## Approved by Faculty Senate 2/5/09

## MEMORANDUM

TO: Deans and Chairs

From: Becky Bitter, Senior Assistant Registrar

DATE: 30 January 2009

SUBJECT: Dropped Courses List from the Academic Affairs Program Prioritization Review Minor Change Bulletin No. 1

The courses below reflect the listing of dropped courses that have been reviewed and approved by Deans, Chairs, and the Provost's Office as a result of the Academic Affairs Program Prioritization review.

Prefix	Course Number	Current	Effective Date
A S	198	Honors, Introductory Animal Science 3 An introductory course for animal science, agriculture and home economics, and science honors students. Open only to students in the Honors College.	8-09
A S	243	Companion Animal Diseases 3 A survey of common diseases that affect dogs, cats, pocket pets and horses including terminology, signs, processes and prevention.	8-09
A S	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
A S	367	Medical and Surgical Problems in the Horse 3 Same as V MS 367.	8-09
A S	410	Canine and Feline Nutritional Biology 3 Prereq A S 313; A S 314. Nutritional biology of the domestic canine and feline; topics include nutrition, reproduction, health and behavior.	8-09
A S	428	Topics in Animal Breeding 2 May be repeated for credit; cumulative maximum 4 hours. Prereq A S 330. Systems of selection and mating for genetic improvement in farm animals. Credit not granted for both A S 428 and 528.	8-09
A S	506	Non-Ruminant Nutrition 3 (2-3) Care and management of companion animal species throughout the life cycle, including nutrition, reproduction, exercise and behavior.	8-09
A S	508	Ruminant Nutrition 3 Prereq A S 313. Graduate-level counterpart of A S 408; additional requirements. Credit not granted for both A S 408 and 508.	8-09
A S	540	Seminar in Animal Physiology 1 May be repeated for credit. Current developments in animal physiology. Cooperative course taught jointly by WSU and UI (AVS 520).	8-09
A S	550	Advanced Reproduction 4 (3-3) Prereq A S 350. Physiology of sexual maturation; gametogenesis; sexual cycle; fertilization; embryonic development; physiological, chemical and immunological characterization of hormones of reproduction. Cooperative course taught by WSU, open to UI students (ANSC 526)	8-09
A S	573	Advanced Dairy Management 3 (1-6) Prereq A S 472. Graduate-level counterpart of A S 473; additional requirements.	8-09
A S	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09

Acctg	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Acctg	434	Accounting for Public Organizations 3 Prereq Acctg 331. Conceptual and procedural accounting issues involving public sector organizations.	8-09
Adver	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Adver	483	Advertising Research 3 Prereq Adver 380; Adver 381; Adver 382; Mktg 360; certified major in communications. Professional research practices in advertising.	8-09
Adver	484	Special Topics: Study Abroad V 1-15 May be repeated for credit. Prereq certified major in communications. S, F grading.	8-09
Adver	581	Advertising Psychology 3 Prereq graduate standing. Examination of social and cognitive psychological theories which have contributed to the practice of advertising.	8-09
Adver	582	Advertising Management 3 Prereq graduate standing. Case method approach to appraising market opportunities for the planning, development, implementation, and administration of advertising programs.	8-09
AFS	105	Organic Gardening and Farming 3 Same as SoilS 101. S, F grading.	8-09
AFS	301	Systems Development and Analysis in Agricultural & Food Systems 3 (2-2) Prereq AFS 201; Stat 212 or 412; junior standing. Analysis, design and construction of integrated agricultural systems.	8-09
AFS	416	(SoilS 404) Sustainable Small Farming and Ranching Overview 3 Introduction to small acreage production systems, evaluation of personal and family goals, land evaluation, business planning, marketing options, regulations, and community resources. Cooperative course taught by UI (Ag 404), open to WSU students. Cooperative course taught by UI, open to WSU students (AG 416).	8-09
AFS	417	(SoilS 403) Agricultural Entrepreneurship 3 Designed for students who are interested in starting an agricultural enterprise or gaining knowledge of the process. Cooperative course taught by UI, open to WSU students (AS 404).	8-09
Ag Ed	401	Adult Programs and Development 3 Organizing and conducting adult programs in agriculture, management, program planning, learning styles, resources; strategies for formal and non-formal adult programs.	8-09
Ag Ed	597	Cooperative Education Programs 3 Program principles and design; teacher coordination procedures and responsibilities; classroom and on-the-job instruction; public relations; teacher administrative responsibilities.	8-09
Ag Ed	600	Special Projects or Independent Study V 1-3 May be repeated for credit. S, F grading.	8-09
Aging	396	Social Work with the Aging 3 Same as S W 396.	8-09
Agri	600	Special Projects or Independent Study V 1-3 May be repeated for credit. S, F grading.	8-09
AgTM	306	Agricultural Structures and Environmental Systems 3 (2-3) Planning farm buildings, construction materials, beam and column design, insulation and ventilation for environmental control. Cooperative course taught by UI, open to WSU students (AGMEC306)	8-09
AgTM	443	Special Topics 1 May be repeated for credit; cumulative maximum 3 hours. Prereq permission of instructor. Laboratory and research techniques for AgTM.	8-09
AgTM	446	Special Topics 1 May be repeated for credit; cumulative maximum 3 hours. Prereq	8-09

		permission of instructor. Laboratory and research techniques for AgTM.	
AgTM	447	Special Topics 1 May be repeated for credit; cumulative maximum 3 hours. Prereq permission of instructor. Laboratory and research techniques for AgTM.	8-09
AgTM	469	Aquacultural System Design 2 (1-3) Prereq Biol 107; Rec A S 468. Aquaculture production system design, species adaptation to aquaculture, management of water flows, oxygen and nutrient consumption, system impacts and economics.	8-09
Am St	275	Special Topics: Study Abroad V 1-15 May be repeated for credit; S, F grading.	8-09
Am St	410	[T] Cities in Fiction 3 Prereq completion of one Tier I and three Tier II courses. Exploration of the city as an active agent in the fictional works of North American authors.	8-09
Am St	424	US Popular Culture 3 Critical approaches and issues in US popular culture.	8-09
Am St	480	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Am St	496	Topics in American Studies 3 May be repeated for credit; cumulative maximum 9hours. Same as Engl 496. Credit not granted for both Am St 496 and 596.	8-09
AMT	320	Textiles Design I 3 Prereq AMT 108, 215. Textile design with emphasis upon weaving, dyeing, surface design, or graphics.	8-09
AMT	321	Textile Design II 3 (0-6) May be repeated for credit; cumulative maximum 6 hours. Prereq AMT 320 or by permission. Development of conceptual and technical abilities in the textile arts with an emphasis on individual expression and designing for industry.	8-09
AMT	322	Textile Design III 3 (0-6) May be repeated for credit; cumulative maximum 6 hours. Prereq AMT 320 or permission. Computer-aided design techniques for professional textile design portfolio development.	8-09
AMT	370	Theatrical Costuming 3 (0-6) Prereq AMT 211 or permission. Creation of costumes for theatre following design throughout production process; parallels between costume shop and apparel industry couture shop.	8-09
Anth	256	Introduction to Syntax and Semantics 3 Same as Engl 256.	8-09
Anth	325	[I] Traveling Cultures: Tourism in Global Perspective 3 Same as CES 325.	8-09
Anth	355	[H] Language in History 3 Writing systems, language in reconstruction of culture history, language families, evolution, and parallels.	8-09
Anth	419	Cultural Components of International Business 3 Introduction to the cultural aspects of business.	8-09
Anth	428	Historical Ethnography 3 May be repeated for credit; cumulative maximum 9 hours. Prereq 3 hours Anth. Culture history, ethnography, theoretical, and contemporary problems of selected culture areas. Credit not granted for both Anth 428 and 528.	8-09
Anth	466	Human Osteology 3 (2-3) Prereq Anth 260. Observations and measurements of human skeletons; variations based on age, sex, and race; comparisons with fossil human and higher primates. Credit not granted for both Anth 466 and 566. Cooperative course taught jointly by WSU and UI (ANTH 451).	8-09
Anth	536	Ethnoarchaeology 3 Graduate-level counterpart of Anth 436; additional requirements. Credit not granted for both Anth 436 and 536.	8-09
Anth	542	Prehistory of Alaska and Eastern Siberia 3 Prehistoric cultural developments in the Arctic and sub-Arctic zones of Asia and North America.	8-09

Arch	332	Materials and Construction II 3 (2-2) Prereq certified major in Arch or Cst M. Theory and application of various construction systems and material applications explored through drawing.	8-09
Arch	341	Computers in Architecture 2 (1-3) Prereq certified major in Arch or Cst M. Introduction to computers, terminology, and software applications, applicable to the field of architecture.	8-09
Arch	411	Architectural Design VII 6 (0-12) Prereq Arch 403. Comprehensive building design incorporating programming, space planning, interiors, site planning and landscaping.	8-09
Arch	413	Architectural Design Thesis 6 (0-12) Prereq Arch 411. In-depth study of architectural design problems; thesis relating to architectural project selected by student and approved by faculty.	8-09
Arch	426	Architectural Theory II 2 Prereq certified Arch major. Continuation and expansion of Arch 425 including applications to design concepts and methodologies.	8-09
Arch	438	Energy, Design and Computers 2(1-2) or 3(1-4) Prereq certified Arch or Cst M major. Design theory and methods of energy and resource conservation in architecture through the use of daylight modeling and computers.	8-09
Arch	442	[M] Theory of Urban Design and Development 3 Prereq certified major in Arch, Cst M, business, or public administration. History, principles and theories of the physical design and development of cities.	8-09
Arch	497	Seminar in Professional Practice V 1-4 May be repeated for credit; cumulative maximum 4 hours. Prereq certified Arch major; senior standing. Advanced study in architectural practice management.	8-09
Arch	498	Seminar in Architectural Structures V 1-4 May be repeated for credit; cumulative maximum 4 hours. Prereq certified Arch major; Arch 301; Arch 351 or c//. Advanced study in architectural structures systems.	8-09
Arch	534	Theory Case Studies 3 Prereq Arch/ID/LA 530 and/or graduate standing. In-depth exposure to the literature of selected theory typologies covered in Arch 530; necessity empirical observation, history, comparison, etc.	8-09
Arch	535	Design/Theory Case Studies 3 Prereq graduate standing, Arch/ID/LA 530. In depth analysis of social-cultural-technological factors affecting designs of the built environment.	8-09
Arch	546	Computer Animation II 3 May be repeated for credit; cumulative maximum 9 hours. Prereq Arch 446. Advanced computer animation techniques; advanced specialization in building/design simulation, art animation, science/engineering animation.	8-09
Arch	550	Design Applications 2 Prereq Arch/I D/L A 530. Emphasizes the cognitive and behavioral practices of design; exploration in terms of content and value.	8-09
Arch	551	Design/Build Firm Management 3 Prereq graduate standing. Introduction to design/build firm management procedures.	8-09
Arch	552	Design/Build Project Management 3 Prereq graduate standing, Arch 551. Introduction to policies, contracts and joint venture organizational structures related to management of design build projects.	8-09
Arch	553	Design and Construction Law 3 Prereq graduate standing. Introduction to contract law affecting the design and construction industry.	8-09

Arch	554	Design/Build Case Studies 3 Prereq graduate standing. Case studies of specific design/build projects from legal, economics, technology, or firm management perspectives.	8-09
Arch	561	Interdisciplinary Seminar II 3 Prereq Arch/I D/L A 560. Builds upon knowledge gained from Arch/I D/L A 560; expected to conduct an in-depth investigation of a specific aspect of dwelling.	8-09
Asia	311	[M] Great Asian Directors 3 (2-3) Prereq China 111, 121 or 131. Same as Chin 311.	8-09
Asia	401	Special Topics - Study Abroad V 1-12 May be repeated for credit. S, F grading.	8-09
Astr	188	Freshman Seminar I 1 Same as Phys 188. S, F grading.	8-09
Astr	490	[M] Undergraduate Thesis 1 Same as Phys 490.	8-09
Astr	499	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
Astr	501	Graduate Seminar 1 Same as Phys 501. S, F grading.	8-09
Astr	538	Topics in Modern Astrophysics 3 May be repeated for credit; cumulative maximum 9 hours.	8-09
Astr	595	Seminar in Astronomy/Astrophysics 1 May be repeated for credit; cumulative maximum 4 hours. Prereq graduate standing. Same as Phys 595. S, F grading.	8-09
Astr	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
Ath T	390	Athletic Training High School Practicum V 1-4 May be repeated for credit; cumulative maximum 8 hours. By interview only. Supervised practicum. S, F grading.	8-09
Ath T	391	Athletic Training Sport Medicine Practicum V 1-4 May be repeated for credit; cumulative maximum 8 hours. By interview only. Supervised practicum. S, F grading.	8-09
Ath T	411	Advanced Strength Training 3 Prereq Ath T 311. Advanced methods as they apply to the enhancement of athletic performance, injury prevention, rehabilitation and general fitness. Cooperative course taught by WSU, open to UI students (PEP 411)	8-09
Ath T	412	Strength Training Practicum, Level I 3 (1-6) Prereq admission to strength training program. Entry-level practical experience in the varsity weight room. S, F grading.	8-09
Ath T	413	Strength Training Practicum, Level II 3 (1-6) Prereq Ath T 412. Intermediate-level practical experience in the varsity weight room. S, F grading.	8-09
Ath T	414	Strength Training Practicum, Level III 3 (1-6) Prereq Ath T 413. Advanced-level practical experience in the varsity weight room. S, F grading.	8-09
Ath T	466	Athletic Training Evaluation 3 Prereq Ath T 266. Advanced injury evaluation theory and techniques in athletic training. Cooperative course taught by WSU, open to UI students (H&S 466).	8-09
ΒA	594	Seminar in Research Techniques 3 Advanced doctoral-level topics in research techniques.	8-09
ΒE	420	Multidisciplinary Design Project 3 (2-2) Prereq junior status; nonengineer; permission of instructor; completion of one Tier I and three Tier II courses. Team development of technical design product with business and social considerations; coupled with B E 410/411; written and oral reporting.	8-09
ВE	445	Cardiovascular Systems Engineering 3 Prereq B E 340. Mathematical modeling	8-09

Biol	461	Environmental Physiology 3 Prereq Biol 350 or 353. Individual and evolutionary	8-09
Biol	460	Plant Ecophysiology 3 Prereq Biol 320, 372. Relationships of biotic and abiotic environment to plant distribution and evolution through study of physiological processes. Credit not granted for both Biol 460 and 560.	8-09
Biol	451	Comparative Vertebrate Reproduction 3 Prereq Biol 106. Physiology of major events in reproductive cycles of vertebrates, emphasizing mammals. Cooperative course taught by UI, open to WSU students (BIOL 450).	8-09
Biol	436	Wildlife Nutrition 3 (2-3) Same as NATRS 431. Credit not granted for both Biol 436 and 536.	8-09
Biol	429	General Plant Pathology 3 (2-3) Rec Biol 107 or 120. Same as Pl P 429.	8-09
Biol	421	Vertebrate Histology and Organology 4 (2-6) Prereq Biol 106 or 251. Microscopic anatomy of tissues and major mammalian organs. Cooperative course taught by UI, open to WSU students (ZOOL 427).	8-09
Biol	417	Stress Physiology of Plants 3 Prereq Biol 320 or c//. Temperature, light, salinity, water effects on physiological processes; mechanistic understanding of stress. Credit not granted for both Biol 417 and 517.	8-09
Biol	411	[M] Limnology and Aquatic Ecosystem Management 3 (2-3) Prereq Biol 102 or 120; Chem 101. Same as NATRS 411.	8-09
Biol	325	Plant Biotechnology 3 Prereq Biol 120, 301. Introduction to the genetic engineering of plants.	8-09
Biol	305	Animal Diversity 4 (3-3) Prereq Biol 106, 107. Introduction to the diversity of animal form and function from phylogenetic and functional perspectives.	8-09
Bdcst	581	Broadcast Management 3 Prereq senior standing. Graduate-level counterpart of Bdcst 481; additional requirements.Credit not granted for both Bdcst 481 and 581.	8-09
Bdcst	566	Advanced Reporting and Documentary 3 (2-3) Prereq Bdcst 465. Graduate-level counterpart of Bdcst 466; additional requirements. Credit not granted for both Bdcst 466 and 566.	8-09
Bdcst	565	Broadcast News Writing, Reporting, and Editing 3 (2-3) May be repeated for credit; cumulative maximum 6 hours. Prereq Bdcst 365. Graduate-level counterpart of Bdcst 465; additional requirements. Credit not granted for both Bdcst 465 and 565.	8-09
Bdcst	483	Special Topics: Study Abroad V 1-15 May be repeated for credit. Prereq certified major in communications. S, F grading.	8-09
Bdcst	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
B Law	417	Law of Cyberspace 3 Prereq B Law 210. Laws regulating intellectual property rights, contracts, communications, torts, and crimes in cyberspace.	8-09
B Law	414	[M] Law of Real Estate 3 Prereq B Law 210. Legal principles and precedents as they apply to the real estate environment.	8-09
B Law	410	Commercial Law 3 Prereq B Law 210. Contracts, sales, leasing, and licensing; commercial paper; and debtor/creditor relations.	8-09
B Law	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
		used to integrate components of the cardiovascular system into a functioning simulation that allows critical systems-level study; individual and group projects are required.	

		adaptations to changing environments with emphasis on recent literature. Credit not granted for both Biol 461 and 561.	
Biol	463	Field Ecology 2 (0-6) Prereq Biol 462. Field implementation of descriptive and experimental techniques to quantify the structure, composition, and interactions within natural communities. Field trips required. Credit not granted for both Biol 463 and 563. Cooperative course taught by WSU, open to UI students (BIOL 537).	8-09
Biol	466	Population Biology and Genetics 3 (2-3) Prereq Biol 301. Population and gene frequency dynamics as fundamental units in ecological interaction and evolutionary change.	8-09
Biol	469	Ecosystem Ecology and Global Change 3 Prereq Biol 372; Chem 106. Same as ES/RP 469. Credit not granted for both Biol 469 and 569.	8-09
Biol	470	Diversity of Plants 3 Morphological, life history, and ecological diversity of major plant clades; emphasis on principles of homology, character transformation, and macroevolution.	8-09
Biol	498	Senior Thesis 3 Prereq senior standing, 4 research hours. Experimental/literature research leading to written thesis and oral examination.	8-09
Biol	505	Principles of Organic Evolution 3 (2-3) Prereq Biol 301. Graduate-level counterpart of Biol 405; additional requirements. Credit not granted for both Biol 405 and 505.	8-09
Biol	506	Microtechnique 4 (2-6) Prereq graduate standing; by interview only. Same as E Mic 506.	8-09
Biol	510	Fish Population Ecology 2 Review of abiotic and biotic factors controlling or regulating fish population densities and critical review of relevant literature. Cooperative course taught by UI, open to WSU students (FISH 514)	8-09
Biol	516	Nutrient Transport and Partitioning in Plants 3 Prereq Biol 320. Structure, physiology, biochemistry and molecular biology of transport and partitioning of water, mineral nutrients and assimilated organic compounds within plants.	8-09
Biol	518	Photosynthesis, Photorespiration, and Plant Productivity 3 Prereq Biol 320 or MBioS 303 or c//. Photosynthesis, photorespiration and the interrelationship of those biochemical, physiological, and environmental factors which determine plant productivity.	8-09
Biol	525	Experimental Plant Ecology 1 (0-3) Same as NATRS 525.	8-09
Biol	526	Population Analysis 1 Prereq NATRS/Entom/Biol 529, biometry. Same as NATRS 526.	8-09
Biol	529	Principles of Population Dynamics 1 Prereq general ecology. Same as NATRS 529.	8-09
Biol	535	Angiosperm Families of the World 3 (2-3) Prereq Biol 332 or 431. Description, classification, and geographic distribution of families of flowering plants of the world.	8-09
Biol	553	Development and Plasticity of the Nervous System 3 Comparative approach to neural development and repair in the invertebrates and vertebrates. Cooperative course taught jointly by WSU and UI (BIOL 509).	8-09
Biol	555	General and Cellular Physiology 4 (3-3) Prereq cell physiology or genetics course. Same as V Ph 555.	8-09
Biol	557	Advanced Mammalian Physiology 4 Prereq V Ph 555. Same as V Ph 557.	8-09
Biol	558	Molecular and Cellular Reproduction 3 (2-2) Same as MBioS 528.	8-09

