

MEMORANDUM

Faculty Senate Approved September 24, 2015

TO: Deans and Chairs
 FROM: Becky Bitter, Sr. Assistant Registrar
 DATE: September 16, 2015
 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
AERO	485	Drop	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	--N/A--	1-16
AMDT	440	Revise	Advanced Management Skills 3 (2-2) Advanced application of management principles and theory in the retail world. Typically offered Fall and Spring.	Organizational Leadership 3 (2-2) <u>Application of organizational leadership principles using experiential learning models for skill transfer to industry.</u> Typically offered Fall and Spring.	1-16
ANTH	260	Revise	[BSCI] [B] Introduction to Physical Anthropology 4 (3-3) Evidence for human evolution; processes of racial differentiation; techniques of physical anthropology. Typically offered Fall and Spring.	[BSCI] [B] Introduction to Biological Anthropology 4 (3-3) Evidence for human evolution; <u>evolutionary explanations of human variation</u> ; techniques of <u>biological anthropology</u> . Typically offered Fall and Spring.	5-16
ANTH	504	Revise	Tribal Peoples and Development 3 Global and historic perspectives on the complex issues surrounding the problem of tribal peoples and development.	Culture, Ecology, and International Development 3 <u>Sociocultural properties of ecological systems in developing nations; cultural transformation in dynamic systems; ethnographic description, comparison; mixed and collaborative methods.</u>	5-16
ANTH	537	Revise	Quantitative Methods in Anthropology 4 (3-3) May be repeated for credit; cumulative maximum 8 hours. Sampling,	Quantitative Methods in Anthropology 4 (3-3) May be repeated for credit; cumulative maximum 8 hours. Sampling,	8-16

			exploratory data analysis, inferential statistics, and use of SAS in anthropological research with emphasis on archaeology . Typically offered Fall.	exploratory data analysis, inferential statistics, and use of <u>statistical software</u> in anthropological research. Typically offered Fall.	
ARCH	353	Drop	Structures Studio I 1 (0-2) Design principles of architectural structures systems; available systems for spanning and enclosing architectural space.	--N/A--	8-15
ARCH	354	Drop	Structures Studio II 1 (0-2) Continuation of ARCH 353.	--N/A--	8-15
B LAW	411	Revise	Managerial Law 3 Course Prerequisite: B LAW 210; certified major or minor in the College of Business. Law of agency, partnerships, limited liability companies and corporations; and securities regulation.	Legal Environment of Business II 3 Course Prerequisite: B LAW 210; certified major or minor in the College of Business. Law of agency, partnerships, limited liability companies and corporations; and securities regulation.	8-16
BIO ENG	210	Revise	Bioengineering Analysis 2 (1-3) Course Prerequisite: MATH 220 or concurrent enrollment; certified major in Bioengineering . Analytical problem solving, modeling and computer methods for bioengineering applications. Typically offered Spring and Summer.	Bioengineering Analysis 2 (1-3) Course Prerequisite: <u>CHE 201</u> with a C or better; MATH 220 or concurrent enrollment. Analytical problem solving, modeling and computer methods for bioengineering applications. Typically offered Spring and Summer.	1-16
BIOLOGY	353	Revise	Advanced Human Physiology 4 (3-3) Function and control at the organ-organismic level with emphasis on mammals, including humans; emphasis on human health science applications. Credit not granted for both BIOLOGY 251 and 353. Recommended preparation: BIOLOGY 315 or 354. Typically offered Spring.	Advanced Human Physiology 4 (3-3) Course Prerequisite: BIOLOGY 106; BIOLOGY 107. Function and control at the organ-organismic level with emphasis on mammals, including humans; emphasis on human health science applications. Credit not granted for both BIOLOGY 251 and 353. Recommended preparation: BIOLOGY 315 or 354. Typically offered Spring.	8-16
BIOLOGY	418	Revise	[M]-Parasitology 4 (3-3) Course Prerequisite: BIOLOGY 102 or BIOLOGY 106; junior standing. Types of associations,	Parasitology 4 (3-3) Course Prerequisite: BIOLOGY 102 or BIOLOGY 106; junior standing. Types of associations, life	8-16

