College of Agriculture and Life Sciences

2009-2011

I. SIGNIFICANT TRENDS:

The College of Agriculture became the College of Agriculture and Life Sciences. The new name more adequately describes the overall purpose and mission of the college. It is an accurate reflection of the science, technology, and education which are central to the College. Since the Agricultural Education curriculum in the Department of Agricultural Education and Studies reflects the mission of the College, this name was changed to Agriculture and Life Sciences Education. The Entomology curriculum was changed to Insect Science to more adequately describe its focus. A new major in Global Resource Systems was added to the curricula. Global Resource Systems is a cutting-edge, interdisciplinary, college-wide interdepartmental major that emphasizes global and cross cultural engagement while equipping students with strong technical competency in a resource area. A new minor in Meat Science was approved to help address industry demand for people with expertise in this area. The development of college-wide student outcomes which began in the 2007-2009 catalog was greatly expanded as a part of the core curriculum for students in the College. Among the outcomes are leadership, entrepreneurship, international perspectives, and life-long learning.

II. CURRICULA, MAJORS, MINORS ADDED OR DROPPED: Majors Added: Global Resource Systems

Minors Added: Meat Science

Majors, Minors, Certificates Dropped: Agricultural Systems Technology/Graduate Minor

III. NEW COURSES:

Agricultural Education and Studies

- AGEDS 312 Science With Practice. (1-3). Cr. 2.
- AGEDS 488 Methods of Teaching Agricultural Mechanics. (2-3). Cr. 3.

Agronomy

- AGRON 311Professional Internship in Agronomy. (1-0). Cr. 1.AGRON 317LPrinciples of Weed Science Laboratory. (0-3). Cr. 1.AGRON 417Evolutionary Ecology of Weeds. (3-0). Cr. 3.AGRON 477Soil Physics. (3-0). Cr. 3.AGRON 484Organic Agricultural Theory and Practice. (3-0). Cr. 3.
- AGRON 558 Laboratory Methods in Soil Chemistry. (2-3). Cr. 3.
- AGRON 553 Laboratory Methods in Son Chemistry. (2-5). Cl. 3 AGRON 563 Soil Formation and Transformation. (2-4). Cr. 4.
- AGRON 563 Soil Formation and Transformation. (2-4). Cr. 4.

Animal Science

AN S 306 Equine Evaluation. (0-6). Cr. 3.

Entomology

	80
ENT 374L	Insects and Our Health Laboratory. (0-3). Cr. 1.
ENT 410	Insect-Virus Interactions: a Molecular Perspective. (3-0). Cr. 3.
ENT 510	Insect-Virus Interactions: a Molecular Perspective. (3-0). Cr. 3.
	Horticulture
HORT 122	Hands-On Home Horticulture. (1-0). Cr. 1.
HORT 233	Foliage Plants for Interiorscapes. (2-2). Cr. 3.
HORT 280	Landscape Graphics. (3-0). Cr. 3.
HORT 471L	Vegetable Production and Management Laboratory. (0-2). Cr. 1.
HORT 480	Contemporary Issues in the Green Industry. (3-0). Cr. 3.
HORT 481	Advanced Garden Composition. (0-5). Cr. 3.

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Natural Resource Ecology and Management

NREM 111	NREM Transitions Learning Community Seminar. (1-0). Cr. 0.
NREM 114	Developing Responsible Learners and Effective Leaders. (2-0). Cr. 2.

Sustainable Agriculture

SUSAG 584 Organic Agricultural Theory and Practice. (3-0). Cr. 3.

Technology Systems Management

TSM 114Developing Responsible Learners and Effective Leaders. (2-0). Cr. 2.TSM 325Biorenewable Systems. (3-0). Cr. 3.

IV. COURSES DROPPED:

Animal Ecology

- A ECL 3011 Iowa Natural History. Cr. 4.
- A ECL 360 Natural History of Aquatic Biota. (0-3). Cr. 1.

Agronomy

- AGRON 306 Use of Weather Data in Agriculture. (1-1). Cr. 1.
- AGRON 332 Crop Quality, Traits, and Utilization. (1-2). Cr. 2.

Animal Science

- AN S 313 Exercise Physiology of Animals. (2-0). Cr. 2.
- AN S 321 Livestock and the Environment. (2-0). Cr. 2.
- AN S 321L Environmental Management of Livestock Laboratory. (0-3). Cr. 1.
- AN S 451 Animal Molecular Biology. (2-3). Cr. 3.
- AN S 551 Animal Molecular Biology. (2-3). Cr. 3.
- AN S 680 Modern Views of Nutrition. Cr. R.

