~~Automation systems, discrete event control using programmable logic controllers (PLC), robot programming, process control.~~ Credit not granted for both MECH 467 and MECH 567. Offered at 400 and 500 level.	**Automation** 3 (2-3) Course Prerequisite: MECH 304 or ECE 260; MECH 348. Design of automation systems, motion control, programmable logic. Credit not granted for both MECH 467 and MECH 567. Offered at 400 and 500 level.	**8-15**
MKTG	**495**	**Revise**	**[M] Marketing Management** 3 Course Prerequisite: MKTG 360; certified major or minor in the College of Business. Integrative marketing capstone course; the evaluation and design of marketing strategy; covers industry, competitor, and customer analysis with the goal of recommending and implementing an appropriate marketing strategy.	**[M] Marketing Management** 3 Course Prerequisite: MKTG 360; certified major or minor in the College of Business; senior standing. Integrative marketing capstone course; the evaluation and design of marketing strategy; covers industry, competitor, and customer analysis with the goal of recommending and implementing an appropriate marketing strategy.	**8-15**

NEP	**530**	**Drop**	**(510) Foundations of Cellular Regulation** 3 Fundamentals of pharmacology and toxicology; signal transduction; cellular effects of diet and exercise; action and regulation of dietary supplements. (Crosslisted course offered as NEP 530, PHARMSCI 530).	**--N/A--**	**8-14**
NEUROSCI	**425**	**Revise**	**Integrated Physiology** 3 Course Prerequisite: NEUROSCI 301, NEUROSCI 302, PSYCH 372, MBIOS 301, or MBIOS 303. Neural regulation of systems physiology examined at the system, cellular, and molecular levels.	**Integrated Physiology** 3 Course Prerequisite: BIO ENG 210, MBIOS 301, MBIOS 303, NEUROSCI 301, NEUROSCI 302, or PSYCH 372. Neural regulation of systems physiology examined at the system, cellular, and molecular levels.	**5-15**
NURS	**540**	**Revise**	**Internship: Practicum in Advancing the FNP Primary Care Role** V 1-10 May be repeated for credit; cumulative maximum 10 hours. Primary Care Practicum experience requiring the supervised provision of increasingly complex direct patient care.	**Internship: Practicum in Advancing the FNP Primary Care Role** V 1-10 May be repeated for credit; cumulative maximum 10 hours. Course Prerequisite: NURS 567; NURS 570. Primary Care Practicum experience requiring the supervised provision of increasingly complex direct patient care.	**1-15**
PHARDSCI	**503**	**Drop**	**Pathophysiology with Medical Terminology** 4 Course Prerequisite: Admission to Pharmacy program. Review of human physiology along with an overview of human pathophysiology, including medical terminology. H, S, F grading.	**--N/A--**	**1-15**
PHARDSCI	**515**	**Drop**	**Immunology** 2 Course Prerequisite: Admission to Pharmacy program. Fundamentals of immunology, including the immunological mechanisms that underlie prevention and clearance of infectious diseases, and immune reactions that contribute to disease;	**--N/A--**	**1-15**

			mechanism of action of immunotherapeutic and immunomodulatory agents. H, S, F grading.		
PHARDSCI	**528**	**Revise**	**Pharmacokinetics** 3 Course Prerequisite: ~~PHARDSCI 518~~. Qualitative and quantitative understanding of the processes of drug absorption, distribution, and elimination. H, S, F grading.	**Pharmacokinetics** 3 Course Prerequisite: Admission to Pharmacy program. Qualitative and quantitative understanding of the processes of drug absorption, distribution, and elimination. H, S, F grading.	**1-15**
PHARMACY	**505**	**Drop**	**Pharmacy Practice Foundations** 2 Course Prerequisite: Admission to Pharmacy program. Perspectives into the profession of pharmacy; pharmacy law, ethics, and careers. H, S, F grading.	**--N/A--**	**1-15**
PHARMACY	**513**	**Revise**	**Introductory Pharmacy Practice Experience I** 1 Course Prerequisite: ~~PHARMACY 505; PHARMACY 507; PHARMACY 509; PHARDSCI 502; PHARDSCI 503;~~ PHARDSCI 504~~; PHARDSCI 508~~. Prepares student pharmacists for community practice experience and service learning activities. H, S, F grading.	**Introductory Pharmacy Practice Experience I** 1 Course Prerequisite: PHARDSCI 504. Prepares student pharmacists for community practice experience and service learning activities. H, S, F grading.	**1-15**
PHARMACY	**514**	**Revise**	**Pharmacotherapy I** 4 Course Prerequisite: PHARDSCI 502; PHARMACY ~~505~~. First in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. H, S, F grading.	**Pharmacotherapy I** 4 Course Prerequisite: PHARDSCI 502; PHARMACY 507. First in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. H, S, F grading.	**1-15**
PHARMACY	**531**	**Revise**	**Applied Patient Care II: Clinical Assessment and Documentation** 1 (0-3) Course Prerequisite: PHARMACY 501. Clinical assessment and documentation skills necessary for effective pharmaceutical care. H, S, F grading.	**Applied Patient Care II: Clinical Assessment and Documentation** 1 (0-3) Course Prerequisite: PHARDSCI 504; PHARMACY 501. Clinical assessment and documentation skills necessary for effective pharmaceutical care. H, S, F grading.	**1-15**

