

Senate Approval 3/5/09

**UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 2
Spring 2009**

---COURSES---

The courses listed below reflect the undergraduate major curricular changes approved by the Catalog Subcommittee since approval of the last Undergraduate Major Change Bulletin. All new and revised courses are printed in their entirety under the headings Current and Proposed, respectively. The column to the far right indicates the date each change becomes effective.

Prefix	Course Number	New Revise Drop	Current	Proposed	Effective Date
Engr	107	New	-- N/A --	Introductory Mathematics for Engineering Applications 3 (2-3) Application of mathematics principles to engineering problems across engineering disciplines; concepts from trigonometry to differential equations necessary for sophomore engineering courses.	5-09
FS	N/A	New Prefix	-- N/A --	New prefix "FS" for Food Science	8-09
FS	110	Revise	Introduction to Food Science 3 Chemistry, microbiology, and processing of foods; concepts of food preservation, packaging and marketing; food additives and regulations. Field trip required. Cooperative course taught jointly by WSU and UI (FST 110). Cooperative course taught jointly by WSU and UI (FST 110).	(FSHN) Introduction to Food Science 3 Chemistry, microbiology, and processing of food <u>and food products</u> ; concepts of food preservation, packaging and marketing of foods; <u>world food issues</u> . Field trip required. Cooperative course taught jointly by WSU and UI (<u>FS</u> 110).	8-09
FS	113	Revise	Vines and Wines 3 The importance of viticulture including world wine regions and enology (winemaking); wine quality. Cooperative course taught by WSU, open to UI students (FST 113).	(FSHN) Introduction to Vines and Wines 3 The importance of viticulture (<u>grape growing</u>) and enology (winemaking); wine quality. Cooperative course <u>taught jointly by WSU and UI</u> (<u>FS</u> 113).	8-09
FS	220	Revise	Food Safety and Quality 3 Regulation, safety and quality of food products, including microbiological, chemical, and sensory properties of food. Cooperative course taught by UI, open to WSU students (FST 220).	(FSHN) Food Safety and Quality 3 Regulation, safety and <u>wholesomeness</u> of food products; microbiological, chemical, and <u>physical risks associated with</u> food. Cooperative course <u>taught jointly by WSU and UI</u> (<u>FS</u> 220).	8-09
FS	303	Revise	[M] Food Processing 3 (2-3)	(FSHN) Food Processing 3 (2-3)	8-09

			Prereq MBioS 305; MBioS 306; Chem 345. Specialized techniques and concepts of food processing and marketing . Field trip required. Cooperative course taught by WSU, open to UI students (FS 303).	Prereq Chem 345; <u>FS 110, 220</u> ; rec MBioS 305; MBioS 306. Specialized techniques, concepts <u>and practices</u> of food processing. Field trip required. Cooperative course <u>taught jointly by WSU and UI</u> (FS 303).	
FS	304	Revise	Cereal Products 2 Prereq organic chemistry . Technical principles relating to the production and commercial processing of legume and cereal foods. Field trip required. Cooperative course taught by UI, open to WSU students (FST 407).	(FSHN) Cereal Products 2 Prereq Chem 345. Technical principles <u>related</u> to the production and commercial processing of legume and cereal foods. Field trip required. Cooperative course <u>taught jointly by WSU and UI</u> (FS 407).	8-09
FS	401	Revise	Topics in Food Science and Human Nutrition V 1-3 May be repeated for credit; cumulative maximum 6 hours. Selected topics in food science and human nutrition . Credit not granted for both FSHN 401 and 501.	(FSHN) Topics in Food Science V 1-3 May be repeated for credit; cumulative maximum 6 hours. Selected topics in food science.	8-09
FS	406	Revise	Evaluation of Dairy Products I 1 Identifying defects in dairy products and relating these defects to their probable cause; remedies. Credit not granted for both FSHN 406 and 506. Cooperative course taught by WSU, open to UI students (FST 406).	(FSHN) Evaluation of Dairy Products I 1 Identifying defects in dairy products and relating these defects to their probable cause; remedies. Credit not granted for both FS 406 and 506. Cooperative course <u>taught jointly by WSU and UI</u> ((FS 406).	8-09
FS	407	Revise	Evaluation of Dairy Products II 1 (0-3) Prereq FSHN 406. Identifying defects in dairy products and intense training for Collegiate Dairy Products Evaluation Competition. Credit not granted for both FSHN 407 and 507. Cooperative course taught by WSU, open to UI students (FST 407).	(FSHN) Evaluation of Dairy Products II 1 (0-3) Prereq FS 406. Identifying defects in dairy products and intense training for Collegiate Dairy Products Evaluation Competition. Credit not granted for both FS 407 and 507. Cooperative course <u>taught jointly by WSU and UI</u> (FS 407).	8-09
FS	408	Revise	Seminar in Food Science 1 May be repeated for credit; cumulative maximum 2 hours. Prereq junior or senior standing in Food Science or permission of instructor. Critical analysis of contemporary topics in food science. Organization and communication of Scientific information. Cooperative course taught jointly by WSU and UI	(FSHN) Seminar in Food Science 1 May be repeated for credit; cumulative maximum 2 hours. Prereq junior or senior standing in Food Science. Critical analysis of contemporary topics in food science. Organization and communication of Scientific information. Cooperative course taught jointly by WSU and UI (FS	8-09