Biol	562	Community Ecology 3 Prereq Biol 106. Graduate-level counterpart of Biol 462; additional requirements. Credit not granted for both Biol 462 and 562.	8-09
Biol	565	Topics in Ecology and Evolution V 1-3 May be repeated for credit; cumulative maximum 6 hours. Current topics in ecology, population, biology, evolution, behavior, systematics, and biogeography.	8-09
Biol	590	Advanced Topics in Botany V 1-4 May be repeated for credit. Recent research in plant science.	8-09
Biol	591	Seminar in Molecular Plant Sciences 1 May be repeated for credit. Same as MPS 515.	8-09
Biol	592	Advanced Topics in Cell Biology V 1-3 May be repeated for credit; cumulative maximum 10 hours. Same as MBioS 526.	8-09
Biol	594	Advanced Topics on Vertebrate Form and Function V 1-3 May be repeated for credit. Analysis of animal structure and function emphasizing the evolution of complex systems; constructional morphology; ecomorphology; phylogenetics; heterochrony; size and shape.	8-09
Biol	595	Seminar II 1 May be repeated for credit; cumulative maximum 8 hours. Literature and problems.	8-09
Biol	596	Advanced Topics in Development V 1-3 Prereq Biol 321; MBioS 303 or 401. Current biochemical and ultra-structural research in developmental biology.	8-09
BSysE	210	Biological Systems Analysis and Design 3 (2-3) Prereq Biol 107, Chem 105; Cpt S 153 or 203. Application of computer-assisted tools for the engineering analysis and design of biological systems.	8-09
BSysE	215	Professional Preparation for Biological Systems Engineering 1 May be repeated for credit; cumulative maximum 3 hours. Preparation for professional, ethical, and social issues and for career development in biological engineering profession. S, F grading.	8-09
BSysE	320	Mechanics of Biomaterials 4 (3-3) Prereq BSysE 210, C E 211. Composition of biological materials, mechanical and thermal properties, chemical and biological changes. Cooperative course taught by WSU, open to UI students (BSYE 386)	8-09
BSysE	351	Environmental Hydrology 3 Prereq Math 140, 171, 202, or 206. Hydrologic cycle; commonly used methods for analysis of components of the cycle; importance of hydrology to the environment. Credit not granted for both BSysE 351 and 353. Cooperative course taught by WSU, open to UI students (AGE 353)	8-09
BSysE	410	[M] Project Design I 3 (2-2) Prereq BSysE 310, 320. Part I of capstone engineering design project; customer needs, design requirements, conceptual design, business plan, project proposal, and presentation.	8-09
BSysE	411	Project Design II 3 (2-2) Prereq BSysE 311 or c//. Detailed design of a biological engineering-related process, machine, structure, or system.	8-09
BSysE	440	Biological Dynamics and Control Systems 3 (2-3) Prereq BSysE 210, Biol 107, Math 315, E E 304 or c//. Descriptions of biological systems interactions primarily in food processing and eco-environmental systems and strategies to control these systems.	8-09
BSysE	441	Process Control 3 Prereq BSysE 310, Ch E 211 or Ch E 310. Same as Ch E 441.	8-09
BSysE	452	Eco-environmental Engineering Design 3 (2-3) Prereq junior standing. Engineering design to monitor, evaluate, and minimize non-point pollution from agriculture,	8-09

		environmentally acceptable disposal of wastes; bioremediation. Cooperative course taught jointly by WSU and UI (BSYE 452).	
BSysE	455	Natural Systems for Wastewater Treatment 3 Prereq senior standing. Principles and design procedures of natural systems for wastewater treatment for agricultural and non-agricultural applications.	8-09
BSysE	456	Surface Hydrologic Processes and Modeling 3 (2-3) Prereq Math 315; BSysE 351, C E 351, or Geol 475. Fundamental hydrologic processes, governing equations and solution methods, GIS techniques commonly used in hydrology, class project on modeling surface hydrology. Credit not granted for both BSysE 456 and 556.	8-09
BSysE	457	Design for Watershed Management 3 (2-3) Prereq junior standing. Modeling water movement and mass transport; design for balance between animal, plant, soil, water, and air resources in watershed. Credit not granted for both BSysE 457 and 557. Cooperative course taught by WSU, open to UI students (BSYSE457)	8-09
BSysE	482	Food Process Engineering Design 3 Prereq BSysE 481 or Ch E 330. Design of food processing systems; design and simulation of sterilization and pasteurization processes in foods. Credit not granted for both BSysE 482 and 582. Cooperative course taught by WSU, open to UI students (AGE 487)	8-09
BSysE	483	Food Separation Processes Design 3 Prereq BSysE 482. Design of food separation unit operations including concentration, dehydration, and membrane processes. Credit not granted for both BSysE 483 and 583. Cooperative course taught by WSU, open to UI students (AGE 483)	8-09
BSysE	484	Thermal Processing of Foods 3 (2-3) Prereq Ch E 332 or M E 404. Principles and practices of food preservation methods based on application of heat. Credit not granted for both BSysE 484 and 584.	8-09
BSysE	486	Food Rheology 3 (2-3) Prereq BSysE 481. Principles and applications on the rheology of foods, including fundamental and empirical equations; viscelasticity; normal forces, time dependency and instrumentation. Credit not granted for both BSysE 486 and 586. Cooperative course taught by WSU, open to UI students (AGE 486)	8-09
BSysE	491	Advanced Topics V 1-3 May be repeated for credit; cumulative maximum 8 hours. Prereq junior standing.	8-09
BSysE	495	Internship in Biological Systems Engineering V 1-3 May be repeated for credit; cumulative maximum 6 hours. Prereq sophomore standing. Prior approval of supervisor and advisor required. Work experience related to academic learning. S, F grading.	8-09
BSysE	499	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
BSysE	510	Fundamentals of Research 3 Prereq graduate standing. The research process and the graduate research project; objectives, techniques, and challenges; scientific method and the design process; use of literature; creativity; writing and speaking about research; preparation of a research proposal. Cooperative course taught by UI, open to WSU students (FOR 510)	8-09
BSysE	557	Design for Watershed Management 3 (2-3) Prereq junior or graduate standing. Graduate-level counterpart of BSysE 457; additional requirements. Credit not granted for both BSysE 457 and 557. Cooperative course taught by WSU, open to UI students (BSYE 457)	8-09
BSysE	558	Fluid Mechanics of Porous Materials 3 Statics and dynamics of multi-flow systems	8-09

		in porous materials, properties of porous materials; steady and unsteady flow. Cooperative course taught by UI, open to WSU students (AGE 558)	
BSysE	562	Systems in Integrated Crop Management 3 (2-3) Prereq one semester calculus. Same as Entom 562.	8-09
BSysE	586	Food Rheology 3 (2-3) Prereq BSysE 481. Graduate-level counterpart of BSysE 486; additional requirements. Credit not granted for both BSysE 486 and 586. Cooperative course taught by WSU, open to UI students (BSYE 586)	8-09
BSysE	587	Food Plant Design 3 Prereq BSysE 482. Graduate-level counterpart of BSysE 487; additional requirements. Credit not granted for both BSysE 487 and 587. Cooperative course taught by WSU, open to UI students (AGE 587)	8-09
BSysE	588	Food Powders 3 Graduate-level counterpart of BSysE 488; additional requirements. Credit not granted for both BSysE 488 and 588. Cooperative course taught by WSU, open to UI students (BSYE 588)	8-09
BSysE	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
СЕ	462	Engineering Law and Contracts 2 Development of law, courts, and ethics; law on contracts, agency, sales, property, and patterns; specifications; preparation of contract documents. Cooperative course taught by UI, open to WSU students (CE 484)	8-09
CE	544	Wastewater Treatment System Design 3 (2-3) Prereq C E 542 or c//. Application of unit operations and processes to design of integrated treatment systems; critical review of designs. Cooperative course taught jointly by WSU and UI (CE 532).	8-09
CE	547	Principles of Environmental Engineering 3 Prereq C E 315, 341; Math 315. Principles of chemistry, microbiology, thermodynamics, material and energy balances, and transport phenomena, for environmental engineers.	8-09
CE	556	Numerical Modeling in Fluid Mechanics 3 Prereq C E 315. Fundamental concepts in development of numerical models for fluid flow with applications to steady and unsteady flows.	8-09
CE	569	Field Methods in Hydrogeology 2 (1-3) Prereq Geol 475; Geol 577 or 579. Same as Geol 569.	8-09
CE	576	Dynamics of Groundwater Contamination 3 Prereq C E 475. Fundamentals of groundwater flow, pollutant transport, modeling data analysis, well sifting/sampling and interaction of pollutants with sediments/soils.	8-09
CE	577	Advanced Groundwater Hydraulics 3 Prereq Geol 475, Math 315. Modeling of subsurface flow in saturated, unsaturated, and multifluid systems; analytic and numerical solutions techniques; review of statistical geohydrologic methods.	8-09
CE	579	Groundwater Geochemistry V 2-4 May be repeated for credit; cumulative maximum 4 hours. Prereq Chem 331, Geol 475. Same as Geol 579. Cooperative course taught by WSU, open to UI students (HYDRO566)	8-09
CE	581	Environmental Engineering Analysis 2 (1-3) Prereq C E 541. Theoretical and laboratory methods for development of design criteria for environmental systems.	8-09
CES	203	[S] Introduction to Critical Psychology 3 Prereq Psych 105 or 198. Methods and traditions of critical psychology with origins in liberation and community psychology; emphasis on critical analysis of racism and oppression.	8-09
CES	303	[M] Research Methods in Ethnic Studies 3 Quantitative, qualitative, and/or literary	8-09

		research methods and strategies particular to the study of race, ethnicity, and culture.	
CES	316	[G] South Asian Film 3 (2-3) Same as Engl 316.	8-09
CES	333	African American Women Writers 3 Prereq CES 101 or 131. African American female authors and the creation of Black Feminist literary theory.	8-09
CES	334	Harlem Renaissance 3 Prereq CES 101 or 131. Black creative explosion between World War I and the Great Depression including politics, literature and music.	8-09
CES	339	[I] Black Politics 3 Same as Pol S 324.	8-09
CES	354	Topics in Latina/o Literature 3 Prereq CES 101. Trends, themes and major writers in Latina/o literature.	8-09
CES	355	[S] Chicanas/os and the Educational System 3 Investigation of the educational experiences, both current and historical, of Chicanas/os in the United States.	8-09
CES	356	Bilingual/Bicultural Education 3 Philosophical, legal, cultural, linguistic, and curricular aspects of bilingual education.	8-09
CES	453	Health Issues for Chicanos/as 3 Prereq completion of one Tier I and three Tier II courses. Examination of the mental and physical health of Chicanas/os from an interdisciplinary perspective.	8-09
CES	457	[T,D] Chicana/o and Latina/o Psychology 3 Prereq Psych 105, EdPsy 401, H D 101, Soc 101, or permission of instructor; completion of one Tier I and three Tier II courses. Examination of the current psychological research and literature relevant to the psychological well being of Chicano/Latino populations.	8-09
CES	474	[T] African Politics 3 Prereq completion of one Tier I and three Tier II courses. Historical, economic, and social factors that shape contemporary African political systems and problems of nation-building.	8-09
CES	486	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
CES	487	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
CES	488	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
CES	492	Advanced Topics in Ethnic Studies 3 May be repeated for credit; cumulative maximum 9 hours. Prereq course in CES. A reading and discussion course that explores special topics in ethnic studies.	8-09
CES	493	Advanced Topics in Ethnic Studies 3 May be repeated for credit; cumulative maximum 9 hours. Prereq course in CES. A reading and discussion course that explores special topics in ethnic studies.	8-09
Ch E	277	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Ch E	298	Technical Seminar 1 May be repeated for credit; cumulative maximum 2 hours. May be repeated for credit; cumulative maximum 2 hours. S, F grading.	8-09
Ch E	418	Materials Processing 3 Prereq Ch E 334; Chem 105, 106; Ch E major. Processing of semiconductor materials.	8-09
Ch E	477	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Ch E	485	Interfacial Phenomena 3 Prereq Ch E 301, 310. Chemical and physical nature of the interface including the molecular basis for interfacial forces and resulting macroscopic phenomena. Credit not granted for both Ch E 485 and 585.	8-09
Ch E	487	Food Process Engineering Design 3 Prereq Ch E 332. Same as BSysE 482.	8-09

		Cooperative course taught by WSU, open to UI students (AGE 487)	
Ch E	496	Cooperative Education Internship V 2-4 May be repeated for credit; cumulative maximum 4 hours. Off-campus internship with business, industry, or government unit. S, F grading.	8-09
Ch E	515	Convective Heat Transfer 3 Same as M E 515.	8-09
Ch E	546	Mass Transfer Operations 3 Diffusional and equilibrium operations. Cooperative course taught jointly by WSU and UI (CHE 546).	8-09
Ch E	565	Fundamentals of Multiphase Environmental Processes 3 Prereq graduate standing. Principles of material and energy balances, reaction kinetics, phase equilibria, chemistry and microbiology governing environmental transport phenomena.	8-09
Ch E	567	Current Topics in Multiphase Environmental Systems 3 Prereq graduate standing. Interdisciplinary course focused on reactions and processes at air, water, and soil interfaces in the environment.	8-09
Ch E	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
Chem	115	[P] Chemical Principles Honors I 4 (3-3) Prereq permission of dept; two years high school chemistry or one year Chem and one year Phys; Math 140 or 171 or c//. Stoichiometry, bonding, structure, gases, liquids, solids, solutions, thermodynamics, chemical reactions, analysis, spreadsheets in chemistry. Credit not granted for both Chem 115 and 105.	8-09
Chem	150	[Q] Molecules and Science 3 (2-3) Chemical basis and molecular structure of everyday materials; polymers, medicines, etc.	8-09
Chem	336	Classical Physical Chemistry 2 Prereq Chem 331 with a grade of C or better. Concepts and applications of classical physical chemistry; transport and kinetic properties; electrochemistry; colloids; polymers and macromolecules.	8-09
Chem	349	Advanced Organic Synthesis Laboratory 2 (0-6) Prereq Chem 345, 346 and 347 with grades of C or better.	8-09
Chem	391	Special Topics in Chemistry V 1-4 May be repeated for credit; cumulative maximum 6 hours. Prereq Chem 106 and permission of instructor. Focus on areas of current chemical research.	8-09
Chem	415	Trace Element Analysis 2 Rec Chem 425. Techniques for the analysis of inorganic materials at trace levels. Credit not granted for both Chem 415 and 515.	8-09
Chem	416	Trace Organic Analysis 2 Rec Chem 425. Methods for the determination of trace amounts of organic compounds.	8-09
Chem	421	Radiochemistry and Radiotracers 2 Prereq Chem 331 with a grade of C or better. Credit not granted for both Chem 421 and 521.	8-09
Chem	422	Radiochemistry Laboratory 1 (0-3) Prereq Chem 222, 331; Phys 202 each with a grade of C or better. Credit not granted for both Chem 422 and 522.	8-09
Chem	455	Teaching Chemistry 1 Prereq junior or senior standing; more than 12 hours Chem. Teaching chemistry; workshop for prospective undergraduate teaching assistants focusing on tutorials and labs.	8-09
Chem	481	[M] Environmental Chemistry I 3 Prereq Chem 220 and 222 each with a grade of C or better. Chemistry of natural and pollutant species and their reactions in the atmospheric environment. Credit not granted for both Chem 481 and 581.	8-09

Chem	482	[M] Environmental Chemistry II 3 Prereq Chem 220, 222, and 332 each with a grade of C or better. Chemistry and reactions of natural and pollutant species on the aquatic environment, sediments and soils.	8-09
Chem	489	Environmental Chemistry Project 3 (1-6) Prereq Chem 482. Laboratory projects in environmental chemistry or environmental analytical chemistry.	8-09
Chem	491	Cooperative Education Internship V 2-5 May be repeated for credit; cumulative maximum 16 hours. Off-campus internship with business, industry, or government unit coordinated through the Professional Experience Program. S, F grading.	8-09
Chem	515	Trace Element Analysis 2 Rec Chem 425. Graduate-level counterpart of Chem 415; additional requirements. Credit not granted for both Chem 415 and 515.	8-09
Chem	535	Computational Quantum Chemistry 3 Rec Chem 332 or Phys 303. Computer simulation of chemical behavior using latest methods; theory and practice of quantum chemistry.	8-09
Chem	570	Chemistry of Polymers and Biopolymers 3 Prereq C or better grade in Chem 345, 346, or MSE 402. Physical properties (molecular weight, rheology, glass transition temperatures) and synthetic methods (free radical, ionic, condensation) of artificial and biopolymers.	8-09
Chem	591	Seminar in Inorganic Chemistry 1 May be repeated for credit. Presentation and discussion of topics in inorganic chemistry taken from research in progress or current literature.	8-09
Chin	160	Chinese Calligraphy 1 (0-2) May be repeated for credit; cumulative maximum 4 hours. An introduction to the brush writing of Chinese characters. No prior knowledge of Chinese needed. S, F grading.	8-09
Clas	103	Latin and Greek for Sciences 2 Latin and Greek roots for students of science, medicine, horticulture, etc.	8-09
Clas	104	Practical Approaches to Latin 3 Basic understanding and word heritage of Latin used in a variety of applications including reading, grammar, speaking and writing.	8-09
Clas	341	Elementary Greek 4 Pronunciation, vocabulary, reading, and functional grammar. Cooperative course taught by UI, open to WSU students (GREK 341).	8-09
Clas	342	Elementary Greek 4 Pronunciation, vocabulary, reading, and functional grammar. Cooperative course taught by UI, open to WSU students (GREK 342).	8-09
Com	260	Introduction to Communication Technology 3 Prereq sophomore standing. Introduction to various communication technologies including web page development, video editing, digital, converging technologies and privacy issues.	8-09
Com	275	Special Topics: Study Abroad V 1-15 Associate Director/Undergrad. Studies approval. S, F grading.	8-09
Com	483	Special Topics: Study Abroad V 1-15 May be repeated for credit. Prereq by interview only. S, F grading.	8-09
Com	510	History of Mass Communications 3 Graduate-level counterpart of Com 410; additional requirements. Credit not granted for both Com 410 and 510.	8-09
Com	515	Law of Mass Communications 3 Graduate-level counterpart of Com 415; additional requirements. Credit not granted for both Com 415 and 515.	8-09
Com	520	New Communication Technologies 3 Graduate-level counterpart of Com 420; additional requirements. Credit not granted for both Com 420 and 520.	8-09

Com	525	Rhetorical Theory 3 Prereq graduate standing. Major theories from classical to contemporary; analysis of symbolic action in public, political discourse.	8-09
Com	538	Seminar in Training and Development 3 May be repeated for credit; cumulative maximum 6 hours. Prereq graduate standing. Instructional aspects of training and consultation in organizational communication; team-building, presentational skills, conflict resolution, assessment leadership, group dynamics.	8-09
Com	540	Media Ethics 3 Prereq by interview only. Graduate-level counterpart of Com 440; additional requirements. Credit not granted for both Com 440 and 540.	8-09
Com	560	Mass Media Criticism 3 Prereq by interview only. Graduate-level counterpart of Com 460; additional requirements. Credit not granted for both Com 460 and 560.	8-09
Com	585	Interpersonal and Small Group Communication 3 Prereq graduate standing. Theory and research in interpersonal and small group communication.	8-09
Com	594	Intercultural Internship 3	8-09
ComSt	185	Principles of Interpersonal Communication 3 Theory and practice of interpersonal communication; understanding and applying intrapersonal information in interpersonal settings.	8-09
ComSt	275	Special Topics: Study Abroad V 1-15 Associate Director/Undergrad. Studies approval. S, F grading.	8-09
ComSt	424	[M] Criticism of Public Address 3 Prereq certified major in communications. Criticism of Public Address 3 Critical analysis of public messages; applications of traditional and contemporary approaches to textual analysis, from classical to postmodern theory. Credit not granted for both ComSt 424 and Com 524.	8-09
ComSt	451	Readers Theatre for the Classroom 3 Prereq certified major in communications. Principles of literature selection, scriptwriting and staging of readers theatre for classroom.	8-09
ComSt	483	Special Topics: Study Abroad V 1-15 May be repeated for credit. Prereq certified major in communications. S, F grading.	8-09
ComSt	488	Structure of Conversation 3 Prereq Com 245; certified major in communications. Symbol systems and their interrelation in sequential organization in everyday communication.	8-09
ComSt	535	Advanced Organizational Communication 3 Prereq ComSt 335. Graduate-level counterpart of ComSt 435; additional requirements. Credit not granted for both ComSt 435 and 535.	8-09
CoPsy	490	Instructional Practicum V 1-3 May be repeated for credit; cumulative maximum 8 hours. May be repeated for credit; cumulative maximum 8 hours. S, F grading.	8-09
CoPsy	499	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
CoPsy	562	Advanced Hypnosis and Therapy 3 Prereq CoPsy 512, or by permission. Advanced training emphasizing mind-body therapies and primary health care including hypnosis, biofeedback, and ego-state therapy. Cooperative course taught by WSU, open to UI students (PEP 562).	8-09
Cpt S	253	Java Programming Language 3 Prereq Cpt S 121, 153, 203, or 251. Skills and literacy course. Comprehensive programming practice using Java.	8-09
Cpt S	435	Concurrent and Real-Time Systems 3 Prereq Cpt S 322, 467; engineering consortium students only. Analysis, design, and programming of concurrent and real-time systems.	8-09