			life cycles, control, prevention, and modifications of parasites; examination of parasitic protozoa and helminths. Typically offered Fall.	cycles, control, prevention, and modifications of parasites; examination of parasitic protozoa and helminths. Typically offered Fall.	
CE	476	Revise	Pavement Maintenance and Rehabilitation 3 Course Prerequisite: CE 317. Engineering concept and information needed to maintain, evaluate, repair and rehabilitate pavements and design of flexible and rigid overlays. Typically offered Fall.	<u>Pavement Evaluation and Rehabilitation</u> 3 Course Prerequisite: CE 317. Engineering concept and information needed to maintain, evaluate, repair, and rehabilitate pavements and design of flexible and rigid overlays. Typically offered Fall.	1-16
CHEM	101	Revise	[PSCI] Introduction to Chemistry 4 (3-3) Course Prerequisite: MATH 103, or placement into MATH 105, ALEKS math placement score of 40%, or 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.	[PSCI] [P] Introduction to Chemistry 4 (3-3) Course Prerequisite: MATH 103, or placement into MATH 105, ALEKS math placement score of <u>45%</u> , or 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. <u>Typically offered Fall, Spring, and Summer.</u>	8-15
CHEM	106		[P] 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 ALEKS math placement score of 70% . Acid-base, ionic, molecular, solubility, oxidation/reduction equilibria; kinetics, electrochemistry; systematic chemistry of the elements; coordination compounds. Credit not granted for both CHEM 106 and 116. Typically offered Fall, Spring, and Summer.	[P] 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 ALEKS math placement score of <u>80%</u> . Acid-base, ionic, molecular, solubility, oxidation/reduction equilibria; kinetics, electrochemistry; systematic chemistry of the elements; coordination compounds. Credit not granted for both CHEM 106 and 116. Typically offered Fall, Spring, and Summer.	1-16
COUN PSY	590	Revise	Seminar in Research in	Seminar in Research in	1-16

			<p>Counseling Psychology 3 Course Prerequisite: By interview only. Recent developments in counseling psychology research and design applied to PhD dissertation proposals. Typically offered Fall. S, F grading.</p>	<p>Counseling Psychology 3 Course Prerequisite: <u>COUN PSY 512; COUN PSY 515; COUN PSY 527; ED RES 565; ED PSYCH 568</u>. Recent developments in counseling psychology research and design applied to PhD dissertation proposals. Typically offered Fall. S, F grading.</p>	
CPT S/ PSYCH	485	Revise	<p>Gerontechnology I 3 Introduction to the field of gerontechnology, including aging and senses, mobility and exercise, data analysis, and research methods. (Crosslisted course offered as CPT S 485, PSYCH 485). Typically offered Fall.</p>	<p>Gerontechnology I 3 Course Prerequisite: <u>Certified major in Computer Science or Psychology</u>. Introduction to the field of gerontechnology, including aging and senses, mobility and exercise, data analysis, and research methods. (Crosslisted course offered as CPT S 485, PSYCH 485). Typically offered Fall.</p>	8-15
CPT S/ PSYCH	486	Revise	<p>Gerontechnology II 3 In-depth exploration of gerontechnology, including socialization, caregiver issues, dementia, app design and data visualization. (Crosslisted course offered as CPT S 486, PSYCH 486). Typically offered Spring.</p>	<p>Gerontechnology II 3 Course Prerequisite: <u>Certified major in Computer Science or Psychology</u>. In-depth exploration of gerontechnology, including socialization, caregiver issues, dementia, app design and data visualization. (Crosslisted course offered as CPT S 486, PSYCH 486). Typically offered Spring.</p>	8-15
CROP SCI	554	Drop	<p>Chromosome Structure and Function 3 Structural and functional organization of eukaryotic chromosomes. Required preparation must include upper-division course in biology, genetics, or plant breeding. Typically offered Even Years - Spring. Cooperative: Open to UI degree-seeking students.</p>	--N/A--	1-16
CROP SCI/ HORT	444	Drop	<p>Plant Breeding I 2 Genetic principles underlying plant breeding and an introduction to plant breeding. (Crosslisted course offered as CROP SCI 444, HORT 444).</p>	--N/A--	1-16

CS	121	Revise	Program Design and Development 4 (3-3) Course Prerequisite: MATH 106 with a C or better, MATH 107 with a C or better, MATH 171 with a C or better, MATH 172 with a C or better, or ALEKS math placement score of 70% or better. Formulation of problems and top-down design of programs in a modern structured language for their solution on a digital computer. Typically offered Fall.	Program Design and Development 4 (3-3) Course Prerequisite: MATH 106 with a C or better, MATH 107 with a C or better, MATH 171 with a C or better, MATH 172 with a C or better, or ALEKS math placement score of <u>80%</u> or better. Formulation of problems and top-down design of programs in a modern structured language for their solution on a digital computer. Typically offered Fall.	8-16
ECONS	528	Revise	Master's Macroeconomics Analysis 3 Master's-level course to develop a coherent theoretical framework to interpret macro data and to analyze macro policy. Typically offered Spring.	Master's Macroeconomics Analysis 3 Master's-level course to develop a coherent theoretical framework to interpret macro data and to analyze macro policy. <u>Cooperative: Open to UI degree-seeking students.</u> Typically offered Spring.	1-16
FINE ART	381	Revise	Beginning Photography 3 (0-6) Course Prerequisite: FINE ART 102. Camera and black/white film used in conjunction with studio and darkroom techniques; composition and aesthetic concepts introduced. Typically offered Fall, Spring, and Summer. Cooperative: Open to UI degree-seeking students.	Beginning Photography 3 (0-6) Fundamentals in digital photography in conjunction with image editing and printing techniques; formal, conceptual, and aesthetic concepts introduced. Typically offered Fall, Spring, and Summer. Cooperative: Open to UI degree-seeking students.	8-15
FINE ART	382	Revise	Intermediate Photography 3 (0-6) May be repeated for credit; cumulative maximum 9 hours. Course Prerequisite: FINE ART 381. Expansion of conceptual building in black/white darkroom and camera techniques; research and portfolio. Typically offered Fall and Spring. Cooperative: Open to UI degree-seeking students.	Intermediate Photography 3 (0-6) May be repeated for credit; cumulative maximum 9 hours. Course Prerequisite: FINE ART 381. Expansion of conceptual <u>and technical development with photography including location and studio lighting, and camera techniques; research and portfolio development.</u> Typically offered Fall and Spring. Cooperative: Open to UI degree-seeking students.	8-15
FINE ART	385	Revise	Digital Imaging 3 (0-6) May be repeated for credit; cumulative maximum 9 hours. Course Prerequisite: FINE ART 332- or	Digital Imaging 3 (0-6) May be repeated for credit; cumulative maximum 9 hours. Course Prerequisite: FINE ART 332;	8-15