			(FST 408). S, F grading.	408). S, F grading.	
FS	416	Revise	Food Microbiology 3 Prereq MBioS 305; MBioS 306. Purpose for enumeration, detection and identification of microorganisms in food products; physical, chemical and environmental factors influencing growth and survival of foodborne microorganisms; pathogenic and spoilage microorganisms in food and their control. Cooperative course taught by UI, open to WSU students (FST 416).	(FSHN) Food Microbiology 3 Prereq MBioS 305, 306. Purpose for enumeration, detection and identification of microorganisms in food products; physical, chemical and environmental factors influencing growth and survival of foodborne microorganisms; pathogenic and spoilage microorganisms in food and their control. Cooperative course <u>taught jointly by WSU and UI</u> (FS 416).	8-09
FS	417	Revise	Food Microbiology Laboratory 2 (0-6) Prereq c// in FSHN 416. Lab for FSHN 416. Cooperative course taught jointly by WSU and UI (FST 417).	(FSHN) Food Microbiology Laboratory 2 (0-6) Prereq c// in FS 416. Lab for FS 416. Cooperative course taught jointly by WSU and UI (FS 417).	8-09
FS	422	Revise	Sensory Evaluation of Food and Wine 4 (3-3) Prereq Stat 212 and age 21 or older. Theory, principles and application of Sensory evaluation techniques in appearance, aroma, flavor and texture of foods and wine. Credit not granted for both FSHN 422 and 522. Cooperative course taught by WSU, open to UI students (FST 422).	(FSHN) Sensory Evaluation of Food and Wine 3 Prereq Stat 212. Theory, principles and application of sensory evaluation techniques in appearance, aroma, flavor and texture of foods and wine. Credit not granted for both FS 422 and 522. Cooperative course <u>taught jointly by WSU and UI</u> (FS 422).	8-09
FS	423	New	-- N/A --	Sensory Evaluation of Food and Wine Lab 1 (0-3) Prereq FS 422 or c//; rec age 21 or older. Practical application of FS 422 including theory, principles and application of sensory evaluation techniques for appearance, aroma, flavor and texture of foods and wine. Credit not granted for both FS 423 and 523. Cooperative course taught jointly by WSU and UI (FS 423).	8-09
FS	429	Revise	Dairy Products 4 (3-3) Prereq MBioS 101 or 301; Chem 345; MBioS 303. Dairy chemistry, microbiology, sanitation, product development and processing from cow to consumer. Credit not granted for both FSHN 429 and 529. Cooperative course taught by WSU, open to UI students (FST	(FSHN) Dairy Products 3 Prereq Chem 345; MBioS 101 or 301; MBioS 303. Dairy chemistry, microbiology, sanitation, product development and processing from cow to consumer. Credit not granted for both FS 429 and 529. Cooperative course <u>taught jointly by WSU and UI</u> (FS 429).	8-09