Entomology

- ENT 311 Bugs in the Classroom. (2-3). Cr. 3.
- ENT 360 Insect Behavior. (3-0). Cr. 3.
- ENT 560 Insect Behavior. (3-0). Cr. 3.
- ENT 573 Advanced Insect Pest Management. (3-3). Cr. 4.

Forestry

FOR 603 Tree Growth and Development. (4-0). Cr. 4.

Horticulture

- HORT 344 Advanced Residential Landscape Design Studio. (0-4). Cr. 2.
- HORT 345 History of Gardening. (2-0). Cr. 2.
- HORT 433 Tropical Plants and Interiorscapes. (2-3). Cr. 3.

Technology Systems Management

TSM 426 Technology Applications in Bioprocessing. (2-2). Cr. 3.

V. NUMBER, CREDIT, AND TITLE CHANGES:

Animal Ecology

A ECL 442 Contact Hrs to: (2-3).A ECL 515 Title to: Ecology of Freshwater Invertebrates, Plants, and Algae.

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Agricultural Education and Studies

- AGEDS 401 Title to: Planning Agriculture and Life Sciences Education Programs.
- AGEDS 402 Title to: Methods of Teaching in Agriculture and Life Sciences.
- AGEDS 417 Title to: Supervised Teaching in Agriculture and Life Sciences. Credit Hrs to: Cr. 1-16.
- AGEDS 501 Title to: Planning Agriculture and Life Sciences Education Programs.
- AGEDS 502 Title to: Methods of Teaching in Agriculture and Life Sciences.

Agronomy

- AGRON 316 Number changed from: 230.
- AGRON 338 Contact Hrs to: (2-3).
- AGRON 402 Title to: Watershed Hydrology.
- AGRON 446 Title to: International Issues and Challenges in Sustainable Development. Contact Hrs to: (2-2).
- Credit Hrs to: Cr. 2-3.
- AGRON 459 Title to: Environmental Soil and Water Chemistry.
- AGRON 463 Number changed from: 473. Title to: Soil Formation and Landscape Relationships.
- AGRON 4631 Number changed from: 473I. Title to: Soil Formation and Landscape Relationships.
- AGRON 485 Title to: Soil and Environmental Microbiology.
- AGRON 510 Contact Hrs to: (3-0).
- AGRON 517 Title to: Evolutionary Ecology of Weeds.
- AGRON 534 Contact Hrs to: (2-0).
- AGRON 536 Contact Hrs to: (1-0).
- AGRON 539 Contact Hrs to: (2-0).
- AGRON 541 Credit Hrs to: Cr. 2-3.
- AGRON 547 Contact Hrs to: (2-0).
- AGRON 559 Title to: Environmental Soil and Water Chemistry.
- AGRON 565 Credit Hrs to: Cr. 0.5-1.5.
- AGRON 575 Title to: Soil Formation and Transformation.
- AGRON 585 Title to: Soil and Environmental Microbiology.
- AGRON 594 Contact Hrs to: (1-0).
- AGRON 595 Contact Hrs to: (3-0).
- AGRON 616 Title to: Advanced Topics in Plant Physiology and Biochemistry.
- AN S 331 Title to: Domestic Animal Reproduction.
- AN S 335 Title to: Dairy Cattle Evaluation. Credit Hrs to: Cr. 3.

Animal Science

- AN S 331 Title to: Domestic Animal Reproduction.
- AN S 335 Title to: Dairy Cattle Evaluation. Credit Hrs to: Cr. 3.
- AN S 520 Number changed from: 519.
- AN S 565 Credit Hrs to: Cr. 0.5-1.5.

Genetics

- GEN 110 Credit Hrs to: Cr. 1.
- GEN 409 Number changed from: 411.
- GEN 410 Title to: Analytical Genetics.

Horticulture

- HORT 338 Contact Hrs to: (2-3).
- HORT 444 Contact Hrs to: (2-3). Credit Hrs to: Cr. 3.
- HORT 461 Title to: Fruit and Nut Crop Production and Management.
- HORT 471 Contact Hrs to: (2-0). Credit Hrs to: Cr. 2.
- HORT 565 Credit Hrs to: Cr. 0.5-1.5.

