

Approved by Faculty Senate 2/29/09

## MEMORANDUM

TO: Deans and Chairs  
 From: Becky Bitter, Assistant Registrar  
 DATE: 12 February 2009  
 SUBJECT: Minor Change Bulletin No. 2

The courses listed below reflect the minor curricular changes approved by the catalog editor since approval of the last Minor Change Bulletin. The column to the far right indicates the date each change becomes effective.

Prefix	Course Number	Revise Drop	Current	Proposed	Effective Date
A S	360	Revise	<b>Meat Science 3</b> (2-3) Prereq Biol 107. Anatomy, slaughter, classification, and processing of meat animal species. Special clothing and equipment required. Cooperative course taught jointly by WSU and UI ( <del>ANSC 472</del> ).	<b>Meat Science 3</b> (2-3) Prereq Biol 107. Anatomy, slaughter, classification, and processing of meat animal species. Special clothing and equipment required. Cooperative course taught jointly by WSU and UI ( <u>AVS 363</u> ).	5-09
A S	451	Revise	<b>Endocrine Physiology 3</b> Prereq Biol 106; Biol 107; MBioS 303. <del>Structure and physiology of glands of internal secretion and their hormonal effects on processes of growth, development, metabolism, and production of vertebrates; minor emphasis on invertebrates.</del> Credit not granted for both A S 451 and 551. Cooperative course taught jointly by WSU and UI (ANSC 451).	<b>Endocrine Physiology 3</b> Prereq Biol 106; Biol 107; MBioS 303. <u>Anatomy, physiology, and biochemistry of endocrine systems and hormone action; emphasis on comparative, veterinary, and biomedical models.</u> Credit not granted for both A S 451 and 551. Cooperative course taught jointly by WSU and UI (ANSC 451).	5-09
A S	551	New date for cross listing	<b>Endocrine Physiology 3</b> Graduate-level counterpart of A S 451; additional requirements. Credit not granted for both A S 451 and 551. Cooperative course taught jointly by WSU and UI (ANSC 551).	<b>Endocrine Physiology 3</b> Graduate-level counterpart of A S 451; additional requirements. Credit not granted for both A S 451 and 551. Cooperative course taught jointly by WSU and UI (ANSC 551).	5-09
Agri	587	Revise	<b>Issues in Agriculture 3</b> Prereq admission to graduate program.	<b><u>Research in Agriculture 3</u></b> Prereq admission to graduate	5-09

			Exploration and assessment of current issues associated with domestic and international agriculture programs.	program. Exploration and assessment of current issues associated with domestic and international agriculture programs.	
<b>B E</b>	<b>320</b>	Revise	<b>[M] Mechanics of Biomaterials 4</b> (3-3) Prereq C E 211; Math 423 or c//. Composition of biological materials, mechanical and thermal properties, chemical and biological changes.	<b>[M] Mechanics of Biomaterials 4</b> (3-3) Prereq C E 211; Math 423 or c//; <u>certified B E major or instructor's permission.</u> Composition of biological materials, mechanical and thermal properties, chemical and biological changes.	5-09
<b>B E</b>	<b>340</b>	Revise	<b>Unified Systems Bioengineering I 4</b> (3-3) B E 210 or c//; <del>E E 261 or e//</del> ; Math 315; or instructor's permission. Foundation for dynamic modeling and design of physiological systems; part one of two-semester course.	<b>Unified Systems Bioengineering I 4</b> (3-3) E E 261 or c//; Math 315; <u>certified B E major or instructor's permission.</u> Foundation for dynamic modeling and design of physiological systems; part one of two-semester course.	5-09
<b>B E</b>	<b>350</b>	Revise	<b>Introduction to Cellular Bioengineering 4</b> (3-3) Prereq Chem 345; Math 315; Phys 202; MBioS 303 or c//. Integrating cellular biology and engineering science by applying quantitative engineering principles for development of cellular-based materials, diagnostic devices and sensor designs.	<b>Introduction to Cellular Bioengineering 4</b> (3-3) Prereq Biol 107; Chem 345; Math 315; MBioS 303 or c//; Phys 202; <u>certified B E major.</u> Integrating cellular biology and engineering science by applying quantitative engineering principles for development of cellular-based materials, diagnostic devices and sensor designs.	5-09
<b>Bdcst</b>	<b>466</b>	Revise	<b>Advanced Reporting and Documentary 3</b> (2-3) Prereq Bdcst 465 or 455; certified major in communications. <del>Advanced writing and reporting for radio or television; feature length reporting on news and public affairs topics; documentaries.</del>	<b><u>Digital Video Editing for News Reporting and Documentary 3</u></b> (2-3) Prereq Bdcst 465 or 455; certified major in communications. <u>Video editing for news reporting; feature-length editing for news and public affairs topics; documentaries; visual storytelling.</u>	5-09
<b>Biol</b>	<b>315</b>	Revise	<b>Gross and Microanatomy 4</b> (3-3) Prereq one semester biology. Gross and microscopic anatomy of the	<b>Gross and Microanatomy 4</b> (3-3) Prereq one semester biology; <u>sophomore standing; cumulative</u>	8-09

