

# Course Schedule - Fall 2005

## Animal Sciences

### 100 **Intro to Animal Sciences** Credit: 4 hours.

(ANSCI 100) Survey of beef and dairy cattle, companion animals, horses, poultry, sheep, and swine. Includes the importance of product technology and the basic principles of nutrition, genetics, physiology, and behavior as they apply to breeding, selection, feeding, and management. Lecture and lab.

Additional Lab Fee Required. Students must register for one lab and one lecture section.

CRN	Type	Section	Time	Days	Location	Instructor
31288	laboratory	AB1	08:00 AM - 09:50 AM	T	room ARENA Stock Pavilion	Parrett, D
31288: ACES Lab 10.00 dollars.						
31293	laboratory	AB2	10:00 AM - 11:50 AM	T	room ARENA Stock Pavilion	Parrett, D
31293: ACES Lab 10.00 dollars.						
31294	laboratory	AB3	10:00 AM - 11:50 AM	R	room ARENA Stock Pavilion	Parrett, D
31294: ACES Lab 10.00 dollars.						
31296	laboratory	AB4	03:00 PM - 04:50 PM	R	room ARENA Stock Pavilion	Parrett, D
31296: ACES Lab 10.00 dollars.						
31298	laboratory	AB5	03:00 PM - 04:50 PM	T	room ARENA Stock Pavilion	Parrett, D
31298: ACES Lab 10.00 dollars.						
31300	lecture	AL1	02:00 PM - 02:50 PM	MWF	room 150 Animal Sciences Laboratory	Parrett, D

### 103 **Working With Farm Animals** Credit: 2 hours.

(ANSCI 103) Introductory course that will provide novice students with the fundamentals of animal-animal and animal-human interactions for domestic farm animals. Emphasizes hands-on experiences to develop a background in the concepts and practice of recognizing and understanding the animal's physiology and behavior, animal well being, and animal responses to human interactions. Prerequisite: ANSC 100.

CRN	Type	Section	Time	Days	Location	Instructor
29832	laboratory	AB1	03:00 PM - 04:50 PM	T	room 125 David Kinley Hall	Cobb, A; Hurley, W; Parsons, C
29835	lecture	AL1	02:00 PM - 02:50 PM	R	room 131 Animal Sciences Laboratory	Cobb, A; Hurley, W; Parsons, C

**109 Meat Pricing and Preparation** Credit: 2 hours.

(ANSCI 109) General approach to meat utilization with emphasis on selecting, grading, cutting, and pricing meat for the home, restaurant, and food service industry; includes laboratory. When appropriate, field trips are taken to area commercial establishments. See Class Schedule approximate cost.

Field Trips, when appropriate. Students must register for one lab and one lecture section.

CRN	Type	Section	Time	Days	Location	Instructor
29837	laboratory	AB1	01:00 PM - 02:50 PM	R	room 120 Meat Science Laboratory	McKeith, F
29839	lecture	AL1	01:00 PM - 01:50 PM	T	room 120 Meat Science Laboratory	McKeith, F

**110 Life With Animals and Biotech** Credit: 3 hours.

(ANSCI 110) Lecture/discussion course that will provide students an overview of biotechnology and animals. Focuses on biotechnological achievements involving animals and how they influence the global development of agriculture, medicine, and industry. Topics will be covered from scientific, discovery, historical, social, and political perspectives.

This course satisfies the General Education Criteria for a Life Sciences course.

CRN	Type	Section	Time	Days	Location	Instructor
29841	lecture-discussion	A	03:00 PM - 03:50 PM	M	room 131 Animal Sciences Laboratory	Kesler, D
	lecture-discussion	A	03:00 PM - 04:50 PM	W	room 131 Animal Sciences Laboratory	Kesler, D
: Discovery, and Life Sciences course. First Year Discovery Program Course. Registration restricted to freshmen. Students should enroll in only one Discovery course. Students who enroll in more than one Discovery course may be dropped from the additional Discovery courses. For course descriptions, see the Discovery Program booklet. For a course listing of Discovery courses, see the front portion of this Class Schedule.						
40336	lecture-discussion	B	12:00 PM - 01:15 PM	MW	room 212 1205 W Oregon	Kesler, D
40336: Camp Honors/Chanc Schol, and Life Sciences course. For Chancellor's Scholars, others may enroll with consent of instructor and Director of the Campus Honors Program.						