PHARMACY	**533**	**Revise**	**Introductory Pharmacy Practice Experience II** 3 (0-9) Course Prerequisite: ~~PHARDSCI 512; PHARDSCI 518; PHARDSCI 519; PHARMACY 513; PHARMACY 514; PHARMACY 516~~. Authentic practice situations and service learning with opportunities for discussion and reflection. H, S, F grading.	**Introductory Pharmacy Practice Experience II** 3 (0-9) Course Prerequisite: PHARDSCI 504; PHARMACY 513. Authentic practice situations and service learning with opportunities for discussion and reflection. H, S, F grading.	**1-15**
PHARMACY	**534**	**Revise**	**Pharmacotherapy II** 4 Course Prerequisite: PHARDSCI 512; ~~concurrent enrollment in PHARDSCI 532;~~ PHARMACY 514. Second in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. H, S, F grading.	**Pharmacotherapy II** 4 Course Prerequisite: PHARDSCI 512; PHARMACY 514. Second in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. H, S, F grading.	**1-15**
PHARMACY	**543**	**Revise**	**Introductory Pharmacy Practice Experience III** 1 Course Prerequisite: ~~PHARDSCI 528; PHARDSCI 532; PHARMACY 527; PHARMACY 531;~~ PHARMACY 533~~; PHARMACY 534~~. Authentic practice situations and service learning with opportunities for discussion and reflection. H, S, F grading.	**Introductory Pharmacy Practice Experience III** 1 Course Prerequisite: PHARMACY 533. Authentic practice situations and service learning with opportunities for discussion and reflection. H, S, F grading.	**1-15**
PHARMACY	**544**	**Revise**	**Pharmacotherapy III** 4 Course Prerequisite: PHARMACY 534~~; concurrent enrollment in PHARDSCI 542~~. Third in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. H, S, F grading.	**Pharmacotherapy III** 4 Course Prerequisite: PHARMACY 534. Third in a sequence of courses that focuses on the clinical use of medications in the prevention, mitigation, or cure of disease. H, S, F grading.	**1-15**
PHARMACY	**546**	**Revise**	**Selected Topics in Pharmacy Practice** 2 Course Prerequisite: PHARMACY 516~~; PHARMACY 527~~. Interactive course addressing economic, ethical and professional aspects	**Selected Topics in Pharmacy Practice** 2 Course Prerequisite: PHARMACY 516. Interactive course addressing economic, ethical and professional aspects of health care delivery. S, F	**1-15**