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FS	430	New	-- N/A --	Dairy Products Lab 1 (0-3) Prereq FS 429 or c//. Hands-on skills formulating, processing, evaluating and analyzing dairy products using communication and critical thinking skills. Credit not granted for both FS 430 and 530. Cooperative course taught jointly by WSU and UI (FS_430).	8-09
FS	432	Revise	[M] Agricultural Processing 3 Rec Math 140 or 202; Phys 101. Same as AgTM 433. Cooperative course taught by WSU, open to UI students (ASM 433).	<u>(FSHN 433) [M] Food Engineering 3</u> FS 303. <u>Food engineering for improving the efficiency of food processing operations and quality processed food; heat transfer, steam, air-vapor mixtures, refrigeration and fluid flow.</u> Cooperative course taught jointly by WSU and UI (FS 432).	8-09
FS	433	Revise	Agricultural Processing Lab 1 (0-3) Rec AgTM 433 or c//. Same as AgTM 434. Cooperative course taught by WSU, open to UI students (FST 434).	<u>(FSHN 434) Food Engineering Lab 1 (0-3)</u> Prereq <u>FS 432 or c//.</u> <u>Laboratories, problem sessions and group discussions.</u> Cooperative course taught jointly by WSU and UI (FS 433).	8-09
FS	460	Revise	Food Chemistry 3 Prereq Chem 345. Rec MBioS 303. Fundamentals of food chemistry; composition of foods and the changes that occur during processing. Cooperative course taught by WSU, open to UI students (FS 460).	<u>(FSHN) Food Chemistry 3</u> Prereq Chem 345, MBioS 303. Fundamentals of food chemistry; composition of foods and the changes that occur during processing. Cooperative course <u>taught jointly by WSU and UI (FS 460).</u>	8-09
FS	461	Revise	[M] Food Chemistry Laboratory 1 (0-3) -Rec FSHN 460 or c//. Experiments related to the properties, reactions, and interactions of chemical components of foods. Cooperative course taught by WSU, open to UI students (FS 461).	<u>(FSHN) [M] Food Chemistry Laboratory 1 (0-3)</u> Prereq <u>FS 460 or c//.</u> Experiments related to the properties, reactions and interactions of chemical components of foods. Cooperative course <u>taught jointly by WSU and UI (FS 461).</u>	8-09
FS	462	Revise	Food Analysis 4 (2-6) Prereq MBioS 305; MBioS 306. Rec Chem 345. Introductory food analysis; methods common to many food commodities. Cooperative course taught by WSU, open to UI students (FST	<u>(FSHN) Food Analysis 4 (2-6)</u> Prereq Chem 345, MBioS 305, 306. Introductory food analysis; methods common to many food commodities. Cooperative course <u>taught jointly by WSU and UI (FS 462).</u>	8-09