			human body.	<u>WSU gpa 2.5; or permission of department.</u> Gross and microscopic anatomy of the human body.	
<b>Biol</b>	<b>353</b>	Revise	<b>Mammalian Physiology</b> 4 (3-3) Prereq Biol 106; Biol 352; Rec c// in organic chemistry. Function and control at the organ-organismic level with emphasis on mammals, including humans.	<b>Mammalian Physiology</b> 4 (3-3) Prereq Biol 106; Biol 352; Rec c// in organic chemistry. Function and control at the organ-organismic level with emphasis on mammals, including humans; <u>emphasis on human health science applications.</u>	5-09
<b>BSysE</b>	<b>482</b>	Revise	<del><b>Food Process Engineering Design</b></del> 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).	<b>Food Process Engineering I</b> 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
<b>BSysE</b>	<b>483</b>	Revise	<del><b>Food Separation Processes Design</b></del> 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).	<b>Food Process Engineering II</b> 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
<b>BSysE</b>	<b>582</b>	Revise	<del><b>Food Process Engineering Design</b></del> 3 Prereq BSysE 481 or Ch E 330. Graduate-level counterpart of BSysE 482; additional requirements. Credit not granted for both BSysE 482 and 582. Cooperative course taught by WSU, open to UI students (AGE 587).	<b>Food Process Engineering I</b> 3 Prereq BSysE 481 or Ch E 330. Graduate-level counterpart of BSysE 482; additional requirements. Credit not granted for both BSysE 482 and 582. Cooperative course taught by WSU, open to UI students (AGE 587).	8-09
<b>BSysE</b>	<b>583</b>	Revise	<b>Food Separation Processes Design</b> 3 Prereq BSysE 482. Graduate-level counterpart of BSysE 483; additional requirements. Credit not granted	<b>Food Process Engineering II</b> 3 Prereq BSysE 482. Graduate-level counterpart of BSysE 483; additional requirements. Credit not granted for both BSysE 483	8-09

			for both BSysE 483 and 583.	and 583.	
<b>BSysE</b>	<b>594</b>	Revise	<del><b>Advanced Topics in Bioprocessing and Biotreatment</b></del> 3 Analysis of bioprocessing and biotreatment processes including energetics, stoichiometry, species competition, process infiltration, product separation and optimization.	<b><u>Design and Analysis of Biomass Conversion Processes and Systems</u></b> 3 Analysis of bioprocessing and biotreatment processes including energetics, stoichiometry, species competition, process infiltration, product separation and optimization.	8-09
<b>C E</b>	<b>315</b>	Revise	<b>Fluid Mechanics 3</b> Prereq M E 212; <del>Math 315</del> . Fluid statics, laminar and turbulent flow, similitude, pipe flow, boundary layer, lift and drag and measurement techniques.	<b>Fluid Mechanics 3</b> Prereq M E 212; <u>certified major in C E or instructor approval</u> . Fluid statics, laminar and turbulent flow, similitude, pipe flow, boundary layer, lift and drag and measurement techniques.	5-09
<b>C E</b>	<b>548</b>	Drop	<b>Advanced Topics in Water Quality Engineering Systems V</b> 2-4 May be repeated for credit; cumulative maximum 9 hours. Analysis and evaluation of natural water systems for retention and transport of pollutants and their associated impacts.	--N/A--	8-09
<b>C E</b>	<b>561</b>	Drop	<b>Water Resources Systems 3</b> Concepts in water development; coordination of development of other natural resources; systems approach and optimization techniques. Cooperative course taught jointly by WSU and UI (CE 523).	--N/A--	8-09
<b>CrM J</b>	<b>201</b>	Revise	<del><b>The Nature of Crime</b></del> 3 Prereq Crm J 101. Analysis of conceptions of crime and seriousness as determined by societal factors.	<b><u>Introduction to Criminological Theory</u></b> 3 Prereq Crm J 101. Analysis of conceptions of crime and seriousness as determined by societal factors.	8-09
<b>CrM J</b>	<b>385</b>	Revise	<del><b>Strategies and Policies of Punishment in Contemporary America</b></del> 3 Prereq Crm J 101. Ideologies of punishment and correction, intermediary sanctioning and reintegration policies in the criminal justice system.	<b><u>Institutional Corrections</u></b> 3 Prereq Crm J 101. Ideologies of punishment and correction, intermediary sanctioning and reintegration policies in the criminal justice system.	8-09