			of health care delivery. S, F grading.	grading.	
PHARMACY	**553**	**Revise**	**Introductory Pharmacy Practice Experience IV** 3 (0-9) Course Prerequisite: ~~PHARDSCI 542; PHARMACY 541; PHARMACY 543; PHARMACY 544; PHARMACY 546~~. Authentic practice situations and service learning with opportunities for discussion and reflection. H, S, F grading.	**Introductory Pharmacy Practice Experience IV** 3 (0-9) Course Prerequisite: PHARMACY 534. Authentic practice situations and service learning with opportunities for discussion and reflection. H, S, F grading.	**1-15**
PHARMACY	**559**	**Revise**	**Quality Assurance and Patient Safety** 2 Course Prerequisite: ~~Admission to Pharmacy program~~. Patient safety issues including quality assurance, medication error avoidance and risk management in healthcare systems. H, S, F grading.	**Quality Assurance and Patient Safety** 2 Course Prerequisite: PHARMACY 531; PHARMACY 534. Patient safety issues including quality assurance, medication error avoidance and risk management in healthcare systems. H, S, F grading.	**1-15**
PHARMACY	**563**	**Revise**	**Introductory Pharmacy Practice Experience V** 2 Course Prerequisite: ~~PHARMACY 551;~~ PHARMACY 553~~; PHARMACY 554; PHARMACY 555; PHARMACY 558; PHARMACY 559~~. Authentic practice situations and service learning with opportunities for discussion and reflection. H, S, F grading.	**Introductory Pharmacy Practice Experience V** 2 Course Prerequisite: PHARMACY 553. Authentic practice situations and service learning with opportunities for discussion and reflection. H, S, F grading.	**1-15**
PHARMACY	**564**	**Revise**	**Pharmacy Law and Regulatory Affairs** 3 Course Prerequisite: ~~Admission to Pharmacy program~~. Legal and ethical pharmacy practice including licensing, patient privacy protection, order fulfillment and contracts. H, S, F grading.	**Pharmacy Law and Regulatory Affairs** 3 Course Prerequisite: PHARMACY 551; PHARMACY 553. Legal and ethical pharmacy practice including licensing, patient privacy protection, order fulfillment and contracts. H, S, F grading.	**1-15**
PHARMACY	**567**	**Revise**	**Public Health and Emergency Preparedness and Response** 2 Course Prerequisite: PHARMACY	**Public Health and Emergency Preparedness and Response** 2 Course Prerequisite: PHARMACY 541; PHARMACY	**1-15**

			541; PHARMACY 543; PHARMACY 544; PHARMACY 546; PHARDSCI 542. Interdisciplinary students (pharmacy, nursing, medicine) working and learning together using patient cases. S, F grading.	544. Interdisciplinary students (pharmacy, nursing, medicine) working and learning together using patient cases. S, F grading.	
PHARMACY	**576**	**Revise**	**~~Advanced Topics in Immunology/Transplantation~~** 1 Course Prerequisite: Admission to Pharmacy program. ~~Transplant pharmacy providing understanding of medical research applied to transplant and other areas of practice.~~ S, F grading.	**Survey of Organ Transplant and Immunosuppressive Drugs** 1 Course Prerequisite: Admission to Pharmacy program. An overview of human transplantation by systems and the immunosuppressive regimes employed to prevent organ rejection. S, F grading.	**1-15**
PHARMACY	**581**	**Revise**	**Acute Care Advanced Practice Experience** 5 (0-5) Course Prerequisite: ~~PHARMACY 558; PHARMACY 561; PHARMACY 563; PHARMACY 564; PHARMACY 565; PHARMACY 566; PHARMACY 567~~. Advanced practice experience in acute care settings. H, S, F grading.	**Acute Care Advanced Practice Experience** 5 (0-5) Course Prerequisite: Admission to Pharmacy program. Advanced practice experience in acute care settings. H, S, F grading.	**1-15**
PHARMACY	**582**	**Revise**	**Ambulatory Care Advanced Practice Experience** 5 (0-5) Course Prerequisite: ~~PHARMACY 558; PHARMACY 561; PHARMACY 563; PHARMACY 564; PHARMACY 565; PHARMACY 566; PHARMACY 567~~. Advanced practice experience in ambulatory care settings. H, S, F grading.	**Ambulatory Care Advanced Practice Experience** 5 (0-5) Course Prerequisite: Admission to Pharmacy program. Advanced practice experience in ambulatory care settings. H, S, F grading.	**1-15**
PHARMACY	**583**	**Revise**	**Community Advanced Practice Experience** 5 (0-5) Course Prerequisite: ~~PHARMACY 558; PHARMACY 561; PHARMACY 563;~~	**Community Advanced Practice Experience** 5 (0-5) Course Prerequisite: Admission to Pharmacy program. Advanced practice experience in a community pharmacy setting. H,	**1-15**