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FS	464	Revise	Food Toxicology 3 Prereq permission of instructor. General principles of toxicologic evaluation of chemicals which enter the food chain; toxicology of food additives, colors, preservatives, drugs, pesticides and natural toxins in foods and risk characterization. Credit not granted for both FSHN 464 and 564. Cooperative course taught by UI, open to WSU students (FST 464).	(FSHN) Food Toxicology 3 Prereq MBioS 303. General principles of toxicologic evaluation of chemicals which enter the food chain; toxicology of food additives, colors, preservatives, drugs, pesticides and natural toxins in foods and risk characterization. Credit not granted for both FS 464 and 564. Cooperative course <u>taught jointly by WSU and UI</u> (FS 464).	8-09
FS	465	Revise	Wine Microbiology and Processing 3 Prereq MBioS 303; MBioS 305; MBioS 306. Technical principles related to the processing and fermentation of wines with an emphasis on microbiology. Credit not granted for both FSHN 465 and 565. Cooperative course taught by WSU, open to UI students (FST 465).	(FSHN) Wine Microbiology and Processing 3 Prereq MBioS 303, 305, 306. Technical principles related to the processing and fermentation of wines with an emphasis on microbiology. Credit not granted for both FS 465 and 565. Cooperative course <u>taught jointly by WSU and UI</u> (FS 465).	8-09
FS	466	Revise	Wine Microbiology and Processing Laboratory 1 (0-3) Prereq FSHN 465 or c//. Hands-on winemaking; application of chemical microbiological methods for wine analysis. Field trip required.	(FSHN) Wine Microbiology and Processing Laboratory 1 (0-3) Prereq FS 465 or c//. Hands-on winemaking; application of chemical microbiological methods for wine analysis. Field trip required. <u>Cooperative course taught jointly by WSU and UI</u> (FS 466).	8-09
FS	470	Revise	Advanced Food Technology 3 Prereq FSHN 303, 416, 433, 460 or c//. Physical principles of food preservation and recent advances in food technology. Credit not granted for both FSHN 470 and 570. Cooperative course taught by WSU, open to UI students (FST 470).	(FSHN) Advanced Food Technology 3 Prereq FS 303, 416, 433, 460 or c//. Physical principles of food preservation and recent advances in food technology. Credit not granted for both FS 470 and 570. Cooperative course <u>taught jointly by WSU and UI</u> (FS 470).	8-09
FS	489	Revise	Food Product Development 3 (1-6) Prereq FSHN 303, 416, 460; senior standing. Application of food chemistry, food processing/engineering and microbiology; knowledge to formulate a new food product. Cooperative course taught by UI,	(FSHN) Food Product Development 3 (1-6) Prereq FS 303, 416, 460; senior standing. Application of food chemistry, food processing/engineering and microbiology; knowledge to formulate a new food product. Cooperative course <u>taught jointly</u>	8-09

			open to WSU students (FST 489).	by <u>WSU and UI</u> (FS 489).	
FS	495	Revise	Internship in Food Science and Human Nutrition 2 May be repeated for credit; cumulative maximum 4 hours. Prereq sophomore standing. Students work full time in industrial assignments with prior approval of advisor and industrial supervisor. S, F grading.	(FSHN) Internship in Food Science 2 May be repeated for credit; cumulative maximum 4 hours. Prereq sophomore standing. Students work full time in industrial assignments with prior approval of advisor and industrial supervisor. S, F grading.	8-09
FS	496	Revise	Internship in Winery 2 Prereq sophomore standing. Industrial assignments at a regional, national or international winery. S, F grading.	(FSHN) Internship in a Winery 2 <u>May be repeated for credit; cumulative maximum 4 hours.</u> Prereq sophomore standing. Industrial assignments at a regional, national or international winery. S, F grading.	8-09
FS	499	Revise	Special Problems V 1-4 May be repeated for credit. S, F grading.	(FSHN) Special Problems V 1-4 May be repeated for credit. S, F grading.	8-09
Hort	113	Revise	Vines and Wines 3 Same as FSHN 113.	Introduction to Vines and Wines 3 Same as FS 113.	8-09
MBioS	130	Revise	[B] Nutrition for Living 3 Information related to the interaction of nutrients in the body and factors that govern nutrient requirements.	(FSHN) [B] Nutrition for Living 3 Information related to the interaction of nutrients in the body and factors that govern nutrient requirements.	8-09
MBioS	233	Revise	Human Nutrition 3 Rec biology or chemistry course; or Biol 251 or 315. Applying principles of chemistry, biology, and physiology to the study of nutrition emphasizing nutrient functions, nutrient requirements and impact of diet on health and disease.	(FSHN) Human Nutrition 3 Rec biology or chemistry course; or Biol 251 or 315. Applying principles of chemistry, biology, and physiology to the study of nutrition emphasizing nutrient functions, nutrient requirements and impact of diet on health and disease.	8-09
V M	567P	New	-- N/A --	Applied Comparative Reproductive Physiology 1 Prereq veterinary medicine student. Applied comparative reproduction physiology of domestic animals. S, M, F grading	8-09