Cpt S	445	Digital Image Processing 3 Prereq Cpt S 330 or E E 341; Math 315; c// in Stat 360 or 443. Digitization, coding enhancement, restoration, reconstruction, segmentation, and description of digital images. Cooperative course taught by WSU, open to UI students (C S 404).	8-09
Cpt S	446	Animation Programming 3 (1-4) Prereq Cpt S 122. Introduction to computer animation production, animation programming techniques, simulation, and dynamic visualization.	8-09
Cpt S	456	Secure Wireless Networks 3 Prereq Cpt S/EE 455 or permission. Mobile wireless networks; wireless ATM, threat models, authentication, detection mechanisms for security attacks. Credit not granted for both Cpt S 456 and 556.	8-09
Cpt S	461	Digital Sound Synthesis and Processing 3 Prereq EE 321 or CptS 317; B- or better in CptS 122 and Math 273. Same as E E 461.	8-09
Cpt S	495	Consulting in Computer Programming 1 May be repeated for credit; cumulative maximum 2 credits. S, F grading.	8-09
Cpt S	522	Software Reuse 3 Prereq Cpt S 422. Basic principles of software reuse, compositional and generative reuse, with specific topics selected from current literature, reverse engineering.	8-09
Cpt S	526	Experimental Software Engineering 3 Prereq CptS 322, CptS 422, graduate standing. Experimental strategies to assess and understand software processes and artifacts (experiments, case studies, field observations, surveys).	8-09
Cpt S	532	Advanced Numerical Analysis 3 Prereq Math 448. Same as Math 545.	8-09
Cpt S	533	Numerical Analysis of Elliptic PDEs 3 Prereq Math 448. Same as Math 546.	8-09
Cpt S	544	Neural Computation 3 Prereq Math 315, Stat 443. Parallel processing inspired by natural neural systems; neural computer architecture, supervised and unsupervised learning, generalization, implementation, and application; neurophysiology basis.	8-09
Cpt S	549	Genetic Algorithms 3 Prereq Cpt S 223, Math 360. Basic concepts, fundamental theories, and techniques of genetic algorithms; applications.	8-09
Cpt S	551	Database Systems 3 Prereq Cpt S 451. Data models: file organization and searching; database system design.	8-09
Cpt S	556	Secure Wireless Networks 3 Prereq Cpt S/EE 455 or permission. Graduate-level counterpart of Cpt S 456; additional requirements. Credit not granted for both Cpt S 456 and 556.	8-09
Cpt S	559	Mobile Computing in Wireless Networks 3 Prereq graduate standing. GSM, CDMA, Mobile-IP, MANET, WATM; routing, mobility management, authentication, naming, address resolution; transport layer and security issues due to mobility.	8-09
Cpt S	596	Computer Science Seminar 1 May be repeated for credit; cumulative maximum 3 hours.	8-09
Crm J	539	The Political Science Profession 1 Same as Pol S 539. S, F grading.	8-09
Crm J	590	Criminal Justice Field Practicum V 1-6 May be repeated for credit; cumulative maximum 6 hours. By interview only. Off-campus professional internship in selected criminal justice agencies. S, F grading.	8-09
Crm J	597	Graduate Internship V 2-12 May be repeated for credit; cumulative maximum 12 hours. On/off campus internship in criminal justice institutions (police, FBI, law firms, etc.) nonprofit or public organizations; written assignments will be required.	8-09

		S, F grading.	
CropS	413	Biology of Weeds 3 Prereq Biol 320. Biology, ecology, and physiology of weeds; crop and weed interactions and interference. Credit not granted for both CropS 413 and 513. Cooperative course taught by UI, open to WSU students (PLSC 410)	8-09
CropS	515	Seminar in Molecular Plant Sciences 1 May be repeated for credit. Same as MPS 515.	8-09
CropS	546	Plant Breeding 3 Prereq MBioS 301. Principles and practices of genetic plant improvement. Cooperative course taught by UI, open to WSU students (PLSC 546)	8-09
CropS	547	Biometrics for Plant Scientists 3 Prereq CropS 101, Stat 212. Biometrical techniques in research with particular emphasis in designing, analyzing, and interpreting agricultural and biological experiments. Cooperative course taught by UI, open to WSU students (PLSC 547)	8-09
CropS	556	Insecticides: Toxicology and Mode of Action 1 Prereq biochemistry, organic chemistry, physiology, plant or animal physiology. Same as Entom 556.	8-09
CropS	557	Herbicides: Toxicology and Mode of Action 1 Prereq biochemistry, organic chemistry, physiology, plant or animal physiology. Same as Entom 557.	8-09
CropS	558	Pesticides Topics 1 Prereq biochemistry, organic chemistry, physiology, plant or animal physiology. Same as Entom 558.	8-09
CRS	335	[K] Cross-Cultural Perspectives on Community 3 Prereq 3 credits S or K GER. Comparative analysis of US and non-US communities, their sustainability, and their role in past and future human development.	8-09
CRS	391	Special Topics V 1-3 May be repeated for credit; cumulative maximum 3 hours. Prereq 3 credits S or K GER; sophomore standing. Topics in rural sociology or community studies.	8-09
CRS	403	Agricultural Entrepreneurship, Tilling the Soil of Opportunity 3 Same as SoilS 403. S, F grading.	8-09
CRS	404	Sustainable Small Farming and Ranching Overview 3 Same as SoilS 404.	8-09
CRS	480	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
CRS	491	Advanced Special Topics V 1-3 May be repeated for credit; cumulative maximum 3 hours. Prereq 6 credits S or K GER. Advanced topics in rural sociology or community studies.	8-09
CRS	499	Special Problems V 1-3 May be repeated for credit; cumulative maximum 6 hours. S, F grading.	8-09
CRS	591	Graduate Special Topics V 1-3 May be repeated for credit; cumulative maximum 6 hours. Prereq graduate standing. Advanced topics in rural sociology or community studies.	8-09
CRS	600	Special Projects/Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
Cst M	232	Construction Systems 3 (2-2) Prereq certified Cst M major; Arch 101 or M E 103; Arch 330. Theory and application of various construction systems and material applications.	8-09
Cst M	253	Building Codes and Zoning 3 Prereq certified Cst M major. Fundamental understanding of how to research, interpret, and apply zoning regulations and building code requirements.	8-09

Cst M	262	Legal Aspects of Construction and Design 3 Prereq B Law 210; Cst M 253; certified Cst M major. Law governing construction and design; liability, delay and disruption theory; breach of contracts; fundamentals of clauses; interpretation and conflict resolution.	8-09
Cst M	442	[M] Theory of Urban Design and Development 3 Prereq certified major in Arch, Cst M, business, or public administration. Same as Arch 442.	8-09
Cst M	452	Construction Practice Management 3 Prereq certified Cst M major. Business/management practices for a construction firm; building construction project management.	8-09
Cst M	453	Construction Communications/Law/Codes 3 (2-3) Construction communications and law overview; analysis and interpretation of contract documents and the uniform building code.	8-09
Cst M	455	Construction Scheduling 3 (2-3) Precedence and arrow networking techniques for construction; fundamentals of scheduling computations, time-cost adjustments, resource leveling; computer scheduling software overview. Cooperative course taught by WSU, open to UI students (CST M455)	8-09
Cst M	457	Methods Procedures II 3 (2-3) Prereq certified Cst M major; Cst M 456. Examination of components in a commercial building form; soils as a design material to finishes.	8-09
Cst M	470	Estimating I 3 (2-3) Prereq Arch 331, Cst M 201. Cost estimating related to building general construction work; methods and techniques applicable to quantity survey, pricing detailed estimates, and bid preparation.	8-09
Cst M	471	Estimating II 3 (1-6) Computerized construction cost estimating and cost management; personal computer software applications spreadsheet, file management, database, and custom-type programs.	8-09
EE	312	Electronics Laboratory I 1 (0-3) Prereq admission to engineering consortium program, E E 321 or c//. Lab exercises in the implementation and analysis of electronic circuits.	8-09
ΕE	314	Microprocessor Systems 3 (2-3) Prereq E E 214, Cpt S 122. Microprocessor system architecture, instruction sets, and interfacing; assembly language programming.	8-09
EE	315	Microcomputers and Assembly Language 3 Prereq admission to engineering consortium program, 6 semester hours of programming. Study of microprocessor systems, including CPUs, memory, registers, bus structures, computer control, and assembly language programming.	8-09
ΕE	316	Microprocessor Laboratory 1 (0-3) Prereq admission to engineering consortium program, E E 315 or c//. Lab exercises in microprocessor systems.	8-09
ЕE	322	Electrical Circuits Laboratory II 1 (0-3) Prereq admission to engineering consortium program; E E 321 or c//. Lab exercises in the time and frequency-domain analysis of electrical circuits.	8-09
ΕE	327	Electronics II 3 Prereq admission to engineering consortium program, E E 311. Analysis and design of electronic circuits, both analog and digital, discrete and integrated.	8-09
EE	328	Electronics Laboratory II 1 (0-3) Prereq admission to engineering consortium program, E E 327 or c//. Lab exercises in the implementation and analysis of electronic circuits.	8-09

ЕE	414	[M] Senior Design Prep 3 Prereq senior standing in engineering consortium program. Engineering project management and design; teamwork, client interaction, specifications, planning, ethics, costing, oral and written technical presentations.	8-09
ЕE	425	Computer Architecture and Design 3 Prereq E E 315; engineering consortium students only. Study of computer design at the architectural and gate levels, pipelining, RISC vs. CISC, cache systems, register-transfer level simulation.	8-09
EE	461	Digital Sound Synthesis and Processing 3 Prereq EE 321 or CptS 317; B- or better in CptS 122 and Math 273. Digital sound synthesis, discrete Fourier transforms and frequency domain analysis, digital processing and manipulation of audio signals.	8-09
EE	478	Microelectronic Fabrication 3 Prereq MSE 302 or by permission. Semiconductors, photo-lithography, diffusion, oxidation, thin film deposition, plasma and chemical etching, process integration, fabrication and testing of diodes and MOS capacitors. Credit not granted for both E E 478 and 578.	8-09
EE	497	RF Mosfet Modeling 3 Prereq E E 496. Mosfet device operation, SPICE BSIM, low end frequency small signal models, noise, parameter extraction, device simulation, DC and RF measurements.	8-09
ΕE	512	Active Network Synthesis 3 Prereq E E 341. Devices and classical network synthesis, two-port network theory, filters, active filters.	8-09
ЕE	536	Numerical Solutions to EM Problems II 3 Prereq E E 351. Theory and use of the method of moments and finite element method in electromagnetics; integral equations.	8-09
ЕE	541	Digital Control Systems II 3 Prereq E E 441. State space approach, SISO, optimal control, state estimators, stochastic systems, state estimation in the presence of noise.	8-09
EE	544	Neural Computation 3 Prereq Math 315, Stat 443. Same as Cpt S 544.	8-09
EE	554	Asynchronous Digital Systems 3 Prereq E E 324. Analysis and design of high speed asynchronous state machines, timing defect analysis, modular elements, arbiters, programmable sequencers, system level design. Cooperative course taught jointly by WSU and UI (EE 540).	8-09
ΕE	597	RF Mosfet Modeling 3 Prereq E E 496. Graduate-level counterpart of E E 497; additional requirements. Credit not granted for both E E 497 and 597.	8-09
E Mic	506	Microtechnique 4 (2-6) Prereq graduate standing; by interview only. Modern methods for preparation of biological specimens for microscopy; paraffin and resin embedding, microtomy, anatomical, cytological and histochemical techniques.	8-09
E Mic	507	Electron Microscopy Laboratory 4 (2-6) Prereq one year biology; one year org chem; one year phys; by interview only. Techniques of transmission electron microscopy, especially those applicable to biological materials; theory and practice for electron optics and specimen preparation.	8-09
EconS	260	Introduction to Environmental and Resource Law 1 American law and legal systems; relationships among legal processes, economic principles, and environmental concerns. Course equivalent to OSU's AREC 260.	8-09
EconS	355	[S,M] American Agriculture and Rural Life 3 History and economic structure of American agriculture, land settlement, organizational nature of firms, technology, and patterns in rural life.	8-09

EconS	361	Farm and Natural Resources Appraisal 3 Prereq EconS 101; EconS 102; EconS 350. Factors affecting value of land; valuation for loans, sales, assessment, and condemnation. Field trips required. Cooperative course taught by UI, open to WSU students (AGEC 361)	8-09
EconS	407	Decision Analysis in Economics 3 Prereq EconS 301; EconS 311; EconS 330. Decision analysis tools for economics and agribusiness; linear, nonlinear, integer programming; transportation, assignment, inventory, input-output models. Credit not granted for both EconS 407 and 507.	8-09
EconS	416	Economies in Transition 3 Prereq EconS 102. Key institutions, policies, and economic performance of different economic systems; transition of new economies in Eastern Europe; capitalism as a global system.	8-09
EconS	454	[M] Policies Affecting American Agriculture 3 Prereq EconS 101. Public policy issues related to agriculture and rural areas. Course equivalent to OSU's AREC 461.	8-09
EconS	455	[T] Growth and Change in the American West 3 Prereq EconS 101. American West development showing how the geography and culture of the West have interacted with technical, economic, and institutional change to shape the western economy.	8-09
EconS	507	Decision Analysis in Economics 3 Prereq EconS 301; either Math 171 or 202. Graduate-level counterpart of EconS 407; additional requirements. Credit not granted for both EconS 407 and 507.	8-09
EconS	535	Agribusiness 3 Prereq graduate standing. Economic and strategic management theories and their relevance to agribusiness decision-making including empirical applications. Cooperative course taught by UI, open to WSU students (AGEC 535)	8-09
EconS	536	Marketing Economics 3 Prereq EconS 526. Application of economic theory to topics in marketing and price analysis. Cooperative course taught by WSU, open to UI students (AG EC536)	8-09
EconS	540	Production Economics 3 Prereq EconS 526. Production economics theory and methods applied to problems of production response, economic optimization, technology, policy, risk and dynamics.	8-09
EconS	553	International Trade and Marketing 3 Prereq graduate standing. Graduate-level counterpart of EconS 453; additional requirements. Credit not granted for both EconS 453 and 553.	8-09
EconS	560	Agribusiness Management and Marketing 3 Rec EconS 452. Management and marketing problem situations in agribusiness; alternative policies, strategies, and decisions.	1-09
Ed Ad	389	Undergraduate Leadership Development 3 Basic leadership through skills, styles and conflict management, critical thinking, problem solving, organizational behavior, and leadership issues.	8-09
Ed Ad	440	Principles of Service and Leadership 3 Prereq Ed Ad 389, senior standing. Individual and group opportunities to apply leadership skills, theory, and principles to a proposed service learning project.	8-09
Ed Ad	490	Special Topics V 1-4 May be repeated for credit; cumulative maximum 8 hours. By interview only.	8-09
Ed Ad	497	Peer Leadership V 1-4 May be repeated for credit. Development of leadership and interpersonal skills for specific peer leadership and paraprofessional positions. S, F grading.	8-09

Ed Ad	498	Undergraduate Leadership Practicum V 1-4 Prereq Ed Ad 389 or c//. Weekly seminar; development of and reporting on significant project associated with a leadership position held by the student. S, F grading.	8-09
Ed Ad	499	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
Ed Ad	530	Special Topics 1 May be repeated for credit; cumulative maximum 3 hours. Topical issues in education responding to shifting demands and skills needed by parents, teachers, school administrators and community leaders.	8-09
Ed Ad	533	Special Topics 1 May be repeated for credit; cumulative maximum 3 hours. Topical issues in education responding to shifting demands and skills needed by parents, teachers, school administrators and community leaders.	8-09
Ed Ad	535	Special Topics 1 May be repeated for credit; cumulative maximum 3 hours. Topical issues in education responding to shifting demands and skills needed by parents, teachers, school administrators and community leaders.	8-09
Ed Ad	566	PhD Practicum in Student Affairs V 1-3 May be repeated for credit; cumulative maximum 3 hours. Prereq must have grad assistantship. Selected supervised experiences in professional affairs settings which provide for the investigation/application of theory/methods gained through formal course work.	8-09
Ed Ad	574	Seminar in Higher Education V 1-3 May be repeated for credit; cumulative maximum 6 hours. Contemporary issues, analyses and developments of higher education programs and institutions.	8-09
EdPsy	490	Instructional Practicum V 1-3 May be repeated for credit; cumulative maximum 8 hours. S, F grading.	8-09
EdPsy	499	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
EdPsy	501	Scholarly Analysis and Writing for Educators 3 Prereq graduate standing. Develop advanced information literacy to identify information resources; critically analyze education research; analyze and construct oral and written scholarly arguments.	8-09
EdPsy	519	Practicum in College Instruction 1 (0-3) May be repeated for credit; cumulative maximum 4 hours. By interview only. Supervised experience in college teaching. S, F grading.	8-09
EdPsy	531	School Psychology Professional Practice 3 Prereq admission to school psychology program. Overview of the advocacy role along with legal/ethical issues that psychologist face.	8-09
EdPsy	532	Interventionist Role for the School Psychologist 3 Prereq admission to school psychology program. Tools to assist school psychologists to develop and monitor academic and behavioral intervention for students.	8-09
EdPsy	533	Assessment of the Exceptional Child 3 Prereq admission to school psychology program. Assessment tools to assist general and special education teachers providing additional academic and cognitive data.	8-09
EdPsy	534	Developmental Psychopathology 3 Prereq admission to school psychology program. Impact of developmental psychopathology on a student's ability to function in the general education environment.	8-09
EdPsy	535	Multicultural Issues in Assessment 1 Prereq admission to school psychology program. Issues and best practices in the assessment of culturally and ethnically diverse populations.	8-09
Engl	103	[W] Rhetorics of Change 3 Academic writing, communication, critical thinking,	8-09

		rhetorical strategies and informational literacy skills applied to critical inquiry.	
Engl	209	[H] Readings in English Literature 3 Selected works by diverse voices from different eras of English literature; importance of conventions, cultural contexts, for interpretation and understanding.	8-09
Engl	333	[M] Topics in Fiction 3 May be repeated for credit; cumulative maximum 6 hours. Forms, history, development of narrative fiction: the tale, short story, Continental and experimental novel.	8-09
Engl	334	[M] Topics in Drama 3 May be repeated for credit; cumulative maximum 6 hours. Forms, history, development of drama: comedy, tragedy, Medieval religious drama, theatre of the absurd.	8-09
Engl	346	Topics in Latina/o Literature 3 Prereq CES 101. Same as CES 354.	8-09
Engl	471	[T] Cultural Politics Since World War II 3 Same as Am St 471.	8-09
Engl	493	[M] Advanced Topics in English Literature 3 May be repeated for credit; cumulative maximum 6 hours. Not open to graduate students. Seminar with term paper project; focused studies in English literature.	8-09
Engl	496	Topics in American Studies 3 May be repeated for credit; cumulative maximum 9 hours. American Studies Summer Institute. Credit not granted for both Engl 496 and 596.	8-09
Engl	537	Seminar in English Literature 3 May be repeated for credit; cumulative maximum 12 hours. Major topics and figures.	8-09
Engl	547	Literary Criticism 3 Theories of literature from Plato and Aristotle to the present.	8-09
Engl	555	Seminar in Middle English Literature 3 May be repeated for credit; cumulative maximum 6 hours.	8-09
Engl	592	Language Arts: Methods of Composition 3 Methods of composition and relevant research in language arts.	8-09
Entom	348	Forest Insects 1 Same as NATRS 348.	8-09
Entom	349	Forest Pest Management 1 Same as NATRS 349.	8-09
Entom	362	Fundamentals of Beekeeping 1 (0-2) Prereq Entom 361 or c//. Applied beekeeping practices including safety, equipment, colony installation, manipulation for pollination and honey production, honey bee diseases and pests.	8-09
Entom	375	Fundamentals of Orchard Ecology 3 (2-2) Prereq Entom 340 or two years field experience. Integration and application of knowledge of ecology, identification and life histories of orchard pests and their management.	8-09
Entom	376	Measuring Populations in Orchards 2 Prereq Entom 375. Common sampling methods and factors influencing populations dynamics of arthropods and management options. Field trips required.	8-09
Entom	439	[M] Taxonomic Entomology V 2-4 Prereq Entom 340 or 343. Identification of insect orders and families. Insect collection required. Credit not granted for both Entom 439 and 539.	8-09
Entom	460	Insects for Teaching 2 Prereq general biology course. The use of insects in teaching scientific principles in the life sciences.	8-09
Entom	499	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
Entom	526	Population Analysis 1 Prereq NATRS/Entom/Biol 529, biometry. Same as NATRS 526.	8-09