<b>Crm J</b>	<b>540</b>	Revise	<b>Seminar in <del>Research Evaluation</del></b> 3 Interrelationship of ideology, data, policy development, and policy implementation in public policy analysis. Cooperative course taught by WSU, open to UI students (CJ 540)	<b>Seminar in <u>Evaluation Research</u></b> 3 Interrelationship of ideology, data, policy development, and policy implementation in public policy analysis. Cooperative course taught by WSU, open to UI students (CJ 540)	5-09
<b>Crm J</b>	<b>555</b>	Revise	<b>Seminar in the Nature of Crime</b> 3 Prereq graduate standing. Individual, situational and ecological correlates of criminal behavior; data sources and empirical research.	<b>Seminar in <u>Criminological Theory</u></b> 3 Prereq graduate standing. Individual, situational and ecological correlates of criminal behavior; data sources and empirical research.	8-09
<b>Crm J</b>	<b>580</b>	Revise	<b>Women and the Criminal Justice System</b> 3 Criminal justice system's treatment of women offenders, victims, and professionals.	<b>Gender and Justice</b> 3 Criminal justice system's treatment of women offenders, victims, and professionals.	8-09
<b>CS</b>	<b>214</b>	Drop	<b>Design of Logic Circuits</b> 3 (2-3) Prereq CS 121 or 251. Design and application of combinational logic circuits with exposure to modern methods and design tools; introduction to sequential logic circuits.	--N/A--	8-09
<b>CS</b>	<b>234</b>	Drop	<b>Microprocessor Systems</b> 3 (2-3) Prereq CS 122; CS 214. Microprocessor system architecture, instruction sets and interfacing; assembly language programming.	--N/A--	8-09
<b>CS</b>	<b>253</b>	Drop	<b>Java Programming Language</b> 3 Prereq CS 121, 153, or 251. Comprehensive programming practice using Java.	--N/A--	8-09
<b>CS</b>	<b>360</b>	Revise	<b>Systems Programming</b> 4 (3-3) Prereq CS 223; CS 224; <del>CS 234</del> . Implementation of systems programs, concepts of computer operating systems; laboratory experience in using operating system facilities.	<b>Systems Programming</b> 4 (3-3) Prereq CS 223; CS 224; <u>CS 261</u> . Implementation of systems programs, concepts of computer operating systems; laboratory experience in using operating system facilities.	8-09
<b>CS</b>	<b>460</b>	Revise	<b>Operating Systems and Computer Architecture</b> 3 Prereq CS 360. Operating systems;	<b>Operating Systems</b> 3 Prereq CS 360. <u>Role and purpose of operating systems, process and</u>	8-09

			<del>computer architectures, and their interrelationships in micro, mini, and large computer systems.</del>	<u>memory management, I/O device management and drivers, file system concepts and design.</u>	
CS	464	Drop	<b>Distributed Systems Concepts and Programming</b> 3 Prereq CS 360. Concepts of distributed systems; naming, security, networking, replication, synchronization, quality of service; programming middleware including CORBA, XML, DCOM/SOAP. Credit not granted for both CS 464 and 564.	--N/A--	8-09
CS	516	Revise	<del>Algorithms</del> 3 Prereq CS 450. Discrete structures, automata, formal languages, recursive functions, algorithms, computability, and complexity.	<u>Theory of Computation</u> 3 Prereq CS 450. Discrete structures, automata, formal languages, recursive functions, algorithms, computability, and complexity.	8-09
CS	534	Drop	<b>Neural Network Design and Application</b> 3 Prereq graduate standing. Graduate-level counterpart of CS 434; additional requirements. Credit not granted for both CS 434 and 534.	--N/A--	8-09
CS	550	Drop	<b>Parallel Computation</b> 3 Prereq CS 450. Parallel machine models, principles for the design of parallel algorithms, interconnection networks, systolic arrays, computational aspects to VLSI.	--N/A--	8-09
CS	564	Drop	<b>Distributed Systems Concepts and Programming</b> 3 Prereq CS 360. Graduate-level counterpart of CS 464; additional requirements. Credit not granted for both CS 464 and 564.	--N/A--	8-09
Cst M	102	Revise	<del>Introduction to Construction and Architecture</del> 2 Introduction to the construction industry; reviewing contract documents, methods of project management and current issues pertaining to the industry.	<u>Introduction to the Built Environment</u> 2 Introduction to the construction industry; reviewing contract documents, methods of project management and current issues pertaining to the industry.	1-10
Cst M	360	Drop	<b>Introduction to Construction and</b>	--N/A--	1-10