			381. Principles and processes of digital imaging including color theory, software, cameras, scanning, color management and output options. Typically offered Spring.	FINE ART 381. <u>Intermediate</u> principles and processes of digital imaging <u>workflow</u> including software, <u>image compositing</u> , color management and output options. Typically offered Spring.	
FINE ART	483	Revise	Advanced Photography V 3 (0-6) to 6 (0-12) May be repeated for credit. Course Prerequisite: FINE ART 382; certified major in Fine Arts. Advanced black/white darkroom and studio; research of historic and contemporary trends; discussion of personal direction; portfolio. Typically offered Fall and Spring.	Advanced Photography V 3 (0-6) to 6 (0-12) May be repeated for credit; <u>cumulative maximum 6 hours.</u> Course Prerequisite: FINE ART 382; certified major in Fine Arts. <u>Advanced studio art techniques and development;</u> research of historic and contemporary <u>photographic</u> trends; discussion of personal direction. Typically offered Fall and Spring.	8-15
H D	201	Drop	Human Development - Prenatal Through Age 8 3 In-depth examination of growth and development from the prenatal period through age 8 in context of family, community and society. Typically offered Fall and Spring.	--N/A--	8-16
H D	204	Revise	[SSCI] [S] Family Systems: Understanding Family Interaction 3 Introduction to the study of family processes: family generational, emotional, boundary, rule, and ritualistic systems. (Crosslisted course offered as H D 204, WOMEN ST 204). Typically offered Fall and Spring.	[SSCI] [S] Family Interactions 3 Introduction to the study of family processes: family generational, emotional, boundary, rule, and ritualistic systems. Typically offered Fall and Spring.	8-16
H D	300	Revise	Child Abuse and Neglect 3 Course Prerequisite: Sophomore standing. Overview of causes, identification, reporting, and treatment of children who are abused and/or neglected. Typically offered Fall and Spring.	Child Maltreatment 3 Course Prerequisite: <u>H D 101; H D 204;</u> Sophomore standing. Overview of causes, identification, reporting, and treatment of children who are abused and/or neglected. Typically offered Fall and Spring.	8-16
H D	301	Revise	Family Stress and Coping 3 Course Prerequisite: Sophomore standing. Examination of the nature and course of family	Family Stress and Coping 3 Course Prerequisite: <u>H D 101; H D 204;</u> Sophomore standing. Examination of the nature and	8-16