Entom	529	Principles of Population Dynamics 1 Prereq general ecology. Same as NATRS 529.	8-09
Entom	542	Insect Behavior 3 Prereq one year biology or entomology. Principles of the behavior of insects. Cooperative course taught by WSU, open to UI students (ENT 542)	8-09
Entom	543	Predator-Prey Dynamics 1 Prereq calculus, general ecology, statistics. Dynamic consequences of interactions between predators and their prey at the population, community and ecosystem level. Cooperative course taught by WSU, open to UI students (ENT 543)	8-09
Entom	551	Biological Control of Weeds 1 Prereq general ecology. Principles, methodologies, and implementation of biological control of weeds in noncropland environments. Cooperative course taught by WSU, open to UI students (ENT 451)	8-09
Entom	555	Applied Design and Analysis of Ecological Field Experiments 2 Prereq Biol 372 or Stat 212; graduate standing. Overview of the application of experimental design and advance statistical analysis in ecological systems.	8-09
Entom	565	Integrated Biological Control 3 Prereq Entom 340 or 343. Study of importance of incorporating biological control into integrated pest management problems in agricultural and urban ecosystems. Cooperative course taught by WSU, open to UI students (ENT 565)	8-09
Entom	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
Entom	702	Master's Special Problems, Directed Study, and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
EntrP	399	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
ES/RP	278	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
ES/RP	375	Aspects of Sustainable Development 3 Prereq junior standing. Same as EconS 375.	8-09
ES/RP	402	Human Health and the Environment 3 Prereq Biol 106, 107, Chem 105, 106; ES/RP 335 or junior in environmental science and regional planning. Problem- solving approach to adverse effects on human health caused by contamination of environmental media or anthropogenic changes in ecosystems. Credit not granted for both ES/RP 402 and 502.	8-09
ES/RP	409	Applied Radiological Physics 3 (2-3) Prereq calculus course; Phys course; Rec ES/RP 406. Production, interactions and measurement of radiation, with application to radiological health protection concerns. Credit not granted for both ES/RP 409 and 509.	8-09
ES/RP	418	Human Issues in International Development 3 Same as Anth 418.	8-09
ES/RP	424	Environmental Health Assessment 2 Prereq one course each in biology, calculus, chemistry, general ecology and physics; Rec ES/RP 406. Environmental transport, fate and effects of radioactive and hazardous materials. Credit not granted for both ES/RP 424 and 524.	8-09
ES/RP	451	Energy Production and the Environment 2 Prereq biology course; general ecology course; Rec ES/RP 406. Evaluation of the impacts of nuclear and other forms of energy production on humans and the environment. Credit not granted for both ES/RP 451 and 551.	8-09
ES/RP	469	Ecosystem Ecology and Global Change 3 Prereq Biol 372; Chem 106. Historic and current factors controlling the function of ecosystems and their response to natural	8-09

		and human-caused global change.	
ES/RP	471	Meteorology 3 Prereq Math 273; Phys 202. Basic meterology; atmospheric thermodynamics; cloud physics; synoptic meterology; radiative processes; climate change. Credit not granted for both ES/RP 471 and 571.	8-09
ES/RP	472	Economic Development and Underdevelopment 3 Prereq Econ 102. Rec Econ 305. Same as EconS 427.	8-09
ES/RP	493	Special Topics V 1-3 May be repeated for credit; cumulative maximum 3 hours. May be repeated for credit; cumulative maximum 3 hours.	8-09
ES/RP	496	Cooperative Education Internship V 2-12 May be repeated for credit; cumulative maximum 12 hours. By interview only. Practical experience in appropriate agencies; for career students in environmental science.	8-09
ES/RP	502	Human Health and the Environment 3 Prereq Biol 106, 107, Chem 105, 106; ES/RP 335 or junior in environmental science and regional planning. Graduate- level counterpart of ES/RP 402; additional requirements. Credit not granted for both ES/RP 402 and 502.	8-09
ES/RP	509	Applied Radiological Physics 3 (2-3) Prereq calculus course; Phys course; Rec ES/RP 406. Graduate-level counterpart of ES/RP 409; additional requirements. Credits not granted for both ES/RP 409 and 509.	8-09
ES/RP	526	Population Analysis 1 Prereq NATRS/Entom/Biol 529, biometry. Same as NATRS 526.	8-09
ES/RP	527	Environmental Chemistry 2 Same as Chem 527.	8-09
ES/RP	529	Population Theory 1 Prereq general ecology. Same as NATRS 529.	8-09
ES/RP	530	Fundamentals of Industrial Safety 2 Prereq graduate standing or by interview only. Fundamentals for recognizing and controlling hazards and losses to protect the safety and health of workers.	8-09
ES/RP	534	Industrial Ecology: Theory and Practice 3 Complex relationships and interactions among industrial activities, the environment, and society and the need for a sustainable system.	8-09
ES/RP	549	Public Land Law 3 History of public lands, problems with ownership of land by governments, legal issues including land sales, mineral extraction, livestock grazing, timber harvest, recreation, wildlife protection, and preservation. Cooperative course taught by UI, open to WSU students (LAW 948).	8-09
ES/RP	551	Energy Production and the Environment 2 Prereq biology course; general ecology course; Rec ES/RP 406. Graduate-level counterpart of ES/RP 451; additional requirements. Credit not granted for both ES/RP 451 and 551.	8-09
ES/RP	556	Insecticides: Toxicology and Mode of Action 1 Prereq biochemistry, organic chemistry, physiology, plant or animal physiology. Same as Entom 556.	8-09
ES/RP	557	Herbicides: Toxicology and Mode of Action 1 Prereq biochemistry, organic chemistry, physiology, plant or animal physiology. Same as Entom 557.	8-09
ES/RP	567	Advanced Applications in GIS 4 (1-6) GIS concepts using ARC/INFO geographic information systems.	8-09
ES/RP	575	Geographic Information Systems 3 Prereq Geol 385. Computerized management of data organized on regional geographic bases; preparation overlay, coding, and manipulation of data for regional planners and land managers. Cooperative course taught by UI, open to WSU students (GEOG 475)	8-09

ES/RP	584	Engineering Aspects of Aquatic Biology 2 (1-3) Prereq C E 583. Same as C E 584.	8-09
ES/RP	591	Special Topics 2 May be repeated for credit; cumulative maximum 4 hours. May be repeated for credit; cumulative maximum 4 hours.	8-09
ES/RP	595	Graduate Internship V 1-12 May be repeated for credit; cumulative maximum 12 hours. By interview only. Practical work experience in appropriate agencies; for graduate career students. S, F grading.	8-09
ES/RP	596	Cooperative Education Internship V 2-12 May be repeated for credit; cumulative maximum 12 hours. By interview only. Practical experience in appropriate agencies; for career graduate students in environmental science and regional planning. S, F grading.	8-09
ES/RP	597	Technical and Public Communications in Environmental Science 2 Prereq technical writing course; Rec public speaking course. Development of written and oral communication skills for practical application in the field of environmental science.	8-09
FA	368	Special Topics-Color Photography V 1-6	8-09
FA	400	Special Topics V 1-6 May be repeated for credit; cumulative maximum 18 hours.	8-09
FA	491	Seminar: Advanced Study, Art on Location 3 Travel to art collections in major urban centers; individual student research into how art functions within a major art center.	8-09
Fin	529	Financial Management for High Tech Firms 3 Fin 325. Application of finance principles to firms in high-tech industries; financing, risk management, capital investment, and mergers/acquisitions.	8-09
Fin	542	Advanced Topics in Real Estate 3 Basic forces that motivate and affect investors in their use and possession of real estate.	8-09
Fin	591	Advanced Topics in Monetary and Public Economics V 1-6 May be repeated for credit; cumulative maximum 12 hours. Prereq EconS 500; EconS 501. Same as EconS 591.	8-09
Fin	592	Advanced Topics in International and Development Economics V 1-6 May be repeated for credit; cumulative maximum 12 hours. Prereq EconS 500; EconS 501. Same as EconS 592.	8-09
For L	542	Research and Methods in Teaching Foreign Culture Courses 3 Prereq graduate standing. Survey of current theory on teaching foreign culture courses with emphasis on practical application and design of activities.	8-09
For L	597	Seminar in Scholarly Methodology 2 Bibliography and formal aspects of scholarly writing; general introduction to literary criticism.	8-09
Fren	111	[G] Francophone Film in English 3 (2-2) Taught in English. Introduction to films from the French-speaking world.	8-09
Fren	121	[I] Francophone Culture 3 Taught in English. Study of relationship between France and its former colonies from a global perspective; complements Fren 120.	8-09
Fren	130	[H] Masterpieces of French/Francophone Literature in Translation 3 Taught in English. Survey of masterpieces of French and Francophone literature from all periods and genres.	8-09
Fren	407	Advanced Speaking and Listening 3 Prereq Fren 307, or equivalent. Systematic development of speaking and listening proficiency at the advanced level.	8-09
Fren	451	[M] Seminar in French Studies - Authors 3 May be repeated for credit; cumulative	8-09

		maximum 6 hours. Prereq two Fren 300-level courses excluding Fren 305. Seminar on important authors in French studies. Taught in French.	
Fren	452	[M] Seminar in French Studies - Genres 3 May be repeated for credit; cumulative maximum 6 hours. Prereq two Fren 300-level courses excluding Fren 305. Seminar on important genres in French studies. Taught in French.	8-09
FSHN	405	Eating Disorders 2 Prereq senior standing; certified nutrition major. Junior-level nutrition majors and others by permission. Examination of anorexia nervosa, bulimia nervosa, compulsive eating, obesity, and weight preoccupation; discussion of cultural and nutritional factors, family issues, and psychological consequences, as well as preventive and therapeutic interventions. Cooperative course taught by UI, open to WSU students (FCS 405)	8-09
FSHN	411	Global Nutrition 2 History of food and hunger and the global nature of our food systems. Cooperative course taught by UI, open to WSU students (FCS 411)	8-09
FSHN	427	Nutritional Assessment 1 (0-3) Rec FSHN 233; senior standing. Basic skills and concepts for determining nutritional status of ambulatory adults using dietary intakes, dietary standards, anthropometric and biochemical measures.	8-09
FSHN	444	[T] Applied Nutrition in Health Science 3 Rec biology, chemistry, sociology/psychology courses. Application of current nutrition topics to community and clinical settings, integrating social science principles for individuals and groups.	8-09
FSHN	500	Topics in Food Science 2 May be repeated for credit; cumulative maximum 6 hours. Prereq permission of instructor. Cooperative course taught jointly by WSU and UI (FST 504).	8-09
FSHN	502	Topics in Food Science 2 May be repeated for credit; cumulative maximum 6 hours. Prereq permission of instructor. Cooperative course taught jointly by WSU and UI (FST 504).	8-09
FSHN	503	Topics in Food Science 2 May be repeated for credit; cumulative maximum 6 hours. Prereq permission of instructor. Cooperative course taught jointly by WSU and UI (FST 504).	8-09
FSHN	504	Advanced Human Nutrition 4 Prereq graduate standing. Scientific basis of human nutrient requirements, dietary allowances and assessment techniques.	8-09
FSHN	513	Mineral and Vitamin Metabolism 4 Prereq A S 406 or 408; MBioS 303. Same as A S 513.	8-09
FSHN	520	Research Methods in Human Nutrition 3 Prereq graduate standing. Rec FSHN 426 or 436; statistics course. The application of human theories and qualitative/quantitative methods of data collection to human nutrition research. Cooperative course taught by WSU, open to UI students (FCS 520)	8-09
FSHN	526	Advanced Community Nutrition 3 Prereq 300-400-level nutrition course. Components of community nutrition programs-needs assessment, planning, intervention, evaluation; application of concepts to case studies. Cooperative course taught by WSU, open to UI students (FCS 526)	8-09
FSHN	530	Prenatal, Infant and Child Nutrition 2 Prereq graduate standing. Nutrition of the mother and fetus during pregnancy and of the child from infancy through childhood.	8-09
FSHN	531	Advanced Lifecycle Nutrition 2 Prereq lifecycle nutrition course or c// FSHN 331. Critically evaluate published literature concerning nutritional considerations during	8-09

		periods of growth, development, pregnancy, lactation, and aging.	
FSHN	533	Pathophysiology of Human Nutrition 3 Prereq FSHN 435. Protein, fat, carbohydrate and other nutrient pathophysiology in the development and treatment of major human diseases.	8-09
FSHN	540	Advanced Clinical Practice 3 (0-9) Prereq FSHN 435, 437; permission of instructor. Application of diet therapy principles to development of nutrition interventions and care plans in a clinical practice setting.	8-09
FSHN	561	Sports Nutrition 3 Prereq by interview only. Macronutrient and selected micronutrient utilization during exercise and restoration after feeding, dietary surveys of athletes, dietary ergogenic aids and discussion of the origins of dietary recommendations for athletes. Cooperative course taught by UI, open to WSU students (FCS 561)	8-09
FSHN	575	Supervised Practice V 2-18 May be repeated for credit; cumulative maximum 18 hours. By interview only. Professional supervised experience in administrative, clinical, and community dietetics; meets American Dietetic Association requirements for registration eligibility. S, F grading.	8-09
FSHN	582	Food Process Engineering Design 3 Prereq BSysE 481 or Ch E 330. Same as BSysE 582. Cooperative course taught by WSU, open to UI students (FST 587)	8-09
FSHN	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
FSHN	702	Master's Special Problems, Directed Study, and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
GenEd	200	[G] Studying World Civilizations Abroad 3 Prereq GenEd 110 or 111 or c//. Study- abroad experience for general education students to introduce them to the cultures they have studied in GenEd 110 and/or 111.	8-09
Geol	150	[Q] Conflict and Debate in Geological Sciences 4 (3-3) Examples in geology of how science is done, how it advances, and what constitutes scientific work. Field trip required.	8-09
Geol	180	[P] Honors Geology 4 (3-3) Prereq honors student or by interview. Introduction to physical geology with emphasis on original research and scientific writing. Credit not granted for more than one of Geol 101, 102, 180. Field trip required.	8-09
Geol	201	Geology of the National Parks 2 Prereq Geol 210. Significant geologic features, processes, and geologic history of the national parks. Field trip optional.	8-09
Geol	206	Field Petrology 3 (2-3) Prereq Geol 101 or 102. Hand sample analysis, petrogenesis and field relationships of rocks. Field trips required.	8-09
Geol	310	Invertebrate Paleontology 3 (2-3) Prereq Geol 210. Morphology, classification, evolution, and paleoecology of fossil invertebrate organisms.	8-09
Geol	391	Living on the Edge: Global Climate and Environmental Change Laboratory 1 (0-3) Prereq junior standing. Laboratory for Geol 390.	8-09
Geol	413	Soil Physics 3 (2-3) Prereq Math 107; Geol 101, 102 or SoilS 201. Same as SoilS413. Credit not granted for both Geol 413 and 513.	8-09
Geol	421	[M] Principles of Stratigraphy 3 (2-3) Prereq Geol 210, 340. Correlation and dating of sedimentary strata; tectonics and sedimentary basins; regional patterns of sedimentation. Field trip required.	8-09
Geol	444	Earthquakes and Seismic Hazards 3 Prereq Geol 101, Phys 101. Geology of	8-09

		earthquakes from the mechanics of failure to seismic waves to seismicity associated with all fault types in a variety of tectonic settings; methods of identifying paleo- earthquakes in the geologic record and assessing seismic risk in active fault environments. Cooperative course taught by UI, open to WSU students (GEOL 344)	
Geol	451	Pedology 3 (2-3) Prereq SoilS 201. Same as SoilS 451.	8-09
Geol	459	Geodynamics 3 Prereq permission of instructor. Dynamics, movement, and deformation of the earth's lithosphere, aethenosphere, and mantle; emphasis on deformation processes and constraints derived from investigation of active tectonics using geophysics, seismology, geodesy, and structural geology. Credit not granted for both Geol 459 and 559. Cooperative course taught jointly by WSU and UI (GEOL 459).	8-09
Geol	476	Exploration Methods 3 Prereq Geol 470. Design of mineral exploration programs and integration and evaluation of geological, geochemical, and geophysical exploration techniques. One 10-day field trip. Cooperative course taught by UI, open to WSU students (GEOE 476)	8-09
Geol	483	Radiogenic Isotopes and Geochronology 3 Prereq Chem 105 and 106 or equivalent; Geol 480 or by permission. Radiogenic isotopes and their uses as chronometers (radiometric dating) and as tracers of earth evolution and differentiation.	8-09
Geol	513	Soil Physics 3 (2-3) Prereq graduate standing. Same as SoilS 513. Credit not granted for both SoilS 413 and 513.	8-09
Geol	515	Paleoecology 3 Ecological dynamics as applied to the paleontological record; preservation constraints; animal-sediment interactions; organisms' role in the relative time scale. Field trip required. Cooperative course taught by UI, open to WSU students (GEOL 515)	8-09
Geol	529	Geologic Development of North America 3 Prereq Geol 310, 421. Tectonic, magnetic, and sedimentary sequence studies of North American continent through time; concepts of metal and petroleum enrichment related to time and geological processes. Field trip required. Cooperative course taught by UI, open to WSU students (GEOL 532)	8-09
Geol	533	Advanced Vadose Zone Hydrology 2 Prereq SoilS 413. Same as SoilS 533.	8-09
Geol	539	Orogenic Systems II 3 Prereq Geol 340. The tetonic evolution of western North America is examined in the field. Field trip required and a research paper. Cooperative course taught jointly by WSU and UI (GEOL 539).	8-09
Geol	557	High-Temperature Aqueous Geochemistry I 3 (2-3) Prereq Chem 331, Geol 582; or by interview only. Application of solution chemistry to hydrothermal solutions; Eh- pH, log f(O2) -pH, activity - activity diagrams; estimation techniques; water structure; metal complexation; solubility, transport and deposition; equilibrium speciation; geothermal fields; experimental methods; activity coefficients. Field trip required. Cooperative course taught by UI, open to WSU students (GEOL 557)	8-09
Geol	558	High-Temperature Aqueous Geochemistry II 3 Prereq Chem 331, Geol 557, 582; or by interview only. Expands on topics covered in Geology 557 through seminar format; selected readings from primary literature followed by presentations and discussions in class. Cooperative course taught by UI, open to WSU students (GEOL 558)	8-09
Geol	559	Geodynamics 3 Prereq permission of instructor. Graduate-level counterpart of Geol	8-09