			~~PHARMACY 564;~~ ~~PHARMACY 565;~~ ~~PHARMACY 566;~~ ~~PHARMACY 567~~. Advanced practice experience in a community pharmacy setting. H, S, F grading.	S, F grading.	
PHARMACY	**584**	**Revise**	**Institutional Advanced Practice Experience** 5 (0-5) May be repeated for credit; cumulative maximum 5 hours. Course Prerequisite: ~~PHARMACY 558;~~ ~~PHARMACY 561;~~ ~~PHARMACY 563;~~ ~~PHARMACY 564;~~ ~~PHARMACY 565;~~ ~~PHARMACY 566;~~ ~~PHARMACY 567~~. Advanced practice experience in an institutional pharmacy setting. H, S, F grading.	**Institutional Advanced Practice Experience** 5 (0-5) May be repeated for credit; cumulative maximum 5 hours. Course Prerequisite: Admission to Pharmacy program. Advanced practice experience in an institutional pharmacy setting. H, S, F grading.	**1-15**
PHARMACY	**585**	**Revise**	**Elective I Advanced Practice Experience** 5 (0-5) Course Prerequisite: ~~PHARMACY 558; PHARMACY 561;~~ ~~PHARMACY 563;~~ ~~PHARMACY 564;~~ ~~PHARMACY 565;~~ ~~PHARMACY 566;~~ ~~PHARMACY 567~~. Advanced practice experience in acute or ambulatory patient care settings. H, S, F grading.	**Elective I Advanced Practice Experience** 5 (0-5) Course Prerequisite: Admission to Pharmacy program. Advanced practice experience in acute or ambulatory patient care settings. H, S, F grading.	**1-15**
PHARMACY	**586**	**Revise**	**Elective II Advanced Practice Experience** 5 (0-5) Course Prerequisite: ~~PHARMACY 558;~~ ~~PHARMACY 561;~~ ~~PHARMACY 563;~~ ~~PHARMACY 564;~~ ~~PHARMACY 565;~~ ~~PHARMACY 566;~~ ~~PHARMACY 567~~. Advanced practice experience in acute, ambulatory, or non-traditional patient care. H, S, F grading.	**Elective II Advanced Practice Experience** 5 (0-5) Course Prerequisite: Admission to Pharmacy program. Advanced practice experience in acute, ambulatory, or non-traditional patient care. H, S, F grading.	**1-15**
PHARMACY	**587**	**Revise**	**Elective III Advanced Practice Experience** 5 (0-5)	**Elective III Advanced Practice Experience** 5 (0-5) Course	**1-15**

			Course Prerequisite: ~~PHARMACY 558; PHARMACY 561; PHARMACY 563; PHARMACY 564; PHARMACY 565; PHARMACY 566; PHARMACY 567~~. Advanced practice experience in various health care settings. H, S, F grading.	Prerequisite: Admission to Pharmacy program. Advanced practice experience in various health care settings. H, S, F grading.	
PHARMACY	**594**	**Revise**	**Comprehensive Diabetes Management** 3 Course Prerequisite: ~~PHARMACY 505; PHARMACY 507; PHARMACY 509; PHARDSCI 502; PHARDSCI 503; PHARDSCI 504; PHARDSCI 508~~. Multidisciplinary foundation for future health professionals in the principles of diabetes management, using self-paced, modular and internet-based alternative format for delivery. S, F grading.	**Comprehensive Diabetes Management** 3 Course Prerequisite: Admission to Pharmacy program. Multidisciplinary foundation for future health professionals in the principles of diabetes management, using self-paced, modular and internet-based alternative format for delivery. S, F grading.	**1-15**
PHARMACY	**596**	**Revise**	**Entrepreneurship in Pharmacy** 1 Course Prerequisite: ~~PHARMACY 544; PHARMACY 546~~. Entrepreneurship and innovative pharmacy business plan development. S, F grading.	**Entrepreneurship in Pharmacy** 1 Course Prerequisite: Admission to Pharmacy program. Entrepreneurship and innovative pharmacy business plan development. S, F grading.	**1-15**
PHARMACY	**598**	**Revise**	**Elementary Science Education Practicum** 1 (0-2) Course Prerequisite: ~~PHARMACY 541; PHARMACY 543; PHARMACY 544; PHARMACY 545; PHARMACY 546; PHARDSCI 542~~. Communication with children in classroom environment to stimulate future practicing pharmacists to participate in outreach activities as part of science education. S, F grading.	**Elementary Science Education Practicum** 1 (0-2) Course Prerequisite: Admission to Pharmacy program. Communication with children in classroom environment to stimulate future practicing pharmacists to participate in outreach activities as part of science education. S, F grading.	**1-15**