			crisis, using a family systemic approach, including principles used in intervention strategies. Typically offered Fall and Spring.	course of family crisis, using a family systemic approach, including principles used in intervention strategies. Typically offered Fall and Spring.	
H D	302	Revise	Parent-Child Relationships 3 Course Prerequisite: Sophomore standing. Parenting in contemporary society with focus on reciprocity of parent-child relationships and diversity of families. Typically offered Fall and Spring.	Parent-Child Relationships 3 Course Prerequisite: <u>Junior</u> standing. Parenting in contemporary society with focus on reciprocity of parent-child relationships and diversity of families. Typically offered Fall and Spring.	8-16
H D	310	Revise	[M] Research Approaches to Human Development 3 Course Prerequisite: Junior standing; certified major in Human Development. Overview of research techniques in human development; methods of evaluating research products. Typically offered Fall and Spring.	[M] Research Methods 3 Course Prerequisite: <u>H D 200</u> ; <u>Sophomore</u> standing; certified major in Human Development. Overview of research techniques in human development; methods of evaluating research products. Typically offered Fall and Spring.	8-16
H D	320	Revise	[M] Resource Management, Consumerism, and Problem Solving 3 Course Prerequisite: Sophomore standing. Styles of managing material, human and environmental resources with families; analysis of consumer role; interaction of consumers, government, market: various approaches to problem solving with individuals and families; effects on communities, families, and individuals. (Crosslisted course offered as H D 320, WOMEN ST 320). Typically offered Fall and Spring.	[M] Resource Management 3 Course Prerequisite: Sophomore standing. Styles of managing material, human and environmental resources with families; analysis of consumer role; interaction of consumers, government, market: various approaches to problem solving with individuals and families; effects on communities, families, and individuals. Typically offered Fall and Spring.	8-16
H D	341	Revise	Learning and Guidance in Early Childhood 3 Course Prerequisite: H D 101 with a C or better, 201 with a C or better, or 340 with a C or better ; sophomore standing. Theories of child guidance; understanding of child behavior; strategies and techniques for effective group	Guidance in Early Childhood Programs 3 Course Prerequisite: <u>H D 306</u> ; sophomore standing. Theories of child guidance; understanding of child behavior; strategies and techniques for effective group and individual guidance of young children. Typically	8-16

			and individual guidance of young children. Typically offered Fall and Spring.	offered Fall and Spring.	
H D	342	Revise	Curriculum for Early Childhood Programs 4 (3-3) Course Prerequisite: H D 201 with a C or better, or 340 with a C or better ; H D 341 with a C or better; sophomore standing; by permission only. Planning and implementation of developmentally appropriate curriculum for use in programs serving young children. Typically offered Fall and Spring.	Curriculum for Early Childhood Programs 4 (3-3) Course Prerequisite: <u>H D 235</u> ; H D 341; sophomore standing; by permission only. Planning and implementation of developmentally appropriate curriculum for use in programs serving young children. Typically offered Fall and Spring.	8-16
H D	350	Revise	[DIVR] [S,D] Diversity in Contemporary Families 3 Course Prerequisite: Sophomore standing. Preparation for students in human service professions to work with ethnic, cultural, economic, language, gender, religious and other types of diversity. Typically offered Fall.	[DIVR] [S,D] Family Diversity 3 Course Prerequisite: Sophomore standing. Preparation for students in human service professions to work with ethnic, cultural, economic, language, gender, religious and other types of diversity. Typically offered Fall.	8-16
H D	360	Revise	Death and Dying 3 Course Prerequisite: Sophomore standing. Death and dying throughout life and in different contexts; manner of death, grief, and legal and ethical considerations.	Death and Dying 3 Course Prerequisite: <u>H D 101</u> ; Sophomore standing. Death and dying throughout life and in different contexts; manner of death, grief, and legal and ethical considerations.	8-16
H D	410	Revise	[M] Public Policy Issues Impacting Families and Individuals 3 Course Prerequisite: H D 310 with a C or better; junior standing; certified major in Human Development . Family policy issues in a changing society; ecological perspective; relationship of public policy to communities, organizations, families, and individuals. Recommended: H D 310. Typically offered Fall and Spring.	[M] Policy Issues in Human Development 3 Course Prerequisite: H D 310; junior standing. Family policy issues in a changing society; ecological perspective; relationship of public policy to communities, organizations, families, and individuals. Recommended: H D 310. Typically offered Fall and Spring.	8-16
H D	412	Drop	Adult Development and	--N/A--	8-16

			Learning 3 Course Prerequisite: Junior standing. Understanding growth and change in adulthood with application of effective learning and teaching practices with adult populations.		
H D	446	Revise	Practicum in Early Childhood Programs 6 May be repeated for credit; cumulative maximum 12 hours. Course Prerequisite: H D majors or H D certificate students; H D 201 or 340; H D 341; H D 342 ; junior standing; by permission only. Supervised teaching; emphasis on skill building in working with diverse groups of children and building partnerships with families.	Practicum in Early Childhood Programs 6 May be repeated for credit; cumulative maximum 12 hours. Course Prerequisite: <u>H D 342 with a C or better</u> ; junior standing; by permission only. Supervised teaching; emphasis on skill building in working with diverse groups of children and building partnerships with families.	8-16
H D	449	Revise	Seminar in Early Childhood Education 3 Course Prerequisite: <u>H D 201 or 340</u>; junior standing. Identification and examination of current issues and trends in early childhood education with emphasis on child, family, and community concerns. Typically offered Spring.	Early Childhood Seminar 3 Course Prerequisite: <u>H D 306</u> ; junior standing. Identification and examination of current issues and trends in early childhood education with emphasis on child, family, and community concerns. Typically offered Spring.	8-16
H D	464	Revise	Administration of Early Childhood Programs 3 Course Prerequisite: H D 201 or 340 ; junior standing. Organization, administration, and management of early childhood programs; finance, program development, service delivery, personnel concerns, resource development, and evaluation.	Administration of Early Childhood Programs 3 Course Prerequisite: <u>H D 306</u> ; junior standing. Organization, administration, and management of early childhood programs; finance, program development, service delivery, personnel concerns, resource development, and evaluation.	8-16
H D	482	Revise	Child Assessment and Evaluation 3 Course Prerequisite: H D 201 or 340 ; junior standing. Understanding aspects of assessment and evaluation of young children; selection, administration, summary development, ethics and professional responsibilities, evaluation and follow-up. Typically offered Fall.	Child Assessment and Evaluation 3 Course Prerequisite: <u>H D 306</u> ; junior standing. Understanding aspects of assessment and evaluation of young children; selection, administration, summary development, ethics and professional responsibilities, evaluation and follow-up. Typically offered Fall.	8-16