**119 Meat Technology** Credit: 3 hours.

(ANSCI 119) Student participation in the transformation of live animals through harvest and carcass fabrication into food products for human consumption; includes laboratory. Purchase of personal equipment is required; see Class Schedule for approximate cost.

CRN	Type	Section	Time	Days	Location	Instructor
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29844	laboratory	AB1	06:00 AM - 08:50 AM	TR	room 120 Meat Science Laboratory	McKeith, F
29842	conference	AC1	12:00 PM - 12:50 PM	M	room 120 Meat Science Laboratory	McKeith, F

**199 Undergraduate Open Seminar** Credit: 1 to 5 hours.

(ANSCI 199) An experimental course on a special topic in animal sciences. Topic may not be repeated except in accordance with the Code. May be repeated to a maximum of 12 hours. No more than 12 hours may be counted toward graduation.

CRN	Type	Section	Time	Days	Location	Instructor
10232	independent study		ARRANGED			
10232: Instructor Approval Required						
29846	lecture-discussion	A	01:00 PM - 02:50 PM	MW	room 107 Animal Sciences Laboratory	Graves, C; Curtis, S
29846: 2 hours Discovery course. Topic: Humans and Animals Need Each Other. First Year Discovery Program Course. Registration restricted to freshmen. Students should enroll in only one Discovery course. Students who enroll in more than one Discovery course may be dropped from the additional Discovery courses. For course descriptions, see the Discovery Program booklet. Meets 17-Oct-05 - 09-Dec-05.						
41185	lecture-discussion	LS	08:30 AM - 09:50 AM	TR	room 107 Animal Sciences Laboratory	Schook, L
41185: 3 hours Topic: Discovering the Genome: Social, Political and Global Implications. First Year Discovery Program Course. Registration restricted to freshmen. Students should enroll in only one Discovery course. Students who enroll in more than one Discovery course may be dropped from the additional Discovery courses. For course descriptions, see the Discovery Program booklet.						

**201 Principles of Dairy Production** Credit: 3 hours.

(ANSCI 201) Surveys the dairy industry; examines principles of breeding, selection, reproduction, feeding, milking and management of dairy cattle. Prerequisite: ANSC 100.

CRN	Type	Section	Time	Days	Location	Instructor
29854	laboratory	AB1	02:00 PM - 02:50 PM	T	room 107 Animal Sciences Laboratory	Dahl, G; Hutjens, M
29857	lecture	AL1	01:00 PM - 01:50 PM	TR	room 107 Animal Sciences Laboratory	Dahl, G; Hutjens, M
45908	online	XM	07:00 PM - 08:00 PM	M		Dahl, G; Hutjens, M

45908: Academic Outreach restrictions and assessments apply, see <http://www.outreach.uiuc.edu> OnlineMeets 26-Sep-05 - 05-Dec-05. AO Tuition 239, AO Tuition 215, AO Fees 36, and AO Fees 36.00 dollars.

**206 Horse Management** Credit: 3 hours.

(ANSCI 206) Focus on the principles of managing horses from birth through breeding; topics include reproductive physiology, breeding management, nutrition, diseases, parasites, herd health programs, genetics, facility design and exercise physiology. Prerequisite: ANSC 340 and ANSC 331.

CRN	Type	Section	Time	Days	Location	Instructor
29863	lecture-discussion	1	01:00 PM - 02:50 PM	T	room ARENA Stock Pavilion	Kline, K
	lecture-discussion	1	01:00 PM - 02:50 PM	T	room 131 Animal Sciences Laboratory	Kline, K
	lecture-discussion	1	01:00 PM - 01:50 PM	R	room 131 Animal Sciences Laboratory	Kline, K

**207 Companion Animal Management** Credit: 3 hours.

(ANSCI 207) Care and management of companion animals, emphasizing the dog and cat. Subject matter includes such topics as domestication and development of breeds, reproduction and genetics, principles of behavior and training, major infectious diseases, and nutrition and feeding management. Intended for students interested in professional careers with companion animals. Prerequisite: Sophomore standing; ANSC 100 or IB 104 or equivalent.