			<b>Architecture 2</b> Introduction to the construction industry; reviewing contract documents, methods of project management and current issues pertaining to the industry. (Effective through Summer 2007) <b>Planning and Scheduling 3 (2-3)</b> Prereq certified Cst M major; Cst M 252. Planning construction processes and utilizing computer applications as they pertain to scheduling computations.		
<b>Cst M</b>	<b>456</b>	Drop	<b>Methods Procedures I 3 (2-3)</b> Prereq certified Cst M major; Cst M 371. Basic knowledge of site layout, heavy earth moving equipment, excavation and related safety issues.	--N/A--	1-10
<b>EconS</b>	<b>320</b>	Revise	<b>Money and Banking 3</b> Prereq EconS 102. Analysis of banking institutions and monetary policy in the US, with comparison to abroad.	<b>Money and Banking 3</b> Prereq <u>EconS 101</u> ; EconS 102. Analysis of banking institutions and monetary policy in the US, with comparison to abroad.	5-09
<b>EconS</b>	<b>321</b>	Revise	<b>Economics of Sports in America 3</b> Prereq EconS 101; <del>junior standing</del> . Economic aspects of American sports; fan demand; advertising; team output decisions; league/conference organization; government and sports.	<b>Economics of Sports in America 3</b> Prereq EconS 101. Economic aspects of American sports; fan demand; advertising; team output decisions; league/conference organization; government and sports.	5-09
<b>EconS</b>	<b>326</b>	Revise	<b>Aspects of Sustainable Development 3</b> Prereq junior standing. Ecological, economical, and sociological aspects of sustainable development.	<b>Aspects of Sustainable Development 3</b> Prereq <u>EconS 101</u> . Ecological, economical, and sociological aspects of sustainable development.	5-09
<b>EconS</b>	<b>327</b>	Revise	<b>International Trade and Finance 3</b> Prereq EconS 102. Analysis and description of international trade flows; commercial policy; multinational firms, foreign exchange markets; open economy macroeconomics; international monetary systems.	<b>International Trade and Finance 3</b> Prereq <u>EconS 101</u> ; EconS 102. Analysis and description of international trade flows; commercial policy; multinational firms, foreign exchange markets; open economy macroeconomics; international monetary systems.	5-09
<b>EconS</b>	<b>407</b>	Revise	<b>Decision Analysis in Economics 3</b> Prereq EconS 301; EconS 311;	<b>Decision Analysis in Economics 3</b> Prereq EconS 301; EconS 311.	5-09

			<del>EconS 330.</del> 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.	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.	
EconS	420	Revise	<b>Monetary Theory and Policy 3</b> Prereq <del>EconS 320</del> . Current issues in monetary economics with a special emphasis on policy.	<b>Monetary Theory and Policy 3</b> Prereq <u>EconS 302</u> . Current issues in monetary economics with a special emphasis on policy.	5-09
EconS	423	Revise	<b>[M] Collective Bargaining 3</b> Prereq <del>EconS 102</del> . Collective bargaining from an economic perspective: union-management negotiations in the US private sector.	<b>[M] Collective Bargaining 3</b> Prereq <u>EconS 301; EconS 311</u> . Collective bargaining from an economic perspective: union-management negotiations in the US private sector.	5-09
EconS	426	Revise	<b>Transportation Economics 3</b> Prereq <del>EconS 305</del> . Transportation economics and relevant transportation modeling; policy issues and concerns.	<b>Transportation Economics 3</b> Prereq <u>EconS 301; EconS 311</u> . Transportation economics and relevant transportation modeling; policy issues and concerns.	5-09
EconS	427	Revise	<b>Economic Development and Underdevelopment 3</b> Prereq <del>EconS 102</del> . Rec <del>EconS 305</del> . Development theories, policies, and performance of Third World economies; population, land reform, foreign trade, aid, investment, debt, dependency.	<b>Economic Development and Underdevelopment 3</b> Prereq <u>EconS 301; EconS 302</u> . Development theories, policies, and performance of Third World economies; population, land reform, foreign trade, aid, investment, debt, dependency.	5-09
EconS	533	Revise	<b>International Trade and Policy 3</b> Prereq graduate standing. <del>Economics of international trade and development with an emphasis on policy and research issues that arise from interaction of economic events in the world food economy.</del> Cooperative course taught by UI, open to WSU students (AGEC 533).	<b>International Trade and Policy 3</b> Prereq graduate standing. <u>International trade theories, policies, and research issues related to world trade with emphasis on agricultural commodity markets.</u> Cooperative course taught by UI, open to WSU students (AGEC 533).	5-09
ES/RP	285	Revise	<b>Planning for a Sustainable Environment 3</b> Prereq ES/RP 101. Ideas and information necessary to integrate environmental viability and sustainable development with other concerns of environmental	<b><u>Climate Change: Planning for a Sustainable Environment 3</u></b> Prereq ES/RP 101. Ideas and information necessary to integrate environmental viability and sustainable development	5-09