H D	487	Revise	Special Topics in Human Development V 1-3 May be repeated for credit; cumulative maximum 6 hours. Course Prerequisite: Sophomore Sophomore standing. Assessment and evaluation of families and children. Typically offered Fall, Spring, and Summer.	Special Topics in Human Development V 1-3 May be repeated for credit; cumulative maximum 6 hours. Course Prerequisite: Junior standing. Assessment and evaluation of families and children. Typically offered Fall, Spring, and Summer.	8-16
H D	498	Revise	Field Placement V 1 (0-3) to 8 (0-24) May be repeated for credit; cumulative maximum 8 hours. Course Prerequisite: H D majors or H D certificate students; H D 385 or H D 497; by permission only. Self-initiated, supervised work experience with appropriate private organizations, businesses, or government agencies; interaction with professionals in related fields. Typically offered Fall, Spring, and Summer.	Field Placement V 1 (0-3) to 8 (0-24) May be repeated for credit; cumulative maximum 8 hours. Course Prerequisite: H D 385 and 496, or H D 497; by permission only. Self-initiated, supervised work experience with appropriate private organizations, businesses, or government agencies; interaction with professionals in related fields. Typically offered Fall, Spring, and Summer.	8-16
HISTORY	417	Revise	Rise of Modern America 3 Response to industrialism in the Gilded Age and the reform movements of Populism and Progressivism. Credit not granted for both HISTORY 417 and HISTORY 517. Offered at 400 and 500 level.	Rise of Modern America 3 Response to industrialism in the Gilded Age and the reform movements of Populism and Progressivism.	8-15
HISTORY/ ASIA/ POL S	475	Revise	Mao to Deng: The People's Republic of China, 1949–1999 3 The major political, social, economic and cultural developments during the People's Republic of China. (Crosslisted course offered as HISTORY 475, ASIA 475, POL S 475).	The People's Republic of China, 1949 to Present 3 The major political, social, economic and cultural developments during the People's Republic of China. (Crosslisted course offered as HISTORY 475, ASIA 475, POL S 475).	1-16
HISTORY/ ASIA/ POL S	476	Revise	[M] Revolutionary China, 1800 to Present 3 Continuity and change in the political, social, cultural and economic experience of China since 1800. (Crosslisted course offered as HISTORY 476, ASIA 476, POL S 476). Offered at 400 and 500	[M] Revolutionary China, 1800 to Present 3 Continuity and change in the political, social, cultural and economic experience of China since 1800. (Crosslisted course offered as HISTORY 476, ASIA 476, POL S 476).	1-16

			level.		
HISTORY	517	Drop	Rise of Modern America 3 Response to industrialism in the Gilded Age and the reform movements of Populism and Progressivism. Credit not granted for both HISTORY 417 and HISTORY 517. Offered at 400 and 500 level.	--N/A--	8-15
HISTORY	576	Drop	[M] Revolutionary China, 1800 to Present 3 Continuity and change in the political, social, cultural and economic experience of China since 1800. (Crosslisted course offered as HISTORY 476, ASIA 476, POL S 476). Offered at 400 and 500 level.	--N/A--	1-16
MATH	206	Drop	[N] Calculus for Architects 3 Enrollment not allowed if credit already earned for MATH 140, 171, or 202. Calculus of elementary functions; trigonometry; applications to architecture. Credit not granted for more than one of MATH 140, 171, 202, 206. Typically offered Spring.	--N/A--	8-15
MBIOS	498	Revise	Directed Research V 1-4 May be repeated for credit. Introduction to laboratory research; requires written report and oral presentation. Typically offered Fall, Spring, and Summer.	Directed Research V 1-4 May be repeated for credit. <u>Course Prerequisite: Minimum 1 credit MBIOS 499. Continued laboratory research; requires oral or poster presentation at a WSU event or external meeting.</u> Typically offered Fall, Spring, and Summer.	1-16
ME	475	Revise	Manufacturing Enterprise Systems -- Automation and Product Realization 3 (2-3) Course Prerequisite: ME 313; ME 316 . Manufacturing automation and product realization; role of information technology and electronic data in manufacturing enterprise systems; product life-cycle management (PLM) and related tools and processes; sustainable	Manufacturing Enterprise Systems -- Automation and Product Realization 3 (2-3) Course Prerequisite: <u>ME 310; ME 311</u> . Manufacturing automation and product realization; role of information technology and electronic data in manufacturing enterprise systems; product life-cycle management (PLM) and related tools and processes; sustainable	8-15