CRN	Type	Section	Time	Days	Location	Instructor
29867	lecture-discussion	A	02:00 PM - 03:20 PM	TR	room 150 Animal Sciences Laboratory	Lopez, A

**215 Humane Edu With Companion Anim** Credit: 3 hours.

(ANSCI 215) Course explores humane education as it pertains to companion animals, primarily cats and dogs. The historical aspects of domestication and humane education as well as modern-day relationships between humans and companion animals are addressed. Pet over population and resulting animal shelter issues are discussed in detail. Selection, behavior, and care of companion animals are studied with a focus on promoting the human-companion animal bond, behavioral wellness, and safety. Animal protection laws, animal control laws, and the connection between animal cruelty and violent behavior toward humans are also examined. Prerequisite: Sophomore standing.

This course satisfies the General Education Criteria for a Advanced Composition course.

CRN	Type	Section	Time	Days	Location	Instructor
29881	lecture-discussion	AE1	03:00 PM - 04:20 PM	T	room 131 Animal Sciences Laboratory	Helmink, S; Fischer-Brown, A

43790	laboratory-discussion	AY1	02:00 PM - 03:20 PM	R	room 292 Animal Sciences Laboratory	Helmink, S; Fischer-Brown, A
43790: Advanced Composition course.						
43791	laboratory-discussion	AY2	03:30 PM - 04:50 PM	R	room 292 Animal Sciences Laboratory	Helmink, S; Fischer-Brown, A
43791: Advanced Composition course.						

**293 Internship Off Campus** Credit: 1 to 4 hours.

(ANSCI 293) Supervised, off-campus learning experience in an animal-related enterprise. May be repeated in the same or subsequent terms to a maximum of ten hours. Prerequisite: good academic standing; ANSC 100.

CRN	Type	Section	Time	Days	Location	Instructor
10235	independent study		ARRANGED			
10235: Instructor Approval Required						

**294 Intern On Campus Practical Exp** Credit: 1 to 5 hours.

(ANSCI 294) Supervised, on-campus learning experience associated with subject matter specific to animal sciences. Approved for both S/U and letter grading. May be repeated in the same or subsequent terms to a maximum of ten hours. Prerequisite: good academic standing; ANSC 100.

CRN	Type	Section	Time	Days	Location	Instructor
10242	independent study		ARRANGED			
10242: Instructor Approval Required						

**295 UG Research or Thesis** Credit: 1 to 5 hours.

(ANSCI 295) Individual research in animal sciences. May be repeated in the same or subsequent terms to a maximum of ten hours. Prerequisite: Minimum GPA of 2.5; not open to students on probation; consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
10246	independent study		ARRANGED			
10246: Instructor Approval Required						

**298 Undergraduate Seminar** Credit: 1 hours.

(ANSCI 298) Presentations and discussion of employment opportunities, departmental research activities, and

topics relevant to animal agriculture. Prerequisite: Sophomore standing.

CRN	Type	Section	Time	Days	Location	Instructor
29886	lecture-discussion	1	12:00 PM - 12:50 PM	R	room 131 Animal Sciences Laboratory	Clark, J

**299 *Animal Mgt Field Studies*** Credit: 1 or 2 hours.

(ANSCI 299) Field studies of farms and service industries; discusses and demonstrates management practices on commercial farms. Trip normally taken during spring break, see Class Schedule for approximate cost.

Additional Lab Fee of \$110-200 may be required.

CRN	Type	Section	Time	Days	Location	Instructor
40361	laboratory	AB1	ARRANGED			Lopez, A
40361: 1 hours Topic: Companion Animal. Study tour to Denmark.						
40665	conference	AC1	ARRANGED			Lopez, A
40665: 1 hours						

**305 *Human Animal Interactions*** Credit: 3 hours.

(ANSCI 205) Explores the relationships between humans and companion animals and the roles and functions that animals play in today's society. Examines the evolution of the human/companion animal bond, benefits and disadvantages of this bond, and working/nonworking roles of companion animals. Controversial issues which are of current concern to society will be examined in detail. Writing and in-class discussions are emphasized. Prerequisite: Junior standing.