			planning.	with other concerns of environmental planning.	
ES/RP	375	Revise	<b>Aspects of Sustainable Development</b> 3 Prereq <del>junior standing</del> . Same as <del>EconS 375</del> .	<b>Aspects of Sustainable Development</b> 3 Prereq <u>EconS 101</u> . Same as <u>EconS 326</u> .	5-09
ES/RP	472	Revise	<b>Economic Development and Underdevelopment</b> 3 Prereq <del>EconS 102</del> . Rec <del>EconS 305</del> . Same as EconS 427.	<b>Economic Development and Underdevelopment</b> 3 Prereq <u>EconS 301</u> ; <u>EconS 302</u> . Same as EconS 427.	5-09
F A	471		<del><b>Digital and Photo Processes for Printmaking</b></del> 3 (0-6) May be repeated for credit. Prereq <del>F A 332</del> . Survey of digital and photo processes for printmaking.	<b>Advanced Printmaking</b> 3 (0-6) May be repeated for credit. Prereq <u>F A 370</u> or <u>371</u> . Survey of digital and photo processes for printmaking.	1-10
Fren	408	Revise	<del>[M] <b>Advanced Grammar and Writing</b></del> 3 Prereq Fren 308, or equivalent. <del>Development of advanced proficiency in writing.</del>	<b>[M] Advanced French</b> 3 Prereq Fren 308 <u>with a grade of C or better</u> , or equivalent. <u>Systematic development of language skills at the advanced level.</u>	8-09
I Bus	375	Revise	<b>Aspects of Sustainable Development</b> 3 Prereq <del>junior standing</del> . Same as EconS 326.	<b>Aspects of Sustainable Development</b> 3 Prereq <u>EconS 101</u> . Same as EconS 326.	5-09
I Bus	470	Revise	<b>International Trade and Finance</b> 3 Prereq EconS 102. Same as EconS 327.	<b>International Trade and Finance</b> 3 Prereq <u>EconS 101</u> ; EconS 102. Same as EconS 327.	5-09
I Bus	472	Revise	<b>Economic Development and Underdevelopment</b> 3 Prereq <del>EconS 102</del> . Rec <del>EconS 305</del> . Same as EconS 427.	<b>Economic Development and Underdevelopment</b> 3 Prereq <u>EconS 301</u> ; <u>EconS 302</u> . Same as EconS 427.	5-09
M E	116	Revise	<b>Engineering Computer-aided Design and Visualization</b> <del>3 (1-6)</del> 3-D solid modeling, parts, engineering drawings and assemblies; geometric dimensioning and tolerancing, 3-D visualization, computational analysis of parts and assemblies.	<b>Engineering Computer-aided Design and Visualization</b> <u>2 (0-6)</u> 3-D solid modeling, parts, engineering drawings and assemblies; geometric dimensioning and tolerancing, 3-D visualization, computational analysis of parts and assemblies.	8-09
M E	301	Revise	<b>Fundamentals of Thermodynamics</b> 3 Prereq Phys 201; Rec Math 315. Thermodynamic properties of matter, ideal and real gases, work and heat, first and second laws and their application to engineering systems. Cooperative course taught	<b>Fundamentals of Thermodynamics</b> 3 Prereq Phys 201 <u>with a grade of C or better</u> ; Rec Math 315. Thermodynamic properties of matter, ideal and real gases, work and heat, first and second laws and their application to engineering	8-09