			and green manufacturing. Typically offered Fall.	and green manufacturing. Typically offered Fall.	
MEDS		Drop	Drop the MEDS subject/prefix	--N/A--	8-15
MEDS	505	Drop	Medical Preceptorship 1 (0-4) May be repeated for credit; cumulative maximum 2 hours. Course Prerequisite: For WWAMI students only. Medical Students work in local clinics, physicians' offices, emergency rooms, hospitals; 4 hours minimum per week. S, F grading.	--N/A--	8-15
MEDS	506	Drop	Seminar in Rural Health 1 Course Prerequisite: For WWAMI students only. Introduction for first-year medical students to primary care in rural environments. S, F grading.	--N/A--	8-15
MEDS	510	Drop	Microscopic Anatomy 4 (3-3) Course Prerequisite: For WWAMI students only. Description and microscopic examination of cell types, tissues, and major organs of the human body. S, F grading.	--N/A--	8-15
MEDS	511	Drop	Anatomy and Embryology I 5 (4-3) Course Prerequisite: For WWAMI students only. Presents formation and 3- dimensional relationships of major structures in the human body; human phenotype examined in dissection laboratory and living anatomy; focus is on trunk anatomy. (Fall only) S, F grading.	--N/A--	8-15
MEDS	512	Drop	Mechanisms in Cellular Physiology 3 Course Prerequisite: For WWAMI students only. Fundamental cell physiology mechanisms: ionic, electrical gradients, sensory receptors, autonomic nervous system, energy metabolism, epithelial transport; gastrointestinal motility and secretions. (Fall only) S, F	--N/A--	8-15

			grading.		
MEDS	513	Drop	Introduction to Clinical Medicine I 1 Course Prerequisite: For WWAMI students only. Instruction in communications skills and interview techniques to form the basis for the eventual doctor-patient relationship. S, F grading.	--N/A--	8-15
MEDS	514	Drop	Biochemistry I 3 Course Prerequisite: For WWAMI students only. Focus on genome information, gene functions, genetic information stored, mobilized, and used, regulation, molecular medicine, genomic therapies. (Fall only) S, F grading.	--N/A--	8-15
MEDS	516	Drop	Systems of Human Behavior 3 Course Prerequisite: For WWAMI students only. Physical and psychological development of the individual; conceptual systems and models of behavior related to medicine. S, F grading.	--N/A--	8-15
MEDS	522	Drop	Introduction to Clinical Medicine II 2 Course Prerequisite: For WWAMI students only. Communication skills as related to patients and dealing with problem identification and patient history. S, F grading.	--N/A--	8-15
MEDS	523	Drop	Introduction to Immunology 2 Course Prerequisite: For WWAMI students only. Principles of immunology and their relationship to human medicine. S, F grading.	--N/A--	8-15
MEDS	524	Drop	Biochemistry II 2 Course Prerequisite: For WWAMI students only. Continuation of MEDS 514P. S, F grading.	--N/A--	8-15
MEDS	530	Drop	Epidemiology and Evidence-Based Medicine 2 Course Prerequisite: For WWAMI	--N/A--	8-15

			students only. Foundations of epidemiology and evidence based medicine. S, F grading.		
MEDS	531	Drop	Anatomy and Embryology II 5 (4-3) Course Prerequisite: For WWAMI students only. Gross anatomy; focus on head and neck anatomy, including skull, pharynx, and larynx; audition and balance. Continuation of MEDS 511P. S, F grading.	--N/A--	8-15
MEDS	532	Drop	Nervous System 5 (4-3) Course Prerequisite: For WWAMI students only. Normal structure and function of the nervous system, including the eye. S, F grading.	--N/A--	8-15
MEDS	534	Drop	Microbiology and Infectious Disease 6 (5-3) Biology of microbial pathogens and the mechanisms of pathogenesis; clinical manifestations, epidemiology and general principles of diagnosis, therapy and prevention of infectious disease. S, F grading.	--N/A--	8-15
MEDS	535	Drop	Introduction to Clinical Medicine III 2 (1-2) Course Prerequisite: For WWAMI students only. The screening physical examination. S, F grading.	--N/A--	8-15
MEDS	540	Drop	Introduction to Cardiovascular Medicine 4 Course Prerequisite: Successful completion of first-year core curriculum. Introduction to cardiovascular medicine in preparation for caring for patients in hospitals and clinics. S, F grading.	--N/A--	8-15
MEDS	541	Drop	Respiratory 3 Course Prerequisite: Successful completion of first-year core curriculum. Scientific foundations that underlie the function of the respiratory system. S, F grading.	--N/A--	8-15