CRN	Type	Section	Time	Days	Location	Instructor
29860	lecture-discussion	1	03:00 PM - 04:20 PM	MW	room 107 Animal Sciences Laboratory	Lopez, A

**310 *Meat Selection and Grading*** Credit: 2 hours.

(ANSCI 210) Study characteristics associated with the value of carcasses, primal and retail cuts from meat animals; emphasize USDA grading and specifications as well as written communication. Field trips to meat packing plants are required; see Class Schedule for approximate cost.

Students are responsible for personal expenses on field trips.

CRN	Type	Section	Time	Days	Location	Instructor
29869	laboratory	A	08:00 AM - 11:50 AM	S	room 120 Meat Science Laboratory	Carr, T

	laboratory	A	03:00 PM - 04:50 PM	MWF	room 120 Meat Science Laboratory	Carr, T
: Field trip.						

**312 *Advanced Livestock Evaluation*** Credit: 3 hours.

(ANSCI 212) Advanced instruction in the selection of breeding animals of beef, sheep, and swine species and in the evaluation of market animals for slaughter. This course requires visits to farms, related companies, and events to observe the latest techniques and scientific principles associated with livestock selection and evaluation.

Prerequisite: ANSC 211 or consent of instructor.

Students are responsible for personal expenses on field trips.

CRN	Type	Section	Time	Days	Location	Instructor
29872	laboratory	1	03:00 PM - 04:50 PM	MWF	room ARENA Stock Pavilion	Parrett, D; Shike, D

**313 *Horse Appraisal*** Credit: 2 hours.

Advanced course for students interested in improving their performance and conformation evaluation skills; provides exposure to the horse show industry and the career opportunities associated with this facet of the horse industry; students may compete in intercollegiate judging contests.

CRN	Type	Section	Time	Days	Location	Instructor
29877	laboratory-discussion	1	ARRANGED			Hagstrom, D

**314 *Adv Dairy Cattle Evaluation*** Credit: 2 hours.

(ANSCI 214) Advanced instruction in the selection of breeding dairy animals. Involves visits to farms, related companies and events to observe the latest techniques and scientific principles associated with dairy cattle selection and evaluation. Field trips for cattle judging are required. May be repeated to a maximum of 4 hours.

Prerequisite: ANSC 204 or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
29880	laboratory-discussion	1	ARRANGED			McCoy, G

**321 *Animal Nutrition*** Credit: 4 hours.

(ANSCI 221) Principles of animal nutrition and their application to farm livestock and man. Credit is not given for both ANSC 321 and ANSC 325. Prerequisite: CHEM 104 and CHEM 105 or equivalent.

CRN	Type	Section	Time	Days	Location	Instructor
29882	lecture-	1	10:00 AM - 10:50	TWRF	room 150 Animal	Berger, L; Murphy, M

	discussion		AM		Sciences Laboratory	
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**340 *Plant and Animal Genetics*** Credit: 4 hours.  
 (ANSCI 220) Same as CPSC 352, and NRES 352. See CPSC 352.

Students must register for one lab and one lecture section.

CRN	Type	Section	Time	Days	Location	Instructor
33526	laboratory	AB1	01:00 PM - 02:50 PM	T	room W115 Turner Hall	Diers, B; Beever, J
33529	laboratory	AB2	03:00 PM - 04:50 PM	T	room W109 Turner Hall	Diers, B; Beever, J
33530	laboratory	AB3	10:00 AM - 11:50 AM	T	room W115 Turner Hall	Diers, B; Beever, J
33521	lecture	AL1	02:00 PM - 02:50 PM	MWF	room W109 Turner Hall	Diers, B; Beever, J

**350 *Cellular Metabolism in Animals*** Credit: 3 hours.  
 (ANSCI 290) Principles and regulation of cellular metabolism in animals, emphasizing energy derivation and its relationship to domestic animal and food production. Prerequisite: CHEM 104 and CHEM 105 and IB 104.