		439; additional requirements. Credit not granted for both Geol 459 and 559. Cooperative course taught jointly by WSU and UI (GEOL 559).	
Geol	563	Igneous Petrogenesis 3 (2-3) Prereq Geol 356. Chemical and petrologic techniques used to interpret the origin and evolution of igneous rocks. Cooperative course taught by WSU, open to UI students (GEOL 563).	8-09
Geol	565	Biogeochemistry and Global Change 4 Survey of how life affects the chemistry of the surface of earth.	8-09
Geol	569	Field Methods in Hydrogeology 2 (1-3) Prereq Geol 475; Geol 577 or 579. Theory and practice of acquisition of hydrogeologic data, emphasizing design and execution of field experiments.	8-09
Geol	570	Advanced Topics in Hydrogeology V 1-4 May be repeated for credit; cumulative maximum 9 hours. Prereq Geol 475. Topics may include organic/inorganic contaminant fate, recharge, carbon cycling, isotope applications. Cooperative course taught by UI, open to WSU students (GEOL 571).	8-09
Geol	573	Advanced Topics in Economic Geology 2 May be repeated for credit. Prereq Geol 470. Ore-forming process or deposit type combining literature synthesis, theoretical evaluation and field trip inspection. Field trip required. Cooperative course taught by WSU, open to UI students (GEOL 573)	8-09
Geol	574	Remote Sensing and Geospatial Analysis 3 (1-4) Prereq SoilS 374; 476 or equivalent. Same as SoilS 574.	8-09
Geol	576	Fundamentals of Modeling Hydrogeologic Systems 3 Prereq Math 275; permission of instructor. Development and application of models representing physical systems, with emphasis on groundwater flow; basic equations of potential flow; properties assignment; parameter sensitivity; dimensional analysis. Cooperative course taught by UI, open to WSU students (HYDR 576).	8-09
Geol	577	Advanced Groundwater Hydraulics 3 Prereq Geol 475, Math 315. Same as C E 577.	8-09
Geol	592	Advanced Topics in Structural Geology V 1-4 May be repeated for credit; cumulative maximum 6 hours. Advanced topics across normal subject boundaries. Cooperative course taught by WSU, open to UI students (GEOL 592).	8-09
Geol	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
Ger	121	[S] Contemporary German Culture 3 Taught in English. Current social, political, economic, and cultural trends in Germany.	8-09
Ger	130	H] Masterpieces in German Literature In Translation 3 Taught in English. Introduction to German literature.	8-09
Ger	407	Advanced Speaking and Listening 3 Prereq Ger 307, or equivalent. Systematic development of speaking and listening proficiency at the advanced level.	8-09
H D	304	Intimate Relationships Across the Life Span 3 Prereq 6 hours of social sciences. An examination and analysis of intimate relationships across the life span including friend, family, and partner relationships.	8-09
H D	345	Managing Behavior in Early Childhood Settings 3 Prereq 6 hours of social science. Principles and strategies for management of children's individual and group behavior in early childhood settings; professional and ethical responsibilities.	8-09
H D	346	Middle Childhood and School Age Care 3 Prereq 6 hours of social science.	8-09

		Understanding development in middle childhood (approximately 5-12 years); understanding and planning school age care programs.	
H D	409	Current Consumer Issues 3 Prereq 6 hours of social sciences. Analysis of the consumer role; ecological perspective; interaction of consumers, government, market; effects on communities, families, and individuals.	8-09
H D	423	Fundamentals of Participatory Research 3 Prereq sophomore standing, two social science courses. Same as CRS 423. Credit not granted for both H D 423 and 523.	8-09
ΗD	428	Housing America's Families 3 Housing, furnishings, and equipment as they influence family well-being, and families' housing choices as affected by social, psychological, economic, technological, and political factors. Cooperative course taught by UI, open to WSU students (FCS 428)	8-09
ΗD	512	Theory and Substance of Human Development II 3 Prereq H D 511. Continuation of 511; theory and application to concepts and issues in human development.	8-09
H D	523	Fundamentals of Participatory Research 3 Prereq graduate standing, two social science courses. Same as CRS 523. Graduate-level counterpart of H D 423; additional requirements. Credit not granted for both H D 423 and 523.	8-09
H D	595	Instructional Practicum V 1-4 May be repeated for credit; cumulative maximum 8 hours. Prereq senior standing. Supervised instructional practicum for departmental majors. S, F grading.	8-09
HBM	201	Quantity Food Production 3 Principles of menu writing, sanitation and food preparation applied to management of quantity food production and service.	8-09
HBM	310	Hospitality Industry Financial Control 3 Prereq Acctg 231; junior standing. International control through financial and accounting systems for hotels and restaurants.	8-09
HBM	357	Food and Beverage Systems Control 3 Prereq Acctg 231; Cpt S 105. Problems encountered in the management of food and beverage operations such as control and forecasting.	8-09
HBM	359	Food Service Operations and Product Logistics 4 (3-3) Prereq FSHN 120. Management of food service operations, control systems, and distribution networks.	8-09
HBM	375	Club Management 2 Prereq junior standing. The identification of managerial problems unique to club operations and their potential solutions.	8-09
HBM	382	Multi-Unit Management 3 Prereq HBM 381. Concepts and principles involved in managing multiple restaurant units; finance, marketing, human resources, operations, and financial management. Special attendance hours may be required.	8-09
HBM	386	Applied Industrial Relations 2 Prereq junior standing. Labor relations; history, organization, and elections of bargaining agents, negotiation and administration of contracts.	8-09
HBM	440	Prereq HBM 301. Theory, organization, structure and management of voluntary associations; economics and role in convention industry.	8-09
HBM	450	Convention Facilities Management 3 Prereq HBM 301. Politics, setting, design, construction, organization and management of public assembly facilities, including private structures.	8-09
HBM	484	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
HBM	493	Service Applications in E-Commerce 3 Prereq junior standing. Design and management of the service delivery processes in e-commerce businesses.	8-09

HBM	496	Seminar V 1-3 May be repeated for credit; cumulative maximum 6 hours. Prereq junior standing. Selected topics.	8-09
HBM	580	Hospitality Services Marketing 3 Prereq Mktg 505. Services marketing concepts and principles applied to hospitality organizations; strategies to market services and control quality.	8-09
HF	463	Methods of First Aid Instruction 2 (1-3) Prereq Red Cross first aid and CPR certificate. Red Cross Standard First Aid and CPR instructor training; certification to those who qualify.	8-09
Hist	255	[S,D] Chicana/o History 3 Same as CES 255.	8-09
Hist	325	[S,D] Food in the United States 3 Acceptance, preparation, and acquisition of particular foods reveals the ethnic, cultural, and gender differences of peoples in the US.	8-09
Hist	344	Topics in History Study Abroad 3 May be repeated for credit; cumulative maximum 6 hours.	8-09
Hist	380	[S] History of Medicine 3 Medicine in English-speaking societies, Middle Ages to present; development of medical care as a social institution.	8-09
Hist	394	Topics in History 3 May be repeated for credit; cumulative maximum 6 hours. Prereq junior status; 6 hours of Hist. Analytical study of selected historical movements and events.	8-09
Hist	408	[T,D] Indians of the Northwest 3 Prereq Anth 320, CES 171, 375, 377, or Hist 308; completion of one Tier I and three Tier II courses. Same as CES 475.	8-09
Hist	420	American Constitutional History 3 Prereq Hist 110 or Pol S 101. Credit not granted for both Hist 420 and 520.	8-09
Hist	437	Topics in History-Study Abroad 3	8-09
Hist	461	Medieval Russia 1147-1700 3 Political, economic, social, and cultural developments in Russia from the foundation of Moscow (1147) through the accession of Peter I (1700).	8-09
Hist	470	[M] Gandhi: India and the United States 3 Prereq completion of one Tier I and three Tier II courses. British India, Gandhi and development of satyagraha in the Indian independence movement and its use in the US civil rights struggle.	8-09
Hist	520	American Constitutional History 3 Prereq Hist 110 or Pol S 101. Graduate-level counterpart of Hist 420; additional requirements. Credit not granted for both Hist 420 and 520.	8-09
Hist	581	American Historiography 3	8-09
Hort	311	Pomology Laboratory 1 (0-3) Prereq c// in Hort 310. Practicum in the botany, cultivation an uses of temperate-zone tree fruits. Field trip required. Cooperative course taught jointly by WSU and UI (PL SC311).	8-09
Hort	317	Golf Course Management 1 Prereq CropS 301. Same as CropS 317.	8-09
Hort	356	Preparation for Entering the Horticulture Profession 1 Prereq junior in horticulture. Resume writing; job applications; interviewing; investigation of job opportunities; contact with employers; internship reports; practice in oral communication.	8-09
Hort	533	Plant Tissue, Cell, and Organ Culture 3 (1-6) Prereq senior standing. By interview only. Current plant tissue techniques used in research and industry to solve problems. Cooperative course taught jointly by WSU and UI (PLSC 533).	8-09

Hort	702	Master's Special Problems, Directed Study, and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
Hum	132	[H] Masterpieces of French/Francophone Literature in Translation 3 Same as Fren 130.	8-09
Hum	133	[H] Masterpieces of German Literature In Translation 3 Same as Ger 130.	8-09
Hum	134	[H] Masterpieces of Peninsular Spanish and Latin American Literature In Translation 3 Same as Span 130.	8-09
Hum	135	[H] Masterpieces of Russian Literature in Translation 3 Same as Rus 130.	8-09
Hum	198	[H] Humanities in the Ancient World: Honors 3 Integrated humanities; literature, philosophy, history, and art of the ancient world. Open only to students in the Honors College.	8-09
I Bus	375	Aspects of Sustainable Development 3 Prereq junior standing. Same as EconS 326.	8-09
I Bus	472	Economic Development and Underdevelopment 3 Prereq EconS 102. Rec EconS 305. Same as EconS 427.	8-09
I Bus	596	Doctoral Topics 1 May be repeated for credit; cumulative maximum 6 hours. Prereq graduate standing. Advanced topics in international business.	8-09
I Bus	800	Doctoral Research, Dissertation, and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
I D	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
I D	276	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
I D	296	Introduction to Computer Technology 3 (2-2) Introduction to software applications used in interior design such as PhotoShop, InDesign, Powerpoint and SketchUP.	8-09
I D	396	Beginning Computer Applications for Interior Design 3 (0-6) Prereq I D 201. Design problem solving using the computer as a tool.	8-09
I D	397	Computer Applications for Interior Design II 2 (0-4) Prereq I D 396. Continuation of I D 396 with a focus on enhancing 2D skills and introducing 3D modeling techniques.	8-09
I D	428	International Design and Industry Experience V 1-6 Prereq minimum 2.50 cumulative gpa. Study abroad working with design and industry representatives in Europe. Credit not granted for both I D 428 and 528.	8-09
I D	480	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
I D	481	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
I D	499	Special Problems V 1-4 May be repeated for credit. May be repeated for credit; cumulative maximum 4 hours. S, F grading.	8-09
I D	550	Design Applications 2 Prereq Arch/I D/L A 530. Same as Arch 550.	8-09
I D	561	Interdisciplinary Seminar II 3 Prereq Arch/I D/L A 560. Same as Arch 561.	8-09
I D	700	Master's Research, Thesis, and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
IPM	552	Pesticides and the Environment 2 Graduate-level counterpart of IPM 452; additional requirements. Credit not granted for both IPM 452 and 552.	8-09
IPM	562	Systems of Integrated Pest Management 3 (2-3) Graduate-level counterpart of IPM 462; additional requirements. Credit not granted for both IPM 462 and 562.	8-09

Jour	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. Prereq by interview only.	8-09
Jour	417	[M] Specialized Writing 3 Prereq Jour 305; certified major in communications. Reporting techniques and issues related to specialized media fields.	8-09
Jour	481	Newspaper Management 3 Prereq Jour 305, Jour 330, or Jour 425; certified major in communications.	8-09
Jour	483	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Kin	563	Exercise and Immune Response 3 Rec MvtSt 463. Influence of physical exercise on immune response and consequent impact on host susceptibility to disease and infection.	8-09
LA	202	[H] The Built Environment 3 Same as Arch 202.	8-09
LA	264	Basic Landscape Design 3 For nonmajors. Design theory and principles; site design factors; design process application; construction criteria; graphic construction communication; landform; circulation systems; plant uses.	8-09
ME	103	Engineering Graphics and Computer-Aided Design 3 (1-6) Orthographic theory, conventions, and visualization; isometric and oblique pictorials; geometric dimensioning and tolerancing, computer-aided drafting and solid modeling. Cooperative course taught by WSU, open to UI students (ME 101).	8-09
M E	104	Engineering Graphics 2 (1-3) Orthographic theory, conventions and visualization, isometric and oblique pictorials, geometric dimensioning and tolerancing.	8-09
M E	105	Engineering Computer-Aided Design Laboratory 1 (0-3) Computer-aided drafting and solid modeling.	8-09
ME	125	M E Merit Experience 2 Prereq by interview only. A hands-on, project-oriented course emphasizing team work and creativity in engineering design, conducted in an enriched learning environment.	8-09
ME	325	Manufacturing Operations Planning 3 Prereq M E 310, 311, Math 360 or c//, or by permission. Quantitative techniques of production and planning and control, material requirements, operations scheduling, production economics.	8-09
ME	375	Manufacturing Control Systems 3 (2-3) Prereq E E 304, M E 212, Math 315. Feedback control; hardware components, software algorithms, and system integration for process control.	8-09
ME	400	Seminar in Manufacturing 2 Prereq senior standing. Current industry practice; non- technical skills (communication, product realization, human factors, ethics, corporate culture, market focus, career development).	8-09
M E	410	[M] Manufacturing Processes Laboratory II 2 (1-3) Prereq M E 474, senior standing. Design of experiments; statistical evaluation of experimental data; technical communication.	8-09
ME	420	Capstone Engineering Design 3 (1-6) Prereq senior in engineering. Integrative design in engineering; multi-disciplinary design project considering both technical and nontechnical contexts; organizational dynamics and communications.	8-09
M E	424	Flow of Compressible Fluids 3 Prereq M E 303. Quasi-one-dimensional flow, shock waves, unsteady one-dimensional flow and steady two-dimensional flows.	8-09
M E	522	Fundamentals of Fluids II 3 Rec M E 521. Viscous shear layers including heat and mass transfer, compressibility effects, vortex dynamics, stability and transition, turbulence analysis and modeling.	8-09

ME	541	Advanced Mechanical Vibrations 2 or 3 Rec M E 449. Response of single and multi degree of freedom systems; finite element formulation; matrix methods, random vibrations. Cooperative course taught jointly by WSU and UI (ME 550).	8-09
ΜE	542	Optimal Control of Dynamic Systems 3 Introduction to optimal control theory, differential games, and multiple criteria systems; applications in engineering, biology, economics, agriculture, and medicine. Cooperative course taught by WSU, open to UI students (ME 542).	8-09
M E	544	Optimal Systems Design 3 Parameter design optimization techniques for nonlinear systems; theory, numerical methods, and applications; multiple criteria optimal trade-off analysis and game theory.	8-09
ΜE	551	Turbulent Flow 3 Rec C E 521 or M E 521. Turbulent flow; dimensional analysis, statistical models and descriptions of organized structures.	8-09
M E	565	Nuclear Reactor Engineering 3 Prereq M E 461. Reactor power distribution; thermal and exposure limits; critical heat flux and pressure design; neutronic/thermal hydraulic relationships; transient/accident analysis.	8-09
M E	569	Advanced Topics in Thermal and Fluid Sciences V 1-3 May be repeated for credit. Advanced topics in thermodynamics, heat transfer or fluid mechanics; analytical and experimental methods.	8-09
Math	090	Basic Mathematics 2 Review of basic arithmetic and elementary algebra. (This material is currently available on the Pullman campus through a 3 credit course, Math 90, taught by the Institute for Extended Learning, Community Colleges of Spokane.) S, F grading.	8-09
Math	092	Intermediate Algebra 3 Fundamental algebraic operations and concepts. (This material is currently available on the Pullman campus through a 3 credit course, Math 91, taught by the Institute for Extended Learning, Community Colleges of Spokane.)	8-09
Math	100	Algebra Methods and Introduction to Functions 3 Fundamental algebraic operations and concepts, linear systems and inequalities, polynomial and rational functions, introduction to exponential and logarithmic functions. (This material is currently available on the Pullman campus through a 3 credit course, Math 99, taught by the Institute for Extended Learning, Community Colleges of Spokane.)	8-09
Math	408	Mathematics for Economists 3 Prereq Math 201, 202. Mathematical topics applicable to modern economic analysis and research. Cooperative course taught by UI, open to WSU students (AG EC409).	8-09
Math	410	Topics in Probability and Statistics 3 May be repeated for credit; cumulative maximum 6 hours. Prereq one 3 hour statistics course. Same as Stat 410.	8-09
Math	424	Introduction to Topology 3 Prereq Math 273; Math 301. Topological ideas including topological spaces, metric spaces, connectedness and compactness, countability and separation axioms and the Tychonoff Theorem.	8-09
Math	430	Statistical Methods in Engineering 3 Prereq Math 172; 220. Same as Stat 430.	8-09
Math	481	Topics in Analysis 3 May be repeated for credit.	8-09
Math	498	Career Experience Internship V 2-12 May be repeated for credit; cumulative maximum 12 hours. By interview only. Industrial or governmental career experience in a mathematics or mathematics-related area, supervised by qualified professionals. S, F grading.	8-09

Math	509	Foundations of Mathematics 3 The basis of mathematics in logic and set theory; continuum hypothesis; Godel's theorems, recent developments. Cooperative course taught by WSU, open to UI students (MATH 509).	8-09
Math	510	Topics in Probability and Statistics 3 May be repeated for credit; cumulative maximum 6 hours. Prereq one 3 hour statistics course. Graduate-level counterpart of Math 410; additional requirements. Credit not granted for both Math 410 and 510.	8-09
Math	515	Statistical Packages 3 (2-3) Prereq statistical methods course. No previous computer experience required. Same as Stat 515.	8-09
Math	523	Statistical Methods for Engineers and Scientists 3 Prereq Stat 360 or one 3 hour statistics course. Graduate-level counterpart of Math 423; additional requirements.	8-09
Math	536	Statistical Computing 3 (2-3) Prereq (Stat 443 and 530), Stat 523, or by instructor's permission. Same as Stat 536. Cooperative course taught jointly by WSU and UI (STAT 540).	8-09
Math	556	Introduction to Statistical Theory 3 Prereq Stat 430 or 443. Graduate-level counterpart of Math 456; additional requirements. Credit not granted for both Math 456 and 556.	8-09
Math	572	Quality Control 3 Prereq Stat 360 or 443. Same as Stat 572.	8-09
Math	573	Reliability 3 Prereq Stat 443. Same as Stat 573. Cooperative course taught jointly by WSU and UI (STAT 571).	8-09
Math	582	Seminar in Algebra V 1-3 May be repeated for credit. Cooperative course taught jointly by WSU and UI (MATH 561).	8-09
Math	584	Seminar in Topology and Geometry V 1-3 May be repeated for credit. Cooperative course taught by WSU, open to UI students (MATH 584).	8-09
Math	585	Seminar in Number Theory V 1-3 May be repeated for credit. Cooperative course taught by WSU, open to UI students (MATH 587).	8-09
Math	591	Seminar in the History of Mathematics I 1 Topics in the history of mathematics to 1800.	8-09
Math	592	Seminar in the History of Mathematics II 1 Topics in the history of mathematics from 1800 to present.	8-09
Math	602	Internship V 2-12 May be repeated for credit. A structured internship from three to nine months; teaching at the postsecondary level or applied work in a non-academic environment. Prereq 40 hours graduate work. S, F grading.	8-09
Math	700	Master's Research, Thesis, and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
MBioS	424	Directed Problems in Cell Biology 1 Prereq MBioS 301 or 303; c// in MBioS 401. Complementary course to MBioS 401.	8-09
MBioS	425	[T] Origins of Life 3 Prereq one Tier II course in biological sciences and completion of one Tier I and three Tier II courses. Origin of life and evolution of genetic structure; critical analysis of molecular evolution.	8-09
MBioS	427	[M] Perspectives in Biotechnology 3 Prereq MBioS 301. Same as A S 488. Credit not granted for both MBioS 427 and 527.	8-09
MBioS	444	Food Microbiology 3 Prereq MBioS 305; MBioS 306. Same as FSHN 416. Cooperative course taught by UI, open to WSU students (FST 416).	8-09