MEDS	542	Drop	Introduction to Clinical Medicine IIA 3 Course Prerequisite: Successful completion of first-year core curriculum. Continued instruction in communications skills and interview techniques to form the basis for the eventual doctor-patient relationship. S, F grading.	--N/A--	8-15
MEDS	543	Drop	Principles of Pharmacology I 3 Course Prerequisite: Successful completion of first-year core curriculum. In-depth physiology and pathophysiology of systems and the relevant pharmacology as it applies to these systems. S, F grading.	--N/A--	8-15
MEDS	547	Drop	Pathology IIA 3 Course Prerequisite: Successful completion of first-year core curriculum. The pathogenesis of disease; cellular and molecular changes that lead to expression of a disease. S, F grading.	--N/A--	8-15
MEDS	548	Drop	Clinical Ethics 1 Course Prerequisite: Successful completion of first-year core curriculum. Clinical ethics and tools for ethical reasoning that support current and future work. S, F grading.	--N/A--	8-15
MEDS	550	Drop	Introduction to Clinical Medicine IIB 3 Course Prerequisite: MEDS 542. Continued instruction in communications skills and interview techniques to form the basis for the eventual doctor-patient relationship. S, F grading.	--N/A--	8-15
MEDS	551	Drop	Gastrointestinal 3 Course Prerequisite: Successful completion of first-year core curriculum. The gastrointestinal system and associated problems with this system. S, F grading.	--N/A--	8-15
MEDS	552	Drop	Hematology 2 Course Prerequisite: Successful	--N/A--	8-15

			completion of first-year core curriculum. Development and function of blood and the pathophysiology of the different types of disorders dealing with blood. S, F grading.		
MEDS	553	Drop	Anatomy and Embryology - Musculoskeletal 3 Course Prerequisite: For WWAMI students only. Anatomy and clinical lectures, gross anatomy labs, living anatomy/clinical correlation. S, F grading.	--N/A--	8-15
MEDS	554	Drop	Genetics 1 Course Prerequisite: Successful completion of first-year core curriculum. Principles of genetics and how they are utilized in current medical practice. S, F grading.	--N/A--	8-15
MEDS	555	Drop	Medicine, Health, and Society 2 Course Prerequisite: Successful completion of first-year core curriculum. Health policy and public health and the relation to practicing medicine. S, F grading.	--N/A--	8-15
MEDS	556	Drop	Hormones and Nutrients 3 Course Prerequisite: Successful completion of first-year core curriculum. Hormone production and function, nutrients, and the pathology and clinical manifestations of endocrine and metabolic diseases. S, F grading.	--N/A--	8-15
MEDS	557	Drop	Pathology IIB 1 Course Prerequisite: MEDS 547. Introduction of pathology in preparation for caring for patients in hospitals and clinics. S, F grading.	--N/A--	8-15
MEDS	558	Drop	Rheumatology 1 Course Prerequisite: Successful completion of first-year core curriculum. Immunology, anatomy, and introduction to clinical medicine to what will be seen in later medical education in clerkship rotations. S, F	--N/A--	8-15

			grading.		
MEDS	560	Drop	Introduction to Clinical Medicine IIC 3 Course Prerequisite: MEDS 550. Continued instruction in communications skills and interview techniques to form the basis for the eventual doctor-patient relationship. S, F grading. S, F grading.	--N/A--	8-15
MEDS	562	Drop	The Urinary System 3 Course Prerequisite: Successful completion of first-year core curriculum. Anatomy, physiology, and pathophysiology as it relates to the urinary tract. S, F grading.	--N/A--	8-15
MEDS	563	Drop	Brain and Behavior 2 Course Prerequisite: Successful completion of first-year core curriculum. Major psychiatric disorders defined; a systemic approach to differential diagnosis. S, F grading.	--N/A--	8-15
MEDS	564	Drop	Principles of Pharmacology II 2 Course Prerequisite: Successful completion of first-year core curriculum. Introduction to drugs used to treat behavioral disorders, neurological disorders, and pain. S, F grading.	--N/A--	8-15
MEDS	565	Drop	Reproduction 3 Foundations of common clinical problems in reproductive medicine. S, F grading.	--N/A--	8-15
MEDS	566	Drop	Pathology IIC 2 Course Prerequisite: MEDS 557. Perinatal pathology with focus on patients between conception and early infancy; encompasses the transition from a 'parasitic' existence in utero to independent viability outside the womb. S, F grading.	--N/A--	8-15
MEDS	567	Drop	Dermatology/Skin System 1 Course Prerequisite: Successful completion of first-year core	--N/A--	8-15