CRN	Type	Section	Time	Days	Location	Instructor
29884	lecture	1	09:00 AM - 09:50 AM	MWF	room 131 Animal Sciences Laboratory	White, B

**362 *Princ of Animal Physiology*** Credit: 4 hours.  
 (ANSCI 202) A course in animal physiology designed to provide a foundation for advanced courses in the Animal Sciences curriculum. Course emphasizes general principles, structure/function relationships, and underlying physiochemical mechanisms of mammalian physiology. Lectures provide in-depth coverage of the operation, regulation, and integration of major organ systems. Laboratories complement lecture by providing a series of student-conducted in vitro and in vivo experiments designed to illustrate basic physiological concepts and to introduce students to physiology research techniques, instrumentation, experimental design, and interpretation of results. Prerequisite: IB 104, CHEM 102 and CHEM 103, and CHEM 104 and CHEM 105.

Additional Lab Fee Required. Students must register for one lab and one lecture section.

CRN	Type	Section	Time	Days	Location	Instructor
36755	laboratory	AB1	09:00 AM - 10:50 AM	T	room 63 Animal Sciences Laboratory	Beverly, J
36755: ACES Lab 15.00 dollars.						
36756	laboratory	AB2	12:00 PM - 01:50	T	room 63 Animal	Beverly, J

			PM		Sciences Laboratory	
36756: ACES Lab 15.00 dollars.						
36757	laboratory	AB3	03:00 PM - 04:50 PM	T	room 63 Animal Sciences Laboratory	Beverly, J
36757: ACES Lab 15.00 dollars.						
36759	laboratory	AB4	09:00 AM - 10:50 AM	R	room 63 Animal Sciences Laboratory	Beverly, J
36759: ACES Lab 15.00 dollars.						
36760	laboratory	AB5	12:00 PM - 01:50 PM	R	room 63 Animal Sciences Laboratory	Beverly, J
36760: ACES Lab 15.00 dollars.						
36761	laboratory	AB6	03:00 PM - 04:50 PM	R	room 63 Animal Sciences Laboratory	Beverly, J
36761: ACES Lab 15.00 dollars.						
36753	lecture	AL1	09:00 AM - 09:50 AM	MWF	room 150 Animal Sciences Laboratory	Beverly, J

**396 *UG Honors Research or Thesis* Credit: 1 to 5 hours.**

(ANSCI 296) Independent study, under the supervision of a faculty member, on a problem of appropriate scope and character that culminates in writing a thesis. Intended primarily for honors students who plan on conducting research or pursuing graduate study. Thesis projects must be supervised by a faculty member and reviewed by a departmental committee. Students must present a satisfactory thesis to receive credit. May be repeated in the same or subsequent terms to a maximum of ten hours. Prerequisite: Junior standing, minimum GPA of 3.4; consent of a faculty member.

CRN	Type	Section	Time	Days	Location	Instructor
10251	independent study		ARRANGED			
10251: Instructor Approval Required						

**401 *Beef Production* Credit: 3 hours.**

(ANSCI 301) The principles of the management of beef cattle enterprises. Applies science and technology to the breeding, selection, feeding, health and production of beef and beef products. Emphasizes the use of research findings in decision-making. Credit is not given for both ANSC 213 and ANSC 401. Prerequisite: ANSC 321 or equivalent.

CRN	Type	Section	Time	Days	Location	Instructor
29887	lecture	1	11:00 AM - 11:50 AM	MWF	room 131 Animal Sciences Laboratory	Parrett, D

**420 Ruminant Nutrition** Credit: 3 hours.

(ANSCI 320) Physiology and microbiology of digestion in the ruminant, and biochemical pathways of utilization of the absorbed nutrients for productive purposes. Prerequisite: ANSC 321.

CRN	Type	Section	Time	Days	Location	Instructor
29891	lecture	A	10:00 AM - 10:50 AM	MWF	room 131 Animal Sciences Laboratory	Litherland, N; Drackley, J

**431 Advanced Reproductive Biology** Credit: 3 hours.

(ANSCI 331) Course is an upper-level undergraduate or entry-level graduate course dealing with reproductive biology. It will include the study of basic cell biology of reproduction, lactation, growth and hormone regulation of domestic and non-domestic animals as well as humans, including biotechnology methods of reproduction control, manipulation, performance enhancement of lactation and growth, and disease control. Prerequisite: ANSC 331 or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
40958	lecture-discussion	AR	01:00 PM - 01:50 PM	MWF	room 131 Animal Sciences Laboratory	Nowak, R; Bahr, J; Belton, R