PHARMSCI	**505**	**Revise**	**Principles and Methods of Toxicology** 3 Course Prerequisite: MBIOS 513. Basic concepts in mammalian toxicology and the methodology currently employed for toxicological investigations. Required preparation: 300-level organ/mammalian physiology course. ~~Cooperative: Open to UI degree-seeking students.~~	**Principles and Methods of Toxicology** 3 Course Prerequisite: MBIOS 513. Basic concepts in mammalian toxicology and the methodology currently employed for toxicological investigations. Required preparation: 300-level organ/mammalian physiology course.	**8-14**
PHARMSCI	**506**	**Revise**	**Principles of Pharmacology** 3 Course Prerequisite: MBIOS 513 or concurrent enrollment. Mechanisms of drug action and the factors that modify drug responses; drug design and drug development. ~~Cooperative: Open to UI degree-seeking students.~~	**Principles of Pharmacology** 3 Course Prerequisite: MBIOS 513 or concurrent enrollment. Mechanisms of drug action and the factors that modify drug responses; drug design and drug development.	**8-14**
PHARMSCI	**510**	**Revise**	**Advanced Pharmacokinetics/ Toxicokinetics** 3 Course Prerequisite: PHARMSCI 506. Kinetics of drug absorption, distribution, elimination, and pharmacologic response. Cooperative: Open to UI degree-seeking students.	**Advanced Pharmacokinetics/ Toxicokinetics** 3 Course Prerequisite: PHARMSCI 506. Kinetics of drug absorption, distribution, elimination, and pharmacologic response.	**8-14**
PHARMSCI	**511**	**Revise**	**Topics in Toxicology** V 1-4 May be repeated for credit; cumulative maximum 12 hours. Topics of current interest in toxicology and closely related areas. ~~Cooperative: Open to UI degree-seeking students.~~	**Topics in Toxicology** V 1-4 May be repeated for credit; cumulative maximum 12 hours. Topics of current interest in toxicology and closely related areas.	**8-14**
PHARMSCI	**512**	**Revise**	**Topics in Pharmacology** V 1-4 May be repeated for credit; cumulative maximum 12 hours. Topics of current interest in pharmacology and closely related disciplines. ~~Cooperative: Open to UI degree-seeking students.~~	**Topics in Pharmacology** V 1-4 May be repeated for credit; cumulative maximum 12 hours. Topics of current interest in pharmacology and closely related disciplines.	**8-14**
PHARMSCI	**530**	**Revise**	**~~(510)~~ Foundations of Cellular Regulation** 3 Fundamentals of pharmacology and toxicology; signal transduction; cellular	**Foundations of Cellular Regulation** 3 Fundamentals of pharmacology and toxicology; signal transduction; cellular	**8-14**

			effects of diet and exercise; action and regulation of dietary supplements. ~~(Crosslisted course offered as NEP 530, PHARMSCI 530).~~	effects of diet and exercise; action and regulation of dietary supplements	
PHARMSCI	**572**	**Revise**	**Fundamentals of Oncology** 3 Course Prerequisite: By permission only. Thorough overview of cancer biology encompassing basic cellular and molecular mechanisms of carcinogenesis and tumor progression, treatment and prevention. ~~Cooperative: Open to UI degree-seeking students.~~	**Fundamentals of Oncology** 3 Course Prerequisite: By permission only. Thorough overview of cancer biology encompassing basic cellular and molecular mechanisms of carcinogenesis and tumor progression, treatment and prevention.	**8-14**
PHARMSCI/ NEP	**597**	**Revise**	**College of Pharmacy Graduate Seminar** 1 May be repeated for credit; cumulative maximum 12 hours. (Crosslisted course offered as PHARMSCI 597, NEP 597.) ~~Cooperative: Open to UI degree-seeking students~~. S, F grading.	**College of Pharmacy Graduate Seminar** 1 May be repeated for credit; cumulative maximum 12 hours. (Crosslisted course offered as PHARMSCI 597, NEP 597.) S, F grading.	**8-14**
POL S	**497**	**Revise**	**Political Science Internship** V 1-12 May be repeated for credit; cumulative maximum 12 hours. On/off campus internship in federal, state, or local government institutions; nonprofit or public organizations; written assignments and readings required. S, F grading.	**Political Science Internship** V 1-12 May be repeated for credit; cumulative maximum 12 hours. Course Prerequisite: By department permission. On/off campus internship in federal, state, or local government institutions; nonprofit or public organizations; written assignments and readings required. S, F grading.	**8-14**
TCH LRN	**490**	**Revise**	**[CAPS] Advanced Practicum** 3 (0-9) Course Prerequisite: TCH LRN 405; senior standing. Intensive practicum integrating educational theory with teaching in classroom contexts. S, F grading.	**[CAPS] Advanced Practicum** 3 (0-9) Course Prerequisite: TCH LRN 401 or 405; senior standing. Intensive practicum integrating educational theory with teaching in classroom contexts. S, F grading.	**8-14**