			jointly by WSU and UI (CHE 321).	systems. Cooperative course taught jointly by WSU and UI (CHE 321).	
<b>M E</b>	<b>305</b>	Revise	<b>Thermal and Fluids Laboratory 2</b> (1-3) Prereq M E 303- <del>or c//</del> , Math 370 or c//, <del>major in engineering</del> . Instrumentation, data acquisition, and theory verification in the thermal and fluid sciences.	<b>Thermal and Fluids Laboratory 2</b> (1-3) Prereq <u>M E 301</u> ; M E 303; Math 370 or c//. Instrumentation, data acquisition, and theory verification in the thermal and fluid sciences.	5-09
<b>M E</b>	<b>313</b>	Revise	<b>Engineering Analysis 3</b> (2-3) Prereq Math 315, <del>major in engineering</del> ; computer science programming. Analysis and modeling of engineering problems utilizing numerical and mathematical techniques and computers. Cooperative course taught jointly by WSU and UI (ME 380).	<b>Engineering Analysis 3</b> (2-3) Prereq Math 315; computer science programming. Analysis and modeling of engineering problems utilizing numerical and mathematical techniques and computers. Cooperative course taught jointly by WSU and UI (ME 380).	8-09
<b>M E</b>	<b>316</b>	Revise	<b>[M] Systems Design 3</b> Prereq C E 215, MSE 201 or c//, major in engineering. Engineering design process for systems and components; design criteria, creativity, engineering economics, CAD, standards, product safety; design projects.	<b>[M] Systems Design 3</b> Prereq C E 215; <u>M E 216</u> ; <u>ME 313</u> ; MSE 201 or c//; major in engineering. Engineering design process for systems and components; design criteria, creativity, engineering economics, CAD, standards, product safety; design projects.	8-09
<b>M E</b>	<b>579</b>	Revise	<b>Advanced Topics in Design and Manufacturing</b> V 1-3 May be repeated for credit.	<b>Advanced Topics in Mechanical Engineering</b> V 1-3 May be repeated for credit.	8-09
<b>MBioS</b>	<b>494</b>	Revise	<b>Senior Project in Biochemistry</b> 1 Prereq certified major in SMB; senior standing. Written paper and seminar presentation on laboratory research project.	<b>Senior Project in Molecular Biosciences</b> 1 Prereq certified major in SMB; senior standing. Written paper and seminar presentation on laboratory research <u>or literature project</u> .	5-09
<b>MBioS</b>	<b>495</b>	Revise	<b>Internship Training</b> V 1-4 May be repeated for credit; cumulative maximum 8 hours. Prereq <del>MBioS 301, 303, or 305</del> ; by permission only. Experience in work related to specific career interests. S, F grading.	<b>Internship Training</b> V 1-4 May be repeated for credit; cumulative maximum 8 hours. Prereq by permission only. Experience in work related to specific career interests. S, F grading.	5-09
<b>MBioS</b>	<b>498</b>	Revise	<b>Directed Research</b> V 1-4 May be repeated for credit. Prereq <del>MBioS</del>	<b>Directed Research</b> V 1-4 May be repeated for credit.	5-09

			<del>301 or 303.</del> Introduction to laboratory research; requires written report and oral presentation.	Introduction to laboratory research; requires written report and oral presentation.	
<b>MBioS</b>	<b>568</b>	Revise	<b>Advanced Topics in Biochemistry</b> V 1-3 May be repeated for credit. Prereq MBioS 513 or c//. Recent research in selected areas of biochemistry.	<b>Advanced Topics in Molecular Biosciences</b> V 1-3 May be repeated for credit. Prereq MBioS <u>503</u> , 513 or c//. Recent research in selected areas of molecular biosciences.	5-09
<b>Mech</b>	<b>103</b>	Revise	<b>Engineering Graphics</b> <del>3 (1-6)</del> Orthographic theory, conventions, and visualization; isometric and oblique pictorials; geometric dimensioning and tolerancing, computer-aided drafting and solid modeling.	<b>Engineering Graphics</b> <u>2 (1-3)</u> Orthographic theory, conventions, and visualization; isometric and oblique pictorials; geometric dimensioning and tolerancing, computer-aided drafting and solid modeling.	8-09
<b>Mech</b>	<b>348</b>	Revise	<b>Dynamics Systems and Control</b> 3 Prereq certified Mech major; Mech 212; <del>Mech 313</del> . Modeling and analysis of dynamic systems, including mechanical, electrical, fluid, and thermal systems. Fundamentals of vibration analysis, control systems.	<b>Dynamics Systems and Control</b> 3 Prereq certified Mech major; Mech 212. Modeling and analysis of dynamic systems, including mechanical, electrical, fluid, and thermal systems. Fundamentals of vibration analysis, control systems.	8-09
<b>Mech</b>	<b>485</b>	Revise	<b>Computer-aided Engineering</b> 3 Prereq Mech 310 or c//; <del>Mech 313</del> . Introduction to the use of finite element techniques in engineering product design and analysis; basic concepts and applications in CAE.	<b>Computer-aided Engineering</b> 3 Prereq Mech 310 or c//. Introduction to the use of finite element techniques in engineering product design and analysis; basic concepts and applications in CAE.	8-09
<b>Med S</b>	<b>520</b>	Drop	<b>Molecular and Cellular Basis of Disease</b> 4 For WWAMI students only. Cell and tissue response to injury mechanisms of cell injury, inflammatory process, immunology, immunopathology, thrombosis, growth, neoplasia, and clinicopathological correlation. (Spring only) Cooperative course taught jointly by WSU and UI (MEDSC520). S, F grading.	--N/A--	5-09
<b>Med S</b>	<b>590P</b>	Revise	<del><b>Introduction to Critical Reading and Evaluation of Medical Literature</b></del> 1 Prereq WWAMI student. Medical literature for the	<b>Medical Information for Decision Making</b> 1 Prereq WWAMI student. Medical literature for the purpose of	5-09