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MBioS	445	Food Microbiology Laboratory 2 (0-6) Same as FSHN 417. Cooperative course taught by UI, open to WSU students (FST 417).	8-09
MBioS	447	Molecular Mechanisms in Microbiology 2 In-depth discussion of molecular mechanisms and different experimental approaches in microbiology. Cooperative course taught by UI, open to WSU students (MMBB 450)	8-09
MBioS	448	Soil Microbiology and Biochemistry 3 (2-3) Prereq MBioS 101 or 201; SoilS 201. Same as SoilS 431.	8-09
MBioS	492	Senior Project in Genetics and Cell Biology 1 Prereq certified major in SMB; senior standing. Written paper and seminar presentation on laboratory research project.	8-09
MBioS	496	Senior Project in Microbiology 1 Prereq certified major in SMB; senior standing. Written paper and seminar presentation on laboratory research or library project.	8-09
MBioS	525	Advanced Topics in Genetics 1 or 2 May be repeated for credit. Prereq MBioS 503. Recent research in selected areas of genetics.	8-09
MBioS	526	Advanced Topics in Cell Biology V 1-3 May be repeated for credit; cumulative maximum 7 hours. Prereq MBioS 501. Current research in cell structure and function. Cooperative course taught by WSU, open to UI students (GENET592)	8-09
MBioS	527	Perspectives in Biotechnology 3 Prereq MBioS 301 or graduate standing. Same as A S 588. Credit not granted for both MBioS 427 and 527.	8-09
MBioS	532	Plant Transmission Genetics 3 Prereq MBioS 301, or graduate standing. Same as CropS 504. Cooperative course taught by WSU, open to UI students (PLSC 507).	8-09
MBioS	535	Molecular Genetics of Plant and Pathogen Interactions 3 Prereq MBioS 301, 303. Same as Pl P 535.	8-09
MBioS	537	Plant Cell Biology 3 Prereq graduate standing. Same as Biol 537.	8-09
MBioS	547	Advanced Topics in Microbiology V 1-3 May be repeated for credit. Prereq MBioS 550.	8-09
MBioS	554	Chromosome Structure and Function 3 Prereq MBioS 301 or graduate standing. Same as Crops 554. Cooperative course taught by WSU, open to UI students (MMBB 554).	8-09
MBioS	571	Advanced Topics in Plant Biochemistry 3 Prereq MBioS 514; introductory botany. Biochemistry unique to plants; new research advances.	8-09
MBioS	576	Advanced Molecular Techniques I 1 (0-3) Prereq MBioS 503 or c//. Modern laboratory technique in the sequencing of nucleic acids.	8-09
MBioS	577	Advanced Molecular Techniques II 1 (0-3) Prereq MBioS 503 or c//. Modern laboratory techniques in the use of plasmids as cloning vehicles.	8-09
MBioS	581	Seminar in Animal Physiology 1 May be repeated for credit. Same as A S 540.	8-09
MBioS	582	Seminar in Reproductive Biology 1 Prereq graduate standing. Same as A S 582. S, F grading.	8-09
MBioS	596	Advanced Topics in Development V 1-3 Prereq Biol 321; MBioS 303 or 401. Same as Biol 596.	8-09
Mfg E	483	Topics in Manufacturing Engineering V 1-4	8-09
MgtOp	440	[M] Advanced Operations Management 3 Prereq MgtOp 340. Advanced concepts in the management of production and service operations with an emphasis on quality management; case studies.	8-09

MgtOp	451	Business Statistical Analyses 3 Prereq admission to MBA program. Advanced preparation for graduate-level business analyses, applied finite math and statistics principles	8-09
MgtOp	501	Management of Organizations 3 Leading, organizing, decision making, planning, controlling, conflict management, and behavior in work organizations.	8-09
MgtOp	517	Quality Improvement for Management 3 Philosophy and evolution of quality control, control charts, process capability analysis, applications.	8-09
MgtOp	518	Techniques of Sampling 3 Prereq MgtOp 591. Sample surveys for business use; theory and application with emphasis on appropriate sample types and the estimation of their parameters.	8-09
MgtOp	542	Applied Stochastic Models 3 Prereq MgtOp 215. Stochastic processes, Markov models, stochastic dynamic programming, queues and simulation applied to business problems.	8-09
MgtOp	583	Organization Design 3 Development and design of contemporary systems of organization and management.	8-09
MgtOp	586	Applied Multiple Time Series Analysis 3 Prereq MgtOp 516. Approaches to modeling and analysis of multiple time series.	8-09
MgtOp	592	Modeling Skills 3 Prereq MgtOp 451 or 591. Abstracting the essential features of a situation in a model; debugging a model effectively and translating model results into insights.	8-09
MIS	153	BASIC Programming 3 Same as Cpt S 153.	8-09
MIS	201	Network and Operating System Essentials 2 Introduction to network, operating systems, and the technologies that support them; course may not be used to satisfy specific course requirements for the Bachelor of Arts in Business Administration. S, F grading.	8-09
MIS	202	Implementing and Supporting Windows 2000 3 Installation, configuration, and management of Windows 2000 Professional and Server; course may not be used to satisfy specific course requirements for the Bachelor of Arts in Business Administration. S, F grading.	8-09
MIS	203	Implementing Network Infrastructure 3 Installation, configuration, and management of network services within Windows 2000 networks; course may not be used to satisfy specific course requirements for the Bachelor of Arts in Business Administration. S, F grading.	8-09
MIS	204	Implementing Directory Services 3 Installation, configuration, and management of Windows 2000 Directory Services; course may not be used to satisfy specific course requirements for the Bachelor of Arts in Business Administration. S, F grading.	8-09
MIS	221	Introduction to ORACLE SQL and PL/SQL 3 Using Oracle to manage relational and object-oriented databases; course may not be used to satisfy specific course requirements for the Bachelor of Arts in Business Administration. S, F grading.	8-09
MIS	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
MIS	350	Management Information Systems 3 Management information systems foundations; current trends; MIS technology fundamentals; applications to business functions and management practice.	8-09
MIS	424	Internet Business Programming 3 Prereq MIS 325. Designing and building n-tier,	8-09

		enterprise-level, multi-user business information systems using internet technologies.	
MIS	427	Emerging Technologies III 3 Prereq MIS 250. Special and advanced topics in MIS.	8-09
MIS	428	Emerging Technologies IV 3 Prereq MIS 250. Special and advanced topics in MIS.	8-09
MIS	475	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Mktg	399	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Mktg	457	[M] Advanced Consumer Behavior 3 Prereq Mktg 407 or 417. Advanced theories of the cognitive, affective and behavior dimensions underlying the decisions and actions of consumers.	8-09
Mktg	567	Consumer Behavior Theory 3 Prereq Mktg 505. Theory in consumer and buyer behavior; conceptual and empirical research role of purchase and consumption behavior on society and marketing.	8-09
Mktg	594	Seminar in Research Techniques 3 Advanced, doctoral-level topics in research techniques.	8-09
Mktg	596	Doctoral Topics 3 May be repeated for credit; cumulative maximum 15 hours. Advanced topics in marketing.	8-09
MSE	429	Powder Metallurgy 3 Fundamentals of conventional press-and-sinter powder metallurgy (PM) and more advanced techniques; commercial applications of PM parts. Cooperative course taught by UI, open to WSU students (MET 429).	8-09
MSE	471	Materials Characterization Techniques 1 (0-3) Prereq permission of instructor, Chem 105, Phys 201. Introduction to advanced materials characterization methods including electron microscopy, scanning probe microscopy, nanomechanical testing, and spectroscopy techniques. S, F grading.	8-09
MSE	520	Seminar 1 May be repeated for credit; cumulative maximum 3 hours. Reporting problems, research and research methods in materials science and engineering. S, F grading.	8-09
Mus	163	[G] World Music 3 Exploration of music from a global perspective through demonstrations, performances, lectures and discussion.	8-09
Mus	429	Crimson Company Quartet 1 (0-4) May be repeated for credit. By audition only. SATB. All styles of popular music; public performances required.	8-09
Mus	430	Crimson Company Show Choir 2 (0-8) May be repeated for credit. By audition only. Popular music performances with choreography. Public performances required.	8-09
Mus	467	Marching and Jazz Techniques 1 Prereq Mus 253. In-depth experience with planning, designing and arranging marching band shows and jazz ensemble concerts using traditional and contemporary techniques.	8-09
MvtSt	390	Practicum in Coaching V 1-4 May be repeated for credit; cumulative maximum 8 hours. By interview only. Supervised practicum. Combined maximum for MvtSt 300-level practicum courses 8 hours. S, F grading.	8-09
MvtSt	475	Marginality and Movement 3 Understanding of the current status of women's sports participation in the U.S. and of the woman participant herself.	8-09
NATRS	314	Forest Measurements and Yield Prediction 4 (3-3) Prereq NATRS 204, Stat 212 or Stat 412. Introduction to techniques for measuring and quantifying tree characteristics, describing site productivity, stand structure and depicting tree and	8-09

		stand development.	
NATRS	320	Timber Harvesting 3 Prereq NATRS 204. Current practices and problems; planning and coordinating timber harvesting with forest management. Field trips required. Cooperative course taught by UI, open to WSU students (FORPR430).	8-09
NATRS	321	Introduction to Wood Technology 3 Prereq Biol 107. Anatomy of woody plants, identifying characteristics and properties of woods; relation of wood properties to processing and use. Field trips required. Cooperative course taught by UI, open to WSU students (FORPR277).	8-09
NATRS	331	Forest Pathology 2 (0-6) Prereq Biol 107. Same as Pl P 331.	8-09
NATRS	348	Forest Insects 1 Classification and biology of insects injurious to forests and forest products	8-09
NATRS	349	Forest Pest Management 1 Prereq NATRS/Entom 348 or 343. Principles and practice of forest pest management.	8-09
NATRS	368	Introduction to ArcGIS 3 (1-6) Prereq one course in biology, geology, or soils. Same as SoilS 368.	8-09
NATRS	372	Wildland Recreation Field Laboratory 1 (0-3) Prereq NATRS 371 or c//. Field observation of recreation practices. Field trips required.	8-09
NATRS	410	Forest Finance and Valuation 3 Prereq Ag Ec 201 or Econ 101; Math 107; NATRS 204. Economic and finance principles applied to forest management and appraisals.	8-09
NATRS	414	[M] Ecosystem Surveys and Inventories 3 (2-3) Prereq MgtOp 215, Stat 212 or 412. The application of sampling theory in natural resource inventories and surveys.	8-09
NATRS	423	Special Topics V 1-3 May be repeated for credit; cumulative maximum 6 hours. Prereq junior standing or by interview only. Topical issues in natural resource sciences.	8-09
NATRS	428	Resolving Environmental Conflicts 4 (3-3) Prereq junior standing, two social science courses. Same as CRS 435. Credit not granted for both NATRS 428 and 528.	8-09
NATRS	432	Low-volume Forest Roads 3 Prereq NATRS 320. Road classification; design of forest roads; construction techniques; costing, environmental considerations, design project. Three days of field trips. Cooperative course taught by UI, open to WSU students (FORPR432).	8-09
NATRS	445	Nongame Management 2 Rec Biol 423, 428. Same as Biol 445. Cooperative course taught by UI, open to WSU students (WLF 445).	8-09
NATRS	499	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
NATRS	518	Forest Growth and Yield 2 Prereq NATRS 313 or instructor's permission. Graduate-level counterpart of NATRS 418; additional requirements. Credit not granted for both NATRS 418 and 518.	8-09
NATRS	526	Population Analysis 1 Prereq NATRS/Entom/Biol 529, biometry. Analysis, diagnosis, interpretation, and forecasting of population change.	8-09
NATRS	528	Resolving Environmental Conflicts 4 (3-3) Prereq graduate standing, two social science courses. Same as CRS 535. Graduate-level counterpart of NATRS 428; additional requirements. Credit not granted for both NATRS 428 and 528.	8-09
NATRS	529	Principles of Population Dynamics 1 Prereq general ecology. Development of the	8-09

		theory of population dynamics from Mathus to the present.	
NATRS	531	Wildlife Nutrition 3 (2-3) Graduate-level counterpart of NATRS 431; additional requirements. Cooperative course taught by WSU, open to UI students (WLF 531)	8-09
NATRS	535	Wildlife Ecology 4 (3-3) Prereq Biol 372 or NATRS 300; Stat 212 or 412. Graduate-level counterpart of NATRS 435; additional requirements. Credit not granted for both NATRS 435 and 535.	8-09
NATRS	536	Advanced Wildlife Management 4 (3-3) Prereq NATRS 435. Graduate-level counterpart of NATRS 436; additional requirements. Credit not granted for both NATRS 436 and 536.	8-09
NATRS	538	Natural Resource Policy and Administration 3 Graduate-level counterpart of NATRS 438; additional requirements. Credit not granted for both NATRS 438 and 538.	8-09
NATRS	541	Population Ecology and Conservation 4 (3-3) Prereq Biol 372 or NATRS 300; Stat 212 or 412. Graduate-level counterpart of NATRS 441; additional requirements. Credit not granted for both NATRS 441 and 541.	8-09
NATRS	545	Advanced Ecosystem and Landscape Management 2 Prereq enrollment in NRI or by interview only. Ecosystems and landscape management principles, assessments, monitoring, design, and practice, incorporating biological and socioeconomic perspectives.	8-09
NATRS	560	Watershed Management 3 Prereq NATRS 204, completion of department requirement in biology, chemistry, and physical science, mathematics and statistics; or by interview. Graduate-level counterpart of NATRS 460; additional requirements. Credit not granted for both NATRS 460 and 560.	8-09
NATRS	575	Sensing and Geospatial Analysis 3 (1-4) Prereq SoilS 374; 476 or equivalent. Same as SoilS 574.	8-09
NATRS	593	Special Topics Seminar 1 May be repeated for credit. Prereq 20 hours NATRS. Literature and problems.	8-09
NATRS	600	Special Projects or Independent Study V 1-18 May be repeated for credit. Prereq department chair approval. S, F grading.	8-09
NATRS	702	Master's Special Problems, Directed Study and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
Neuro	406	Neuroscience Research Techniques 3 (2-3) Prereq Neuro 301, or by interview only. Historical development, theory and technical bases for contemporary laboratory methods in the neurosciences.	8-09
Neuro	502	Faculty Research in Pharmacology/Toxicology 1 Prereq graduate standing. Same as P/T 502. S, F grading.	8-09
Neuro	505	Principles and Methods of Toxicology 3 Prereq MBioS 513 or c//; 300-level organ/mammalian physiology or permission of instructor. Same as P/T 505. Cooperative course taught by WSU, open to UI students (FST 505)	8-09
Neuro	506	Principles of Pharmacology 3 Prereq MBioS 513 or c//. Same as P/T 506.	8-09
Neuro	507	Principles of Therapeutics 3 Prereq 300-level organ/mammalian physiology; P/T 506. Same as P/T 507.	8-09
Neuro	553	Development and Plasticity of the Nervous System 3 Same as Biol 553.	8-09
Neuro	577	Behavioral Pharmacology 3 Prereq Psych 574. Same as Psych 577.	8-09

Neuro	579	Behavioral Neuroscience 3 Prereq Psych 574. Same as Psych 579.	8-09
Neuro	584	Sensory Bases of Behavior 3 Prereq Psych 384. Same as Psych 584.	8-09
Nur-Y	200	Profession of Nursing 2	8-09
Nur-Y	310	Pharmacological Basis of Nursing Practice 2	8-09
Nur-Y	312	Pathophysiological Basis of Nursing Practice 3	8-09
Nur-Y	313	Mental Health Concepts: Individuals and Families 2	8-09
Nur-Y	314	Introduction to Nursing Practice in Health and Illness 5 (4-2) Introduction to nursing concepts and health assessment including core professional values, knowledge, and competencies for nursing practice.	8-09
Nur-Y	320	Nursing Concepts: Foundations 4	8-09
Nur-Y	321	Nursing Practice: Foundations 4	8-09
Nur-Y	330	Nursing Concepts and Practice: Health Assessment 3 (2-3)	8-09
Nur-Y	342	Nursing Concepts: Maternity Nursing 2	8-09
Nur-Y	343	Nursing Practice: Maternity Nursing 3 (0-9)	8-09
Nur-Y	344	Nursing Concepts: Nursing of Children 2	8-09
Nur-Y	345	Nursing Practice: Nursing of Children 3 (0-9)	8-09
Nur-Y	346	Nursing Concepts: Family and Child Development 2	8-09
Nur-Y	390	Laboratory Value Analysis and Interpretation 2 Prereq Nurs 312. Analysis and interpretation of common laboratory values with nursing focused application in selected case scenarios. S, F grading.	8-09
Nur-Y	391	Concepts of Caring 2 Explores nursing concept of caring using personal narratives, storytelling, and literary discussions to foster practices of mutuality, constructed knowing, and heightened sensitivity.	8-09
Nur-Y	401	[M] Nursing Leadership: Research 2	8-09
Nur-Y	402	Nursing Leadership: Group Theory 2	8-09
Nur-Y	403	Nursing Leadership and Management 3	8-09
Nur-Y	420	Nursing Concepts: Adults 5	8-09
Nur-Y	421	Nursing Practice: Adults 6 (0-18)	8-09
Nur-Y	441	Nursing Practice: Community Health 4 (0-12)	8-09
Nur-Y	450	Nursing Concepts: Psychiatric / Mental Health 3	8-09
Nur-Y	451	Nursing Practice: Psychiatric / Mental Health 3 (0-9)	8-09
Nur-Y	460	Nursing Concepts: Clinical Decision Making 3 Prereq enrolled in ICN consortium university with nursing major; registered nurse. Analysis of clinical decisions and the role of the professional nurse in case management, information management, and policy development.	8-09
Nur-Y	493	School Nursing I 6 (3-9)	8-09
Nur-Y	517	Financial Management V 2-3 Prereq graduate student in nursing. Application of economic theory and principles of financial management to the role of nurse manager.	8-09
Nur-Y	537	Role Analysis: Advanced Practice 2 (1-3) Prereq admission to FNP program. Emphasis on role analysis including interdisciplinary relationships, consultative	8-09

		skills, responsibility, activities, and functions of the advanced practice nurse.	
Nur-Y	540	Family and Partner Psychotherapy 4 (2-6) Prereq Nurs 541, 543; psych/mental health nursing major or permission of instructor. Introduction to theory and practice of family/partner therapy including role of therapist in treatment of family as a unit.	8-09
Nur-Y	542	Role Development and Practice Management for the Psychiatric Mental Health Practitioner 2 Prereq admission to the PMHNP program or permission of instructor. Advanced practice role development, definition of scope and standards of independent and collaborative practice of the psychiatric nurse practitioner.	8-09
Nur-Y	544	Differential Diagnosis of Medical and Psychiatric Mimics 2 Prereq Nurs 581, 582, or c//. Nursing theoretical differential assessment and management principles of physical/psychiatric symptomatology in determining diagnoses and implementing appropriate treatment.	8-09
Nur-Y	545	Advanced Concepts of Psychiatric/Mental Health Nursing: Children and Adolescents 5 (3-6) Prereq Nurs 541, 543 or permission of instructor. Advanced study of intervention models for psychopathologies evidenced during childhood and adolescence; practicum emphasizes assessment, psychiatric diagnosis, and psychotherapeutic intervention.	8-09
Nur-Y	547	Practice Management for the Psychiatric Nurse Practitioner 2 Prereq last semester of NP program. Evaluation of the role of the psychiatric nurse practitioner across a variety of health care contexts, examining current practice issues.	8-09
Nur-Y	555	Community-Based/Population-Focused Nursing Internship V 1-9 May be repeated for credit; cumulative maximum 9 hours. Prereq Nurs 550, 552, 554, 556, 564, or permission of instructor. Application and integration of theory, research findings, and community analyses/macro-level intervention strategies in performing community-based/population-focused nursing. S, F grading.	8-09
Nur-Y	557	At-Risk Populations in the First Decade of Life 3 Prereq admission to FNP program. Analysis of biopsychosocial health risks of the first decade of life using models of risk and resiliency in advanced nursing practice.	8-09
Nur-Y	558	Care Management with At-Risk Older Child and Adolescent Populations 3 Prereq graduate standing in nursing or by permission. Analysis of biopsychosocial health risks of older children and adolescents using models of risk and resiliency in advanced nursing practice.	8-09
Nur-Y	559	Advanced Nursing Practice with At-Risk Child and Youth Populations Practicum V 2-4 Prereq graduate standing in nursing or by permission; Nurs 557 and 558 or c//. Application of concepts/models of childhood risk and resiliency in advanced nursing practice with community-based at-risk older children and adolescents.	8-09
Nur-Y	560	Promoting Health of Community-Based Adults V 2-4 Analysis and evaluation of strategies, interventions, and programs to promote the health of at-risk adult community populations.	8-09
Nur-Y	571	Adult and Elders: Inpatient Management of Chronic Problems 6 (3-9) Prereq Nurs 562, 563, 581, c// in 575. Diagnosis and treatment of inpatient adults and elders with low to medium acuity.	8-09
Nur-Y	572	Nursing Science: Chronic Biobehavioral Nursing Outcomes 6 (3-9) Prereq admission to graduate program. Concepts, theories and research relevant to preventing and managing chronic conditions across the lifespan.	8-09
Nur-Y	579	Vulnerable Populations: The Homeless 3 Prereq graduate standing in nursing or by	8-09