Microbiology

- MICRO 381 Title to: Environmental Systems I: Introduction to Environmental Systems.
- MICRO 485 Title to: Soil and Environmental Microbiology.
- MICRO 565 Credit Hrs to: Cr. 0.5-1.5.
- MICRO 585 Title to: Soil and Environmental Microbiology.

Natural Resource Ecology and Management

- NREM 402 Title to: Watershed Hydrology.
- NREM 496 Credit Hrs to: Cr. 1-5.
- NREM 596 Credit Hrs to: Cr. 1-5.

Plant Pathology

PL P 565 Credit Hrs to: Cr. 0.5-1.5.

Technology Systems Management

TSM 272	Title to: Occupational Safety Management.
TSM 598	Title to: Technical Communications for a Master's Degree.
TSM 698	Title to: Technical Communications for a Doctoral Degree.

VI. COURSES ADDED FOR NONMAJOR GRADUATE CREDIT

AGRON	484
HORT	471L

VII. COURSES DROPPED FOR NONMAJOR GRADUATE CREDIT

AGRON	306
ENT	311
HORT	433
TSM	426

VIII. SUMMARY OF CHANGES: Note: a cross-listed course should be counted only once - with the "primary" department or program. So in Section III New Courses and Section IV Courses Dropped, a cross-listed course should be listed only once.

Summary of Changes									
Department	New	Dropped	Number	Credit	Title				
A ECL	0	2	0	0	1				
AGEDS	2	0	0	1	5				
AGRON	7	2	6	3	11				
AN S	1	6	2	2	2				
ENT	3	4	0	0	0				
FOR	0	1	0	0	0				
GEN	0	0	2	1	1				
HORT	6	3	0	3	1				
MICRO	0	0	0	1	3				
NREM	2	0	0	2	1				
PL P	0	0	0	1	0				
SUSAG	1	0	0	0	0				
TSM	2	1	0	0	3				
Total College of Agriculture and Life Sciences	24	19	10	14	28				

IX. Changes since Proposed Departmental Changes for General Review

X. JUSTIFICATION FOR NEW COURSES (insert excel spreadsheet)

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Process:

August 15: Proposed Changes for General Review report is compiled and available for download.September-November: FSCC begins review and approval of college reports.December: Final approval by the Faculty Senate.

Summary Table

Department Name	Designator and Course Number		major ite credit		quired rogram	Experimental Offering		ering	<u>Justification for:</u> •courses offered experimentally •not required in a program	
		No	Yes	No	Yes	No	Term	Year	Enroll.	
Ag. Ed. & Studies	AGEDS 312	x		x			F	2007	16	Part of college-wide Science with Practice
							S	2008	19	program
							F	2008	24	
Ag. Ed. & Studies	AGEDS 488	x			x		F	2008	13	
Agronomy	AGRON 311	x		x			F	2007	2	Industry demand, alternative to 310
							S	2008	1	
							F	2008	11	
Agronomy	AGRON 317L	x		x			F	2008	7	
Agronomy	AGRON 417	x		x		x				Replaces Agron 517, industry demand
Agronomy	AGRON 477	x		x		x				Industry demand
Agronomy	AGRON 484		x	x			S	2008	11	
				ļ		<u> </u>	F	2008	12	
Agronomy	AGRON 558	ļ		х						Reinstate course left out of 07-09 catalog
Agronomy	AGRON 563			x		х				Dual listed with Agron 463

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Animal Science	AN S 306	x		x			S	2008	13	
Entomology	ENT 374L	x		x			S	2008	2	lab to supplement lecture
Entomology	ENT 410	x		x			F	2007	4	
Entomology	ENT 510	x		x			F	2007	4	
Horticulture	HORT 122	x		x						Supplemental lab for Hort 121
Horticulture	HORT 233	x			x		F	2008	23	
Horticulture	HORT 280	x			x					
Horticulture	HORT 471L		x	x						Supplemental lab for Hort 471
Horticulture	HORT 480	x			x					
Horticulture	HORT 481	x			x					
NREM	NREM 111	х		x			F	2007	37	
							S`	2008	28	
							F	2008	43	
NREM	NREM 114	х		х			F	2007	2	
							S`	2008	3	
SUS AG	SUS AG 584			x			S	2008	35	
TSM	TSM114	x		x						cross list with FS HN, Hort, and Ent.
TSM	TSM 325	x			x	x				