			purpose of primary research, diagnosis and therapeutic and preventative intervention. Cooperative course taught by UI, open to WSU students (MED S590) S, F grading.	primary research, diagnosis and therapeutic and preventative intervention. Cooperative course taught by UI, open to WSU students (MED S590) S, F grading.	
<b>Neuro</b>	<b>403</b>	Revise	<b>[M] Cellular Neurobiology 3</b> Prereq Neuro 301; MBioS 303. Cellular and molecular interactions occurring within the nervous system.	<b>[M] Cellular Neurobiology 3</b> Prereq Neuro 301; MBioS 303; <u>certified Neuro major or minor or instructor's permission.</u> Cellular and molecular interactions occurring within the nervous system.	5-09
<b>Nurs</b>	<b>567</b>	Revise	<del><b>Primary Care: Adults and Elders</b></del> 4 (1-9) Prereq admission to FNP program; Nurs 562; Nurs 563; Nurs 581. Assessment, differential diagnosis, therapeutic intervention with adults; developmental changes; opportunities to provide diagnostic, maintenance, and follow-up care.	<b><u>Primary Care of Families: Adults and Elders</u></b> 4 (1-9) Prereq admission to FNP program; Nurs 562; Nurs 563; Nurs 581. Assessment, differential diagnosis, therapeutic intervention with adults; developmental changes; opportunities to provide diagnostic, maintenance, and follow-up care.	5-09
<b>Nurs</b>	<b>568</b>	Revise	<del><b>Primary Care: Family</b></del> 4 (1-9) Prereq admission to FNP program; Nurs 562; Nurs 563; Nurs 581. Assessment, differential diagnosis, therapeutic intervention with individuals in childbearing, childrearing, and multigenerational families.	<b><u>Primary Care of Families: Maternity Care &amp; Womens's Health</u></b> 4 (1-9) Prereq admission to FNP program; Nurs 562; Nurs 563; Nurs 581. Assessment, differential diagnosis, therapeutic intervention with individuals in childbearing, childrearing, and multigenerational families.	5-09
<b>Nurs</b>	<b>569</b>	Revise	<del><b>Primary Care: Infants, Children and Adolescents</b></del> 4 (1-9) ) Prereq admission to FNP program; Nurs 562; Nurs 563; Nurs 581. Assessment, differential diagnosis, and therapeutic intervention with infants, children, and adolescents in rural and urban settings.	<b><u>Primary Care of Families: Infants, Children and Adolescents</u></b> 4 (1-9) ) Prereq admission to FNP program; Nurs 562; Nurs 563; Nurs 581. Assessment, differential diagnosis, and therapeutic intervention with infants, children, and adolescents in rural and urban settings.	5-09
<b>PharS</b>	<b>540</b>	Revise	<del><b>Immunology and Immunopharmacology</b></del> 3 Prereq Biol 352; Chem 346; MBioS 303;	<b><u>Immunology 2</u></b> Prereq successful progress in PharmD program. Fundamentals of immunology,	1-10