40958: Topic: Advanced Reproductive Physiology

**437 Adv Reproductive Management** Credit: 2 hours.

(ANSCI 374) The focus of this course is advanced techniques and technologies used to manage production livestock. The course will emphasize advanced and emerging technologies such as embryo transfer, cloning, semen sexing, and ultrasound pregnancy diagnosis and fetal sexing and innovations in existing procedures including artificial insemination, reproductive health management, and estrus synchronization. Implementation of existing and emerging techniques and technologies and research and discovery will be covered for individuals focusing on careers in livestock production, clinical veterinary medicine, education, technical service/support, and research and development. Approved for both letter and S/U grading. Prerequisite: ANSC 331 or equivalent, or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
31306	lecture-discussion	A	07:00 PM - 08:20 PM	T	room 131 Animal Sciences Laboratory	Wallace, R; Kesler, D
31308	lecture-discussion	B	07:00 PM - 07:50 PM	T	room 2281 Vet Med Basic Sciences Bldg	Wallace, R; Kesler, D; Hutjens, M

31308: Registration in Veterinary Medicine Curriculum. Approved for S/U Grading.

45909	online	XM	07:00 PM - 08:00 PM	T		Kesler, D
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45909: Academic Outreach restrictions and assessments apply, see <http://www.outreach.uiuc.edu/OnlineMeets> 20-Sep-05 - 06-Dec-05. AO Tuition 239, AO Tuition 215, AO Fees 36, and AO Fees 36.00 dollars.

**440 *Applied Statistical Methods I* Credit: 4 hours.**

(ANSCI 340) Same as ABE 440, CPSC 440, FSHN 440, and NRES 440. See CPSC 440.

CRN	Type	Section	Time	Days	Location	Instructor
34101	lecture	AL1	08:00 AM - 09:20 AM	TR	room 124 Burrill Hall	Bullock, D
34015	laboratory-discussion	AY1	01:00 PM - 02:50 PM	T	room N120 Turner Hall	Bullock, D
34033	laboratory-discussion	AY2	05:00 PM - 06:50 PM	T	room N120 Turner Hall	Bullock, D
34050	laboratory-discussion	AY3	01:00 PM - 02:50 PM	W	room N120 Turner Hall	Bullock, D
34068	laboratory-discussion	AY4	03:00 PM - 04:50 PM	T	room N120 Turner Hall	Bullock, D
34088	laboratory-discussion	AY5	10:00 AM - 11:50 AM	T	room N120 Turner Hall	Bullock, D

**446 *Population Genetics* Credit: 3 or 4 hours.**

(ANSCI 316) Mathematical theory of the genetics of populations: estimation of allele frequency for autosomal and X-chromosomal loci, Hardy-Weinberg principle, systems of mating, relationship between relatives, forces that change allele frequency, and quantitative inheritance. Applications to animals, plants, and humans. Same as IB 416. Students desiring 4 hours credit do additional work in some area of population genetics. Prerequisite: ANSC 340, IB 150 or IB 220, and MATH 220 or MATH 234; or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
36960	laboratory	A	09:00 AM - 10:50 AM	F	room 107 Animal Sciences Laboratory	Shanks, R
	lecture-discussion	A	09:00 AM - 09:50 AM	MW	room 107 Animal Sciences Laboratory	Shanks, R

**449 *Biological Modeling* Credit: 3 or 4 hours.**

(ANSCI 368) Same as CPSC 448, GEOG 468, and IB 491. See GEOG 468.

CRN	Type	Section	Time	Days	Location	Instructor
37454	lecture-discussion	G1	10:00 AM - 12:20 PM	W	room 338 Davenport Hall	Hannon, B
37454: 4 hours						
37453	lecture-discussion	U1	10:00 AM - 12:20 PM	W	room 338 Davenport Hall	Hannon, B
37453: 3 hours						

**452 *Animal Growth and Development*** Credit: 3 or 4 hours.

(ANSCI 312) Basic principles of animal growth from early fetal development through typical marketing ages for the major domestic animal species. Topics discussed include molecular and cellular determinants of tissue development and whole animal growth, with coverage of current and future technologies for manipulating growth to enhance animal production. 3 or 4 undergraduate hours or 4 graduate hours. Prerequisite: ANSC 362 and 321; ANSC 350 or MCB 350; or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
29889	lecture-discussion	A	09:00 AM - 09:50 AM	MWF	room 292 Animal Sciences Laboratory	Novakofski, J

**455 *Lab Animal Science I*** Credit: 1 hours.

(ANSCI 355) Same as VCM 646. See VCM 646.