		permission. Analysis of factors placing persons at risk for homelessness; proposal	
Nur-Y	582	of policy changes based on research and experiential learning.	8-09
INUI- Y	382	Advanced Physiology and Pathophysiology II 3 Prereq graduate standing in nursing. Advanced cellular and system physiology/ pathophysiology related to health care of individuals with neuroendocrine, gastrointestinal, and immune diseases.	8-09
Nur-Y	583	Promoting Health of Community-Based Elders V 3-4 Prereq graduate standing in nursing. Advanced practice role in assessment, nursing intervention and public policy regarding multidimensional physical, emotional, and social problems of community-based elderly.	8-09
Nur-Y	594	Nursing Care of Children in a School Setting 3(2-3) or 4(3-3) Prereq graduate standing in nursing. Assessment of the school age population including high risk students; development, management, and evaluation of school health services.	8-09
Nur-Y	596	Post-Master's Psychiatric Nurse Internship V 1-9 May be repeated for credit; cumulative maximum 9 hours. Prereq completion of course work for a clinical nurse specialist in psychiatric mental health nursing or psychiatric nurse practitioner, malpractice insurance as an ARNP with prescriptive authority, by interview only. Supervised performance of the ARNP role in psychiatric nursing care for patients presenting primary psychiatric disorders.	8-09
Nurs	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Nurs	307	Assertiveness Training for Nurses 2 Prereq junior standing; major in nursing. Assertion techniques and conflict management skills in personal and nursing situations; integrating theoretical concepts into practical situations. S, F grading.	8-09
Nurs	391	Concepts of Caring 2 Explores nursing concept of caring using personal narratives, storytelling, and literary discussions to foster practices of mutuality, constructed knowing, and heightened sensitivity.	8-09
Nurs	537	Role Analysis: Advanced Practice 2 (1-3) Prereq admission to FNP program. Emphasis on role analysis including interdisciplinary relationships, consultative skills, responsibility, activities, and functions of the advanced practice nurse.	8-09
Nurs	538	Technology in Nursing 2 Prereq graduate standing in nursing. Impact of technology in nursing practice, research and education with resulting changes in roles, practice models and values.	8-09
Nurs	540	Family and Partner Psychotherapy 4 (2-6) Prereq Nurs 541, 543; psych/mental health nursing major or permission of instructor. Introduction to theory and practice of family/partner therapy including role of therapist in treatment of family as a unit.	8-09
Nurs	542	Role Development and Practice Management for the Psychiatric Mental Health Practitioner 2 Prereq admission to the PMHNP program or permission of instructor. Advanced practice role development, definition of scope and standards of independent and collaborative practice of the psychiatric nurse practitioner.	8-09
Nurs	545	Advanced Concepts of Psychiatric/Mental Health Nursing: Children and Adolescents 5 (3-6) Prereq Nurs 541, 543 or permission of instructor. Advanced study of intervention models for psychopathologies evidenced during childhood and adolescence; practicum emphasizes assessment, psychiatric diagnosis, and psychotherapeutic intervention.	8-09
Nurs	555	Community-Based/Population-Focused Nursing Internship V 1-9 May be repeated for credit; cumulative maximum 9 hours. Prereq Nurs 550, 552, 554, 556, 564, or	8-09

		permission of instructor. Application and integration of theory, research findings, and community analyses/macro-level intervention strategies in performing community-based/population-focused nursing. S, F grading.	
Nurs	557	At-Risk Populations in the First Decade of Life 3 Prereq admission to FNP program. Analysis of biopsychosocial health risks of the first decade of life using models of risk and resiliency in advanced nursing practice.	8-09
Nurs	558	Care Management with At-Risk Older Child and Adolescent Populations 3 Prereq graduate standing in nursing or by permission. Analysis of biopsychosocial health risks of older children and adolescents using models of risk and resiliency in advanced nursing practice.	8-09
Nurs	559	Advanced Nursing Practice with At-Risk Child and Youth Populations Practicum V 2-4 Prereq graduate standing in nursing or by permission; Nurs 557 and 558 or c//. Application of concepts/models of childhood risk and resiliency in advanced nursing practice with community-based at-risk older children and adolescents.	8-09
Nurs	560	Promoting Health of Community-Based Adults V 2-4 Analysis and evaluation of strategies, interventions, and programs to promote the health of at-risk adult community populations.	8-09
Nurs	573	Ecology of Nursing Inquiry II 2 Prereq Nurs 536. Ecological concepts relevant to nursing science to devise components of a formal research plan.	8-09
Nurs	579	Vulnerable Populations: The Homeless 3 Prereq graduate standing in nursing or by permission. Analysis of factors placing persons at risk for homelessness; proposal of policy changes based on research and experiential learning.	8-09
Nurs	583	Promoting Health of Community-Based Elders V 2-4 Prereq graduate standing in nursing. Advanced practice role in assessment, nursing intervention and public policy regarding multidimensional physical, emotional, and social problems of community-based elderly.	8-09
Nurs	596	Post-Master's Psychiatric Nurse Internship V 1-9 May be repeated for credit; cumulative maximum 9 hours. Prereq completion of course work for a clinical nurse specialist in psychiatric mental health nursing or psychiatric nurse practitioner, malpractice insurance as an ARNP with prescriptive authority, by interview only. Supervised performance of the ARNP role in psychiatric nursing care for patients presenting primary psychiatric disorders.	8-09
Nutr	500	Seminar in Nutrition 1 May be repeated for credit; cumulative maximum 5 hours. Seminar on current research issues in nutrition.	8-09
Nutr	507	Advanced Nutrition Metabolism 3 Prereq A S 406 or 408; 504, MBioS 303. Same as A S 507.	8-09
Nutr	508	Seminar-Written 2 May be repeated for credit. Same as FSHN 508.	8-09
Nutr	513	Mineral and Vitamin Metabolism 4 Prereq A S 406 or 408; MBioS 303. Same as A S 513.	8-09
Nutr	520	Research Methods in Human Nutrition 3 Prereq FSHN 130 or 233; Rec FSHN 426 or 436; statistics course. Same as FSHN 520.	8-09
Nutr	526	Advanced Community Nutrition 3 Prereq 300-400-level nutrition course. Same as FSHN 526.	8-09
Nutr	531	Advanced Lifecycle Nutrition 2 Rec 300-400-level lifecycle nutrition course; c// FSHN 436. Same as FSHN 531.	8-09

Nutr	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
Nutr	800	Doctoral Research, Dissertation and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
P R	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
P R	483	Special Topics: Study Abroad V 1-15 May be repeated for credit. Prereq by interview only. S, F grading.	8-09
P R	511	Public Relations Theory and Application 3 Theory and practice of public relations; its function in organizations and its role in society.	8-09
P/T	543	Scientific Writing 1 Prereq two semesters of graduate work in the biomedical sciences, with lab rotations. A highly personalized course designed to help graduate students develop writing skills for biomedical science careers.	8-09
P/T	556	Insecticides: Toxicology and Mode of Action 1 Prereq biochemistry, organic chemistry, physiology, plant or animal physiology. Same as Entom 556.	8-09
P/T	557	Herbicides: Toxicology and Mode of Action 1 Prereq biochemistry, organic chemistry, physiology, plant or animal physiology. Same as Entom 557.	8-09
P/T	558	Pesticide Topics 1 Prereq biochemistry, organic chemistry, physiology, plant or animal physiology. Same as Entom 558.	8-09
PEACT	116	Gymnastics 1 (1-1) A, S, F grading.	8-09
PEACT	124	Tap Dancing 1 (1-1) A, S, F grading.	8-09
PEACT	147	Beginning Rollerskating and Rollerblading 1 (1-1) A, S, F grading.	8-09
PEACT	224	Intermediate Tap Dance 1 (1-1) A, S, F grading.	8-09
PEACT	245	Intermediate Fencing Men 1 (1-1) A, S, F grading.	8-09
PEACT	246	Intermediate Fencing Women 1 (1-1) A, S, F grading.	8-09
PEACT	259	Advanced Volleyball 1 (1-1) A, S, F grading.	8-09
PEACT	281	Intermediate Roller Hockey 1 (1-1) A, S, F grading.	8-09
PEACT	282	Competitive Roller Hockey 1 (1-1) A, S, F grading.	8-09
PharP	450	Wellness and Preventive Medicine 3 Principles and techniques of health education and preventive medicine.	8-09
PharP	451	Pharmacy Practice 2 Prereq first-year pharmacy student. Introductory foundation to pharmacy practice including discussion, debates and practical application to establish early connections, vision, professionalism and requisite critical thought processes.	8-09
PharP	456	Early Practice Experience I 1 (0-3) Prereq PharP 450. Practical experience which introduces knowledge and skills related to patient education, disease management, and medical self-care. For PharmD students only. S, F grading.	8-09
PharP	457	Early Practice Experience II 1 (0-3) Prereq PharP 450, 456. Continued practical experience in using knowledge and skills related to patient education, disease management, and medical self-care as well as one-on-one mentoring of other students. For PharmD students only. S, F grading.	5-10
PharP	505	Applied Patient Care V: Integrated Patient Care 1 (0-3) Prereq PharP 504. Integration of pharmaceutical care with an interdisciplinary emphasis using patient cases and human patient simulation.	8-09

PharP	511	Advanced Pharmacotherapeutics I 1 Pharmacotherapy of infectious diseases. S, F grading.	1-10
PharP	512	Advanced Pharmacotherapeutics II 1 Pharmacotherapy of cardiovascular disorders. S, F grading.	1-10
PharP	513	Advanced Pharmacotherapeutics III 1 Pharmacotherapy of musculoskeletal disorders. S, F grading.	1-10
PharP	514	Advanced Pharmacotherapeutics IV 1 Pharmacotherapy of pulmonary diseases. S, F grading.	1-10
PharP	515	Advanced Pharmacotherapeutics V 1 Pharmacotherapy of renal diseases. S, F grading.	1-10
PharP	516	Advanced Pharmacotherapeutics VI 1 Pharmacotherapy of hematology and oncology diseases. S, F grading.	1-10
PharP	517	Advanced Pharmacotherapeutics VII 1 Pharmacotherapy of endocrine disorders. S, F grading.	1-10
PharP	518	Advanced Pharmacotherapeutics VIII 1 Pharmacotherapy of gastrointestinal disorders. S, F grading.	1-10
PharP	519	Advanced Pharmacotherapeutics VIIII 1 Pharmacotherapy of neuropsychiatric disorders. S, F grading.	1-10
PharP	525	Practical Psychiatric Drug Therapy for Clinicians 3 Prereq Nurs 311 or graduate standing in nursing program. Review of practical psychiatric drug therapy for physicians, pharmacists, mental health professionals, and others working in the mental health field.	8-09
PharP	531	Clinical Research Methods I: Pharmacoeconomics 2 Prereq PharS 533P, PharP 552P. Pharmacoeconomics and biostatistics.	8-09
PharP	538	Parenteral Products 2 (1-3) Prereq PharS 437, 533P. Preparation of intravenous admixtures, parenteral nutrition; pharmacotherapy of fluid/electrolyte disorders, parenteral nutrition, and emergency medications.	5-10
PharP	541	Physical Assessment 2 (1-3) Prereq PharP 538P, 552P, PharS 543P. Collection and evaluation of patient information; monitoring efficacy and toxicity of pharmacotherapy: physical assessment and clinical laboratory values. S, F grading.	1-10
PharP	542	Nonprescription/Herbal Products 2 Prereq PharP 553P, 558P. Pharmacotherapy of nonprescription medications and herbal products.	1-10
PharP	552	Pharmacotherapy I 5 Prereq PharS 533P, 542P. Series of modules that provide the foundation of pathophysiology and treatment of various diseases.	8-09
PharP	553	Pharmacotherapy II 5 Prereq PharP 552P, PharS 543P. Series of modules that provide the foundation of pathophysiology and treatment of various diseases, including infectious diseases, cancer chemotherapy, renal impairment, and critical care issues.	1-10
PharP	554	Pharmacotherapy III 5 Prereq PharP 552P, PharS 543P. Series of modules that provide the foundation of pathophysiology and treatment of various diseases, including cardiovascular diseases, endocrine disorders, psychiatric disorders, and neurological disorders.	5-10
PharP	557	Clinical Pharmacokinetics V 1-2 May be repeated for credit; cumulative maximum 2 hours. Prereq PharS 533. Applications of pharmacokinetic principles to safe and effective therapeutic management of individual patients in a clinical setting.	1-10

PharS	546	Selective Toxicity 3 Prereq PharS 541P. Structure-activity relationships, mechanisms of action, and pharmacodynamics of drugs that demonstrate selective	8-09
PharS	545	Quality Management 1	8-09
PharS	542	Pharmacological Basis of Therapeutics II 4 Prereq PharS 541P. Structure activity relationship, mechanism of action, medication-related effects, therapeutic uses, adverse reactions, and drug interactions of peripheral nervous system and cardiovascular medications.	8-09
PharS	541	Pharmacological Basis of Therapeutics I 3 Prereq c// PharS 540P. Molecular pharmacology and drug action; drug development; genetic factors and biochemical processes involved in drug disposition; drug interactions; and micronutrients.	8-09
PharS	533	Pharmaceutics III 3 Prereq PharS 332, 531P, 532P. Pharmacokinetics of medication absorption, distribution, and elimination; medication regimen design.	8-09
PharS	532	Pharmaceutics II 3 Prereq PharS 531P. The study of the interaction between dosage forms and various biological systems; drug delivery to the gastrointestinal tract, respiratory tract, eye and skin.	8-09
PharS	531	Pharmaceutics I 3 Prereq Chem 345; Chem 346; Math 140. Physiochemical principles underlying the design of dosage forms; survey of materials and methods used in the manufacture of dosage forms; parenteral drug delivery.	8-09
PharS	437	Pharmaceutics Laboratory 1 (0-3) Prereq PharS 531P or cc//. Formulation and extemporaneous preparation of dosage forms.	8-09
PharS	332	Pharmaceutical Calculations 1 (0-2) Prereq Math 140. The mathematics of prescription preparation and dispensing. S, F grading.	8-09
PharP	581	Pharmacy Management 3 Management principles applied to pharmacy practice; health systems; patient care strategies.	8-09
PharP	576	[M] Pharmaceutical Care Laboratory V 2 (0-6) Prereq PharP 554P or c//, PharP 575P. Practicum designed to integrate classroom-acquired knowledge, behaviors and values into professional skills.	5-10
PharP	575	Pharmaceutical Care Laboratory IV 2 (0-6) Prereq PharP 553P or c//, PharP 574P. Practicum designed to integrate classroom-acquired knowledge, behaviors and values into professional skills.	1-10
PharP	574	[M] Pharmaceutical Care Laboratory III 2 (0-6) Prereq PharP 552P or c//, PharP 573P. Practicum designed to integrate classroom-acquired knowledge, behaviors, and values into professional skills.	8-09
PharP	573	Pharmaceutical Care Laboratory II 1 (0-3) Prereq PharP 572P or c//. Practicum designed to integrate classroom-acquired knowledge, behaviors and values into professional skills.	8-09
PharP	572	Pharmaceutical Care Laboratory I 1 (0-3) Prereq PharP 451 or c//. Practicum designed to integrate classroom-acquired knowledge, behaviors and values into professional skills.	8-09
PharP	568	Extended Degree Advanced Practice Experience V 1-20 May be repeated for credit; cumulative maximum 20 hours. Prereq five pharmacotherapeutic weekend workshops complete. Advanced practice experience in various health care settings.	1-10
PharP	558	Literature Evaluation 2 Prereq PharP 553P or c//. An overview of the biomedical literature emphasizing how to evaluate the pharmaceutical and biomedical literature to provide better patient care.	1-10

		toxicity against microbes and tumor cells.	
PharS	556	Pathophysiology 3 Prereq Biol 315. Mechanisms of major disease processes; cell injury, circulatory disease, inflammation, disturbances of growth, and neoplasia.	8-09
Phil	205	Debating Social/Political/Philosophical Issues 2 (0-4) Introduction to and practice in debate techniques applied to current issues.	8-09
Phil	220	[H] Aesthetics 3 Analysis of aesthetic experience; applications to art and nature; criteria of art criticism.	8-09
Phil	240	Philosophy of Sport 3 Philosophical issues in sports (e.g. sports ethics, the role of sports in society, and the aesthetics of sports).	8-09
Phil	325	[M] History of Analytic Philosophy 3 Prereq 3 hours Phil. Selected major philosophers, issues, and trends in analytic philosophy.	8-09
Phil	490	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
Phys	345	[P] Principles of Astronomy 3 Prereq Phys 102 or 202. Same as Astr 345.	8-09
Phys	412	Modern Optics Laboratory 3 (1-6) Prereq Phys 443 or c//. Fundamentals of experimental modern optics and applications in science and engineering.	8-09
Phys	435	Astronomy and Astrophysics 3 May be repeated for credit; cumulative maximum 6 hours. Prereq Math 172; Phys 202. Same as Astr 435. Cooperative course taught jointly by WSU and UI (PHYS 485).	8-09
Phys	436	Astronomy and Astrophysics II 3 Math 172; Phys 202. Same as Astr 436.	8-09
Phys	595	Seminar in Astronomy/Astrophysics 1 May be repeated for credit; cumulative maximum 4 hours. Prereq graduate standing. Current topics in theoretical and observational aspects of modern astrophysics. S, F grading.	8-09
Pl P	331	Forest Pathology 2 (0-6) Prereq Biol 106. Parasitic and nonparasitic diseases of forest and shade trees; life histories of fungi as related to diseases.	8-09
Pl P	421	General Mycology 4 (2-6) Rec Biol 106. The structure, life histories, classification, and economic importance of the fungi. Credit not granted for both Pl P 421 and 521. Cooperative course taught by WSU, open to UI students (PLSC 421)	8-09
Pl P	490	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Pl P	529	General Plant Pathology 3 (2-3) Rec Biol 107 or 120. Graduate-level counterpart of Pl P 429; additional requirements. Credit not granted for both Pl P 429 and 529.	8-09
Pl P	534	Fungal Genetics 4 (3-3) Prereq MBioS 301. Classical and molecular approaches to genetic analyses in fungi.	8-09
Pl P	600	Special Projects or Independent Study V 1-18 May be repeated for credit. S, F grading.	8-09
Pol S	275	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Pol S	278	Special Topics: Study Abroad V 1-15 May be repeated for credit. S, F grading.	8-09
Pol S	324	[I] Black Politics 3 Political culture, roles, and strategies of Black people in the United States; impact upon public policy.	8-09
Pol S	412	[M] Russian Politics: Past, Problems, and Policies 3 Institutions and political processes of the former Soviet Union.	8-09
Pol S	413	Latin American Governments 3 Institutions and political processes of selected Latin American republics.	8-09
Pol S	495	Topics in Political Science V 1-3 May be repeated for credit; cumulative maximum	8-09