			curriculum. Anatomy, biochemistry, physiology, pathology, and immunology of the skin. S, F grading.		
MEDS	590	Drop	Medical Information for Decision Making 1 Course Prerequisite: For WWAMI students only. Medical literature for the purpose of primary research, diagnosis and therapeutic and preventative intervention. S, F grading.	--N/A--	8-15
MEDS	600	Drop	Special Projects or Independent Study V 1-6 May be repeated for credit; cumulative maximum 6 hours. Independent study, special projects, and/or internships. Students must have graduate degree-seeking status and should check with their major advisor before enrolling in 600 credit, which cannot be used toward the core graded credits required for a graduate degree. S, F grading.	--N/A--	8-15
MGMT	315	Revise	[S,D] Women in Management and Leadership 3 Analysis of women's historical and contemporary role in American management. (Crosslisted course offered as WOMEN ST 315, MGMT 315). Typically offered Fall and Spring.	[S,D] Women in Management and Leadership 3 Analysis of women's historical and contemporary role in American management. Typically offered Fall and Spring.	1-16
PHARMACY	545	Revise	Pharmacy Management 3 Course Prerequisite: Admission to Pharmacy program. Management principles essential for common practice settings in the profession of pharmacy. Typically offered Spring . H, S, F grading.	Pharmacy Management 3 Course Prerequisite: Admission to Pharmacy program. Management principles essential for common practice settings in the profession of pharmacy. Typically offered <u>Fall</u> . H, S, F grading.	8-15
PHARMACY	566	Revise	Therapeutics of Special Populations 3 Course Prerequisite: PHARMACY 554. Special therapeutic needs of unique populations including pediatrics, chronic neurologic disorders, hospice care and immuno-compromised patients.	Therapeutics of Special Populations 3 Course Prerequisite: PHARMACY 554. Special therapeutic needs of unique populations including pediatrics, chronic neurologic disorders, hospice care and immuno-compromised patients.	8-15

			Typically offered Spring . H, S, F grading.	Typically offered <u>Fall</u> . H, S, F grading.	
PSYCH	106	Drop	Psychology Applied to Daily Living: Dealing with Friends, Alcohol, and Sex 1 Application of psychological procedures to the problems of group living, alcohol use, sexual decision making and related social issues.	--N/A--	1-16
PSYCH	312	Revise	[M] Experimental Methods in Psychology 4 (3-3) Course Prerequisite: PSYCH 311 with a grade of C- or better. Designing, conducting, and reporting research in selected areas of experimental psychology. Recommended preparation: PSYCH 105. Typically offered Fall, Spring, and Summer.	[M] Experimental Methods in Psychology 4 (3-3) Course Prerequisite: <u>PSYCH 210</u> ; PSYCH 311 with a grade of C- or better. Designing, conducting, and reporting research in selected areas of experimental psychology. Recommended preparation: PSYCH 105. Typically offered Fall, Spring, and Summer.	8-16
PSYCH	333	Revise	Abnormal Psychology 3 Problems of abnormality from traditional and evolving points of view; types, therapies, outcomes, preventive techniques. Recommended preparation: PSYCH 105. Typically offered Fall, Spring, and Summer.	Abnormal Psychology 3 <u>Course Prerequisite: PSYCH 105.</u> Problems of abnormality from traditional and evolving points of view; types, therapies, outcomes, preventive techniques. Typically offered Fall, Spring, and Summer.	5-16
PSYCH	465	Drop	Neuropsychology of Learning Disorders 3 Biological and cognitive aspects of learning disorders including etiology, common cognitive deficits, and treatment of cognitive dysfunction.	--N/A--	1-16
PSYCH	480	Drop	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	--N/A--	1-16
TCH LRN	427	Revise	Proportional Reasoning 3 Course Prerequisite: TCH LRN 352. Examination of work samples; identifying student's incomplete understanding of fundamental concepts; design instruction to develop a deeper understanding of rational numbers. Typically offered Fall and Spring.	Proportional Reasoning 3 Examination of work samples; identifying student's incomplete understanding of fundamental concepts; design instruction to develop a deeper understanding of rational numbers. Typically offered Fall and Spring.	8-15

UNIV	395	Revise	Advanced Leadership 2 Course Prerequisite: UNIV 295. Advanced study of theoretical and applied concepts of leadership through experiential learning, in-depth case analysis, and values exploration. Typically offered Fall and Spring.	Advanced Leadership 2 Course Prerequisite: UNIV 295 <u>or</u> <u>UNIV 497</u> . Advanced study of theoretical and applied concepts of leadership through experiential learning, in-depth case analysis, and values exploration. Typically offered Fall and Spring.	1-16
WOMEN ST	315	Drop	[S,D] Women in Management and Leadership 3 Analysis of women's historical and contemporary role in American management. (Crosslisted course offered as WOMEN ST 315, MGMT 315). Typically offered Fall and Spring.	--N/A--	1-16