CRN	Type	Section	Time	Days	Location	Instructor
33190	lecture	A	04:00 PM - 04:50 PM	T	room 2258 Vet Med Basic Sciences Bldg	Peper, R

**467 *Applied Animal Ecology*** Credit: 3 hours.

(ANSCI 307) An in-depth multidisciplinary approach (physiology, behavior, immunology, neuroscience) to understanding animal-environment interactions (including thermal, air, microbic, photic and behavioral factors) as basis for prescribing practical environments for keeping animals. Courses in physiology, biology, nutrition, microbiology, and genetics are recommended. Prerequisite: ANSC 362.

CRN	Type	Section	Time	Days	Location	Instructor
31302	laboratory	AB1	09:00 AM - 09:50 AM	T	room 131 Animal Sciences Laboratory	Johnson, J
31303	laboratory	AB2	09:00 AM - 09:50 AM	R	room 131 Animal Sciences Laboratory	Johnson, J

31305	lecture	AL1	08:00 AM - 08:50 AM	TR	room 131 Animal Sciences Laboratory	Johnson, J
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**499 Seminar** Credit: 1 to 4 hours.

(ANSCI 399) Group discussion or an experimental course on a special topic in animal sciences. May be repeated.

CRN	Type	Section	Time	Days	Location	Instructor
10254	independent study		ARRANGED			
10254: Instructor Approval Required						

**523 Techniques in Animal Nutrition** Credit: 3 hours.

(ANSCI 403) Discusses and applies methods of laboratory analysis and animal experimentation frequently used in nutrition research May be repeated with approval. Prerequisite: Courses in nutrition, physiology, and biochemistry and consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
29894	lecture-discussion	1	03:00 PM - 04:50 PM	TR	room 107 Animal Sciences Laboratory	Fahey, G; Swanson, K

**524 Nonruminant Nutrition Concepts** Credit: 2 hours.

(ANSCI 404) Review of literature in nonruminant nutrition. Emphasizes basic concepts associated with food intake, carbohydrate and fat utilization, protein quality, bioavailability of nutrients, and diet formulation. Prerequisite: Consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
29895	lecture-discussion	A	10:00 AM - 10:50 AM	TR	room 107 Animal Sciences Laboratory	Parsons, C

**525 Topics in Nutrition Research** Credit: 1 hours.

(ANSCI 410) Same as FSHN 510, and NUTR 510. See NUTR 510.

CRN	Type	Section	Time	Days	Location	Instructor
34605	lecture	A	11:00 AM - 12:20 PM	TR	room 328 Bevier Hall	Murphy, M
34605: History of Nutrition Topic: History of Nutrition Meets 24-Aug-05 - 27-Sep-05.						

34602	lecture	B	11:00 AM - 12:20 PM	TR	room 328 Bevier Hall	Singletary, K
34602: Diet and CancerTopic: Diet and Cancer.Meets 29-Sep-05 - 27-Oct-05.						
34607	lecture	C	11:00 AM - 12:20 PM	TR	room 328 Bevier Hall	Erdman, J; Fahey, G; Garlick, P
34607: Scientific Basis for DRIsTopic: Scientific Basis for Establishing Dietary Recommendations.Meets 01-Nov-05 - 09-Dec-05.						