			MBioS 305; MBioS 306. Basic immunology and review of prevention and treatment of infectious diseases, cancer and immune-mediated pathology; includes theory, principles, and mechanism of action of immunomodulatory agents.	<u>including the immunological mechanisms that underlie prevention and clearance of infectious diseases, and immune reactions that contribute to disease; mechanism of action of immunotherapeutic and immunomodulatory agents.</u>	
Phys	101	Revise	[P] General Physics 4 (3-3) Prereq Math 107 with a grade of C or better <del>or placement into Math 140 or higher.</del> Algebra/trigonometry-based physics; topics in mechanics, wave phenomena, temperature, and heat; oriented toward non-physical science majors.	[P] General Physics 4 (3-3) Prereq Math 107 with a grade of C or better, <u>math placement into calculus, or passing Math 140, 171, 202, or 206.</u> Algebra/trigonometry-based physics; topics in mechanics, wave phenomena, temperature, and heat; oriented toward non-physical science majors. <u>Credit not granted for more than one of Phys 101, 201, or 205.</u>	8-09
Phys	102	Revise	[P] General Physics 4 (3-3) Prereq Phys 101 with a grade of C or better; Math 107 with a C or better <del>or placement into Math 140 or higher.</del> Algebra/trigonometry-based physics; topics in electricity, magnetism, optical phenomena, relativity, and quantum theory; oriented toward non-physical science majors.	[P] General Physics 4 (3-3) Prereq Phys 101 with a grade of C or better; Math 107 with a grade of C or better, <u>math placement into calculus, or passing Math 140, 171, 202, or 206.</u> Algebra/trigonometry-based physics; topics in electricity, magnetism, optical phenomena, relativity, and quantum theory; oriented toward non-physical science majors. <u>Credit not granted for more than one of Phys 102, 202, or 206.</u>	8-09
Phys	201	Revise	[P] Physics for Scientists and Engineers I 4 (3-3) Prereq Math 171 with a grade of C or better or placement into Math 172 or higher. Calculus-based physics; topics in motion and dynamics of particles and rigid bodies, vibrations, wave phenomena, and the laws of thermodynamics.	[P] Physics for Scientists and Engineers I 4 (3-3) Prereq Math 171 with a grade of C or better or placement into Math 172 or higher. Calculus-based physics; topics in motion and dynamics of particles and rigid bodies, vibrations, wave phenomena, and the laws of thermodynamics. <u>Credit not granted for more than one of Phys 101, 201, or 205.</u>	8-09
Phys	202	Revise	[P] Physics for Scientists and	[P] Physics for Scientists and	8-09

			<b>Engineers II 4 (3-3)</b> Prereq Math 172 with a grade of C or better or placement into Math 273 or higher; Phys 201 with a grade of C or better. Calculus-based physics, topics in electricity, magnetism, electromagnetics, D/C and A/C circuits, optics, reflection, refraction, interference, diffraction, polarization.	<b>Engineers II 4 (3-3)</b> Prereq Math 172 with a grade of C or better or placement into Math 273 or higher; Phys 201 with a grade of C or better. Calculus-based physics; topics in electricity, magnetism, electromagnetics, DC and AC circuits, optics, reflection, refraction, interference, diffraction, polarization. <u>Credit not granted for more than one of Phys 102, 202, or 206.</u>	
Phys	205	Revise	<b>[P] Physics for Scientists and Engineers I - Honors 5 (3-5)</b> Prereq Math 171. Calculus-based physics, honors section; mechanics, sound, and thermodynamics.	<b>[P] Physics for Scientists and Engineers I - Honors 5 (3-5)</b> Prereq Math 171. Calculus-based physics, honors section; mechanics, sound, and thermodynamics. <u>Credit not granted for more than one of Phys 101, 201, or 205.</u>	8-09
Phys	206	Revise	<b>[P] Physics for Scientists and Engineers II - Honors 5 (3-5)</b> Prereq Math 172; Phys 201 or 205. Calculus-based physics, honors section; electricity, magnetism, light, topics in modern physics.	<b>[P] Physics for Scientists and Engineers II - Honors 5 (3-5)</b> Prereq Math 172; Phys 201 or 205. Calculus-based physics, honors section; electricity, magnetism, light, topics in modern physics. <u>Credit not granted for more than one of Phys 102, 202, or 206.</u>	8-09
Phys	514	Revise	<b>Optoelectronics Lab I <del>V 1-3 (0-3 to 0-12)</del></b> May be repeated for credit; cumulative maximum 3 hours. Prereq graduate standing. Experiments with optical systems: Imaging, interference, coherence, information storage/processing, gas and solid state lasers, optical fibers, and communications systems.	<b>Optoelectronics Lab I 1 (0-3)</b> May be repeated for credit; cumulative maximum 3 hours. Prereq graduate standing. Experiments with optical systems: Imaging, interference, coherence, information storage/processing, gas and solid state lasers, optical fibers, and communications systems.	8-09
Pol S	541	Revise	<b>Seminar in <del>Research-Evaluation</del></b> 3 Same as Crm J 540.	<b>Seminar in <u>Evaluation Research</u></b> 3 Same as Crm J 540.	5-09
Soc	375	Revise	<b>Aspects of Sustainable Development 3</b> Prereq <del>junior standing</del> . Same as EconS 326.	<b>Aspects of Sustainable Development 3</b> Prereq <u>EconS 101</u> . Same as EconS 326.	5-09