		6 hours. Selected issues and topics in political science.	
Pol S	599	Research Practicum V 1-3 May be repeated for credit; cumulative maximum 6 hours. S, F grading.	8-09
Psych	203	[S] Introduction to Critical Psychology 3 Prereq Psych 105 or 198. Same as CES 203.	8-09
Psych	409	Affective Neuroscience 3 Prereq A S 440, Biol 353, Neuro 301, or Psych 372. Same as Neuro 409. Credit not granted for both Psych 409 and 509.	8-09
Psych	509	Affective Neuroscience 3 Prereq graduate standing. Same as Neuro 509.	8-09
Psych	579	Behavioral Neuroscience 3 Prereq Psych 574 or graduate standing in Neuro or P/T. Advanced topics in neurochemistry, neurophysiology, and neuroanatomy, as they relate to behavior. Cooperative course taught by WSU, open to UI students (PSYC 567)	8-09
Psych	591	Models of Learning 3 Historical and current theory and research in learning and cognition.	8-09
Rus	120	Russian Culture 3 Taught in English. Russian culture to 1917. Cooperative course taught by WSU, open to UI students (RUS 120)	8-09
Rus	130	[H] Masterpieces of Russian Literature in Translation 3 Taught in English. The masterpieces of the great Russian and Soviet writers of the 19th and 20th centuries. Cooperative course taught by WSU, open to UI students (RUSS 130)	8-09
Rus	306	Intermediate Reading and Translation 3 Prereq Rus 204 with a grade of C or better, or equivalent. Vocabulary building contrastive English-Russian expressions, development of skills to increase reading speed and fluency. Cooperative course taught by WSU, open to UI students (RUSS 306)	8-09
Rus	307	Intermediate Speaking and Listening 3 Prereq Rus 204 with a grade of C or better, or equivalent. Systematic development of speaking and listening proficiency. Cooperative course taught by WSU, open to UI students (RUSS 203)	8-09
Rus	308	[M] Intermediate Grammar and Writing 3 Prereq Rus 204 with a grade of C or better, or equivalent. Writing practice in the language and active review of grammar. Not open to native speakers except with permission.	8-09
Rus	405	Advanced Conversation 1 May be repeated for credit; cumulative maximum 2 hours. Prereq Rus 305; oral proficiency interview. Advanced-level conversation practice in small groups with a native speaker. S, F grading.	8-09
Rus	412	Government and Politics of the Former Soviet Union 3 Same as Pol S 412.	8-09
Rus	450	[M] Seminar in Russian Studies - Themes 3 Prereq two Rus 300-level courses excluding Rus 305. Seminar focusing on a particular theme. Taught in Russian. Cooperative course taught by WSU, open to UI students (RUSS 450)	8-09
Rus	466	[T] History of the Cold War, 1944-present 3 Prereq one Tier I; three Tier II courses. Same as Hist 466.	8-09
S W	390	Social Welfare History and Policy 3 Current social welfare programs; income maintenance, health services, criminal justice, public housing, child welfare; historical development of social welfare programs.	8-09
S W	393	[M] Social Work Methods in Community Organization 3 Social legislation creation and impact on delivery services by professional/paraprofessional social workers.	8-09
S W	396	Social Work with the Aging 3 The aging process; accessing community resources	8-09

		for the elderly; applying social work methods to the elderly and their family	
		systems. Cooperative course taught by WSU, open to UI students (SOC 396).	
S W	490	[M] Social Work Field Experience V 10-15 Prereq S W 492. Placement in social agency; knowledge in the helping relationship; decision making in applied settings. S, F grading.	8-09
S W	492	Social Work Senior Seminar 1 Practicum preparation; practical advice about social work careers, resume writing, interviewing skills. S, F grading.	8-09
S W	495	Social Work in Corrections 3 Applying social work methods to the field of corrections; community-based programs for adult offenders; interventions with juvenile offenders.	8-09
Soc	270	Personal Identity and Social Interaction 3 Development of self concept in social interaction; attitudes, values, beliefs and behaviors; conformity and interpersonal influence.	8-09
Soc	366	Treatment Approaches in Alcohol Abuse/Alcoholism 3 Prereq Psych 365. Same as Psych 366.	8-09
Soc	383	[S,D] Sociology of Sexuality 3 Prereq Soc 101, Soc 102, or W St 200. Social construction of sexuality, sexual behavior, and sexuality as a part of social inequalities and institutions.	8-09
Soc	424	Sociology and Public Policy 3 Prereq Soc 101. Relationship between sociology and public policy; effective utilization of concepts and methods in applied settings.	8-09
Soc	442	[T] Political Sociology 3 Prereq Soc 101; one Tier I course; three Tier II courses. Sociological analysis of political institutions and power structures; social and cultural basis of political behavior.	8-09
Soc	446	Medical Sociology 3 Prereq Soc 101. Social factors related to health and illness; organization and change in health care; impacts of health care reform, rising costs, and aging.	8-09
Soc	455	[T] Beliefs, Norms, and Values 3 Prereq Soc 101; one Tier I course; three Tier II courses. General survey of theory and research on the common meanings - beliefs, norms, values - constructed by societies and held by individuals.	8-09
Soc	512	Theory Construction and Formalization 3 Testing; formalization of theoretical systems; adaptation of general models to specific problems.	8-09
Soc	524	Sociology and Public Policy 3 Sociological theories used to consider the rationale for public policy; development of tools for policy analysis.	8-09
Soc	546	Medical Sociology 3 Prereq Soc 101. Social factors related to health and illness; organization and change in health care; impacts of health care reform, rising costs, and aging.	8-09
Soc	555	Sociology of Gender 3 Sociological theory and research on gender and gender inequality in American society.	8-09
Soc	573	Group Processes 3 Sociological research and theory dealing with overt behavior in human interaction settings and its cognitive antecedents.	8-09
SoilS	150	[Q] Science, Society and Sustainable Food Systems 3 (2-3) Introduction to food and farming systems, emphasizing scientific principles and sustainability from environmental and socioeconomic perspectives. Cooperative course taught by WSU, open to UI students (PLSC 150)	8-09
SoilS	345	Sustainable Agriculture 3 Prereq two semesters college-level physical or biological	8-09

		science or by permission. Environmental issues in sustainable agriculture and food production; pesticides, fertilizers, organic wastes, biotechnology, quality of life, and risk-benefit assessment. Cooperative course taught jointly by WSU and UI (SOIL 345).	
SoilS	402	Special Topics in Soils V 1-3 May be repeated for credit; cumulative maximum 6 hours. Presentation and discussion of current soils science subject matter. Cooperative course taught jointly by WSU and UI (SOILS404).	8-09
SoilS	442	Analytical Methods for Soil-Plant-Water Systems 3 (2-3) Prereq SoilS 421 or 441. Standard analytical methods; e.g. major dissolved ions, organic matter concentration, carbon exchange capacity; experimental design; hypothesis testing; statistical methods. Cooperative course taught jointly by WSU and UI (SOIL 404).	8-09
SoilS	490	Composting 2 The composting industry, including biology, methods, benefits, management, regulations, and environmental concerns.	8-09
SoilS	513	Soil Physics 3 (2-3) Prereq graduate standing. Characterization of soil properties including water content and potential and hydraulic conductivity; modeling water, solute transport, erosion contamination of groundwater. Credit not granted for both SoilS 413 and 513.	8-09
SoilS	521	Environmental Soil Chemistry 3 Prereq two semesters of Chem; SoilS 201. Graduate-level counterpart of SoilS 421; additional requirements. Credit not granted for both SoilS 421 and 521.	8-09
SoilS	531	Soil Microbiology and Biochemistry 3 (2-3) Prereq MBioS 101 or 201; SoilS 201. Same as Soils 431.	8-09
SoilS	545	Field Analysis of Sustainable Food Systems 3 Graduate-level counterpart of SoilS 445; additional requirements. Credit not granted for both SoilS 445 and 545. Cooperative course taught jointly by WSU and UI (AG 545).	8-09
SoilS	551	Advanced Pedology 3 Prereq SoilS 451. Origin and development of soil; geochemical and biochemical weathering processes; dynamics of organic matter; soil development cycles. Cooperative course taught by WSU, open to UI students (SOILS551)	8-09
SoilS	575	Seminar in Remote Sensing 1 Presentation of research results and ideas on subjects relating to remote sensing.	8-09
Span	130	[H] Masterpieces of Peninsular Spanish and Latin American Literature In Translation 3 Taught in English. Introduction to Spanish and Latin American literature.	8-09
Span	309	Spanish for Native Speakers 3 Prereq Span 203 with a grade of C or better, or equivalent. Readings on Spanish-speaking communities; information and corrective feedback for native speakers of Spanish, grammatical emphasis in writing and speaking.	8-09
Span	346	Topics in Latina/o Literature 3 Prereq CES 101. Same as CES 354.	8-09
SpMgt	498	Special Topics V 1-3 May be repeated for credit; cumulative maximum 6 hours. Special topics in sport studies.	8-09
Stat	390	SAS Programming 1 SAS system, main emphasis: SAS DATA STEP and INPUT statement. S, F grading.	8-09
Stat	391	Advanced SAS Programming 1 Prereq Stat 390 or c//. Data set rearrangements, macros, report writing and effective use of SAS manuals, documentation and	8-09

~		sample program library. S, F grading.	
Stat	392	SAS Special Topics 1 May be repeated for credit. Prereq Stat 390 or c//. Special features of the SAS system including, but not limited to: SAS/GRAPH, SAS/ASSIST, SAS/IML, SAS/ACCESS, SAS/FSP, advanced macros, complex inputs. S, F grading.	8-09
Stat	404	Special Topics V 1-4 May be repeated for credit. Prereq Stat 212, 360, 412, or MgtOp 215. Special topics in statistics. Cooperative course taught by UI, open to WSU students (STAT 404).	8-09
Stat	420	Statistical Analysis of Qualitative Data 3 Prereq Math 140, 171, 201, 202, or 220; and one 3 hour statistics course. Binomial, Poisson, multinomial distribution; contingency tables, Fisher's tests, log-linear models; ordinal data; applications in biology, business, psychology, an sociology. Cooperative course taught by WSU, open to UI students (STAT 420).	8-09
Stat	499	Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
Stat	504	Special Topics 3 Prereq Stat 456. Cooperative course taught by UI, open to WSU students (STAT 504)	8-09
Stat	511	Statistics for Economics 4 Prereq college calculus and matrix algebra. Same as EconS 510.	8-09
Stat	518	Techniques in Sampling 3 Prereq MgtOp 591. Same as MgtOp 518.	8-09
Stat	531	Econometrics I 3 Prereq EconS 510. Same as EconS 511. Cooperative course taught by WSU, open to UI students (STAT 531)	8-09
Stat	534	Analyses of Mixed Linear Models 3 Prereq Stat 430. Theory and applications of generalized linear mixed models, nonlinear mixed effects models and meta- analysis. Cooperative course taught by WSU, open to UI students (STAT 534)	8-09
Stat	542	Applied Stochastic Models 3 Prereq MgtOp 215. Same as MgtOp 542.	8-09
Stat	552	Econometrics II 3 Prereq Ag Ec 501; Econ 511. Same as Ag Ec 512.	8-09
Stat	553	Econometrics III 3 Prereq EconS 502; EconS 503; EconS 512. Same as EconS 513.	8-09
Stat	554	Econometrics IV 3 Prereq EconS 502; EconS 503; EconS 513. Same as EconS 514.	8-09
Stat	586	Applied Multiple Time Series Analysis 3 Prereq MgtOp 516. Same as MgtOp 586.	8-09
Stat	700	Master's Research, Thesis, and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
T & L	304	Introduction to Middle Level Education 2 (1-3) Prereq T & L 300. Study of adolescents; middle level organization and instructional strategies including field component at middle schools.	8-09
T & L	319	Literacy Practicum 1 (0-3) Practicum for students serving as literacy tutors in schools and agencies; methodologies, at-risk issues and community-school partnerships. S, F grading.	8-09
T & L	335	Bilingual/Bicultural Education 3 Same as CES 356.	8-09
T & L	355	Chicanas/os and the Educational System 3 Same as CES 355.	8-09
T & L	409	Curriculum and Assessment for Bilingual/ESL Education 3 Prereq T & L 333; T & L 339 or 414. Curriculum development for assessment of language minority students.	8-09
T & L	412	Language and Cultural Factors in Mathematics 3 Prereq T & L 352. For candidates	8-09

		admitted to teacher preparation and experienced teachers. Research and instructional strategies related to linguistic and cultural influences on learning math. Credit not granted for both T & L 412 and 512.	
T & L	431	Innovations in Reading 2 Aspects of teaching reading; current programs and trends; activities and materials for enrichment. Credit not granted for both T & L 431 and 530.	8-09
T & L	433	Children's Literature in the Curriculum 2 Theory and classroom applications for selecting and using literature and storytelling in content areas; reading, writing, language development, the arts. Credit not granted both T & L 433 and 532.	8-09
T & L	452	Content Area Reading and Study Skills Practicum V 1-3 May be repeated for credit; cumulative maximum 3 hours. For candidates admitted to teacher preparation and experienced teachers. Development and delivery of vocabulary, comprehension, and study skills.	8-09
T & L	462	Corrective Reading in the Classroom 2 For candidates admitted to teacher preparation and experienced teachers. Investigation, formulation, application of informal and formal assessment for classroom instruction; specific needs of children with reading difficulties.	8-09
T & L	472	Technology for Language Learning 3 Prereq T & L 333, 335, or graduate standing. Computer technologies addressing the needs of language minority students and their teachers (including audio, video, graphics, and text).	8-09
T & L	473	Teaching Foreign Language in the Elementary School 3 Fluency in a language other than English required. Theory and methods of teaching foreign languages in the elementary schools.	8-09
T & L	511	Teaching Poetry to Children and Young People 3 Elements and forms of poetry for children and young people; selection and utilization in the school curriculum.	8-09
T & L	573	Children's Literature and Hands-On Science 3 Prereq for candidates admitted to graduate teacher preparation. Students learn how to bring together language arts and science curricula to instill in children a curiosity about the world around them.	8-09
T & L	586	Issues in At-risk Education V 2-3 School and community resources to assist at-risk students and families.	8-09
Theat	463	Seminar in Theatre Design 3 (0-6) May be repeated for credit; cumulative maximum 9 hours. Prereq Theat 163. Sketching, mechanical drawing, watercolors, model building, and use of theatrical materials and techniques.	8-09
Theat	702	Master's Special Problems, Directed Study, and/or Examination V 1-18 May be repeated for credit. S, F grading.	8-09
V An	413	Advanced Anatomy 3 (1-6) May be repeated for credit; cumulative maximum 6 hours. Prereq V M 512P. Microscopic and gross anatomy of selected organ systems.	8-09
V An	499	Special Problems V 1-4 May be repeated for credit. Cooperative course taught jointly by WSU and UI (VS 404). S, F grading.	8-09
V An	600	Special Projects or Independent Study V 1-18 May be repeated for credit. Cooperative course taught jointly by WSU and UI (VS 504). S, F grading.	8-09
V An	700	Master's Research, Thesis, and/or Examination V 1-18 May be repeated for credit. For MS in veterinary science only. S, F grading.	8-09
V An	800	Doctoral Research, Dissertation, and/or Examination V 1-18 May be repeated for	8-09

		credit. For PhD in veterinary science only. S, F grading.	
V M	527	Clinical Animal Behavior V 1-4 May be repeated for credit; cumulative maximum 8 hours. Prereq veterinary medicine student. Participation in the treatment of animals with behavioral problems and in animal behavior training classes for clients and their animals. S, M, F grading.	8-09
VM	541	Fish Disease Diagnostics and Control 2 2 (1-2) Prereq veterinary medicine major. Current fish disease diagnostics techniques crucial to management and control of disease in wild or confined populations. Cooperative course taught by UI, open to WSU students (FISH 524).	8-09
V M	555	Surgery Laboratory II 1 (0-3) Prereq c// in V M 553P. Surgical exercises minimizing use of living animals. S, M, F grading.	8-09
V M	560	Clinical Problem Solving V 1-3 May be repeated for credit; cumulative maximum 4 hours. Prereq veterinary medicine student. Web-based clinical problem solving course designed to enhance problem-solving skills using simulated patients. S, M, F grading.	8-09
V M	575	Small Animal Theriogenology 1 Prereq veterinary medicine student. Information on management and disorders of the canine and feline reproductive systems as it relates to veterinary practice. S, M, F grading.	8-09
V M	581	Equine Orthopedic Sports Medicine 1 Prereq VM 574P. 15 one-hour presentation/discussion sessions as an advanced supplement to VM 628P. Not available for audit. S, M, F grading.	8-09
V M	586	Analytic Epidemiology 2 (1-3) Prereq statistics course. Problem-solving methods related to health events and other occurrence phenomena.	8-09
V M	601	[M] Small Animal Medicine 4 (0-12) Prereq fourth year in veterinary medicine. Theory and practice of small animal medicine; hospital rotation in all phases. S, F grading. S, F grading.	8-09
V M	602	Small Animal Surgery 4 (0-12) Prereq veterinary medicine student. Surgical cases in clinic, ward round, case discussions by students, seminars by faculty, designed surgical exercises. S, M, F grading.	8-09
V M	618	Veterinary Dentistry V 1-4 May be repeated for credit; cumulative maximum 4 hours. Prereq veterinary medicine student. Clinical experience, laboratory exercises, and instructional sessions to increase proficiency in clinical dentistry. S, M, F grading.	8-09
V M	619	Small Animal Clinical Behavior V 1-4 Prereq veterinary medicine student. Diagnosing, preventing, and managing common behavioral problems encountered in private practice. S, M, F grading.	8-09
V M	634	Epidemiology of Diseases V 1-4 May be repeated for credit; cumulative maximum 8 hours. Prereq veterinary medicine student. Field research on the epidemiology of a selected disease problem including project design, data collection and completion of a paper. S, M, F grading.	8-09
V M	639	Small Animal Theriogenology V 1-4 Prereq veterinary medicine student. Hands-on experience in diagnosis, treatment, prevention and management of disorders related to canine and feline reproduction. S, M, F grading.	8-09
V M	652	Technical and Diagnostic Radiology V 1-4 May be repeated for credit; cumulative maximum 4 hours. Prereq veterinary medicine student. Laboratory exercises and	8-09

		instructional sessions to increase proficiency in clinical diagnostic radiology. S, M, F grading.	
V Mic	536	Diagnostic Microbiologic Conference 1 (0-3) May be repeated for credit. Prereq graduate student in veterinary science. Identification of animal pathogens in clinical material.	8-09
V Mic	537	Diagnosis of Viral and Rickettsial Diseases of Domestic Animals 3 (1-6) Prereq V M 534P, 535P, 546P. Clinical, pathological, and laboratory diagnosis of viral and rickettsial diseases of domestic animals.	8-09
V Mic	562	Molecular Diagnostic Microbiology 1 (0-3) May be repeated for credit; cumulative maximum 3 hours. Prereq V Mic 541 or c//. Discussion and molecular laboratory for detection and identification of infectious agents for the diagnosis of animal diseases.	8-09
V MS	575	Equine House Officer Rounds 1 May be repeated for credit; cumulative maximum 6 hours. Prereq DVM or graduate standing. Weekly small group discussion of problems in equine medicine, surgery or reproductive medicine using current or recent case material from the Veterinary Teaching Hospital.	8-09
V MS	583	Advanced Anesthesiology 2 Prereq DVM degree. Advanced veterinary anesthesiology as applied to clinical practice.	8-09
V MS	594	Advanced Small Animal Surgery 3 (2-3) May be repeated for credit; cumulative maximum 6 hours. Prereq DVM degree. Clinical experimental techniques.	8-09
V MS	595	Advanced Laboratory Diagnosis V 1-3 May be repeated for credit; cumulative maximum 6 hours. Prereq DVM degree. Advanced clinical laboratory diagnosis and interpretation.	8-09
V Ph	529	Integrative Neuroscience 3 Prereq graduate standing; biochemistry course. Same as Neuro 529. Cooperative course taught by WSU, open to UI students (ZOOL 529).	8-09
V Ph	531	Neuroscience Laboratory Rotation 1 (0-3) May be repeated for credit; cumulative maximum 2 hours. Prereq graduate standing. Same as Neuro 531. S, F grading.	8-09
V Ph	541	Biochemistry 3 Prereq Chem 346. Intermediate biochemistry; introduction to metabolism and the chemical and physical properties of biomolecules. Cooperative course taught by UI, open to WSU students (MMBB 541).	8-09
V Ph	542	Biochemistry 3 Prereq V Ph 541. Intermediate biochemistry; introduction to metabolism and the chemical and physical properties of biomolecules. Cooperative course taught by UI, open to WSU students (MMBB 542).	8-09
V Ph	557	Advanced Mammalian Physiology 4 Prereq V Ph 555. Function and control of mammalian organ systems.	8-09
V Ph	590	Seminar 1 May be repeated for credit; cumulative maximum 4 hours. Same as Neuro 590. S, F grading.	8-09
V Ph	592	Research Seminar 3 May be repeated for credit; cumulative maximum 6 hours. Same as Neuro 592.	8-09
W St	130	[H] Masterpieces of German Literature in Translation 3 Same as Ger 130.	8-09
W St	255	[S,D] Chicana/o History 3 Same as CES 255.	8-09
W St	301	Topics in Women's Studies V 1-3 May be repeated for credit; cumulative maximum 9 hours. May be repeated for credit; cumulative maximum 9 hours.	8-09
W St	311	Topics in Women's Studies V 1-3 May be repeated for credit; cumulative maximum	8-09

		9 hours. Focused study of subjects/issues relating to women.	
W St	380	[S] History of Medicine 3 Same as Hist 380.	8-09
W St		Cross-Cultural Gender and Kinship 3 Prereq Anth 101 or Soc 101. Same as Anth 402.	8-09