**530 *Advanced Endocrinology*** Credit: 2 hours.  
(ANSCI 412) Same as MCB 512, and VB 512. See MCB 512.

CRN	Type	Section	Time	Days	Location	Instructor
38724	discussion-recitation	1	04:00 PM - 05:50 PM	M	room 292 Animal Sciences Laboratory	Bunick, D

**533 *Repro Physiology Lab Methods*** Credit: 1 to 3 hours.  
(ANSCI 433) Laboratory methods used in reproductive physiology studies, such as blood sampling, large animal surgery, collection of tissues and gametes, embryo recovery, in vitro fertilization, tissue culture, hormone measurements, and directed individual research problems. Same as MCB 533, and VB 533. Prerequisite: Consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
36970	laboratory	A	09:00 AM - 09:50 AM	M	room 396 Animal Sciences Laboratory	Bahr, J

**554 *Immunobiological Methods*** Credit: 3 hours.  
(ANSCI 444) Same as VP 544. See VP 544.

CRN	Type	Section	Time	Days	Location	Instructor
33200	laboratory-discussion	A	01:00 PM - 02:50 PM	W	room 2406 Vet Med Basic Sciences Bldg	Greeley, E; Segre, M
33200: Instructor Approval Required						
	laboratory-discussion	A	03:00 PM - 04:50 PM	W	room 2853 Vet Med Basic Sciences Bldg	Greeley, E; Segre, M
: Instructor Approval Required						

**590 Animal Sciences Seminar** Credit: 0 to 2 hours.

(ANSCI 490) Discussions of current research and literature. Registration for 0 to 2 hours each term is expected for animal sciences graduate students. Approved for both letter and S/U grading. May be repeated to a maximum of 2 hours for Masters students and 4 hours for Ph.D. students.

Students enrolled for 0 credit will received S/U grades; those enrolled for 1 hour will received letter grades.

CRN	Type	Section	Time	Days	Location	Instructor
36762	lecture-discussion	A	03:00 PM - 04:50 PM	T	room 396 Animal Sciences Laboratory	Beever, J
36762: Topic: Animal Breeding and Genetics.						
43991	lecture-discussion	A1	03:00 PM - 04:50 PM	T	room 396 Animal Sciences Laboratory	Beever, J
43991: 1 hours						
43992	lecture-discussion	A2	03:00 PM - 04:50 PM	T	room 396 Animal Sciences Laboratory	Beever, J
43992: 2 hours						
36763	lecture-discussion	B	ARRANGED			Koelkebeck, K
36763: Topic: Behavior.						
43993	lecture-discussion	B1	ARRANGED			Koelkebeck, K
43993: 1 hours						
43994	lecture-discussion	B2	ARRANGED			Koelkebeck, K
43994: 2 hours						
36765	lecture-discussion	C	ARRANGED			Koelkebeck, K
36765: Topic: Environmental Management.						
43995	lecture-discussion	C1	ARRANGED			Koelkebeck, K
43995: 1 hours						
43996	lecture-discussion	C2	ARRANGED			Koelkebeck, K
43996: 2 hours						
36766	lecture-discussion	D	12:00 PM - 12:50 PM	F	room 120 Meat Science Laboratory	McKeith, F; Killefer, J
36766: Topic: Meat Science and Muscle Biology.						

43997	lecture-discussion	D1	12:00 PM - 12:50 PM	F	room 120 Meat Science Laboratory	McKeith, F; Killefer, J
43997: 1 hours						
43998	lecture-discussion	D2	12:00 PM - 12:50 PM	F	room 120 Meat Science Laboratory	McKeith, F; Killefer, J
43998: 2 hours						
36767	lecture-discussion	E	12:00 PM - 12:50 PM	W	room 107 Animal Sciences Laboratory	Parsons, C
36767: Topic: Non-Ruminant Nutrition.						
43999	lecture-discussion	E1	12:00 PM - 12:50 PM	W	room 107 Animal Sciences Laboratory	Parsons, C
43999: 1 hours						
44000	lecture-discussion	E2	12:00 PM - 12:50 PM	W	room 107 Animal Sciences Laboratory	Parsons, C
44000: 2 hours						
36769	lecture-discussion	F	04:00 PM - 04:50 PM	W	room 140 Burrill Hall	Bagchi, M
36769: Topic: Reproductive Physiology.						
44001	lecture-discussion	F1	04:00 PM - 04:50 PM	W	room 140 Burrill Hall	Bagchi, M
44001: 1 hours						
44002	lecture-discussion	F2	04:00 PM - 04:50 PM	W	room 140 Burrill Hall	Bagchi, M
44002: 2 hours						
36770	lecture-discussion	G	12:00 PM - 12:50 PM	W	room 107 Animal Sciences Laboratory	Parsons, C
36770: Topic: Ruminant Nutrition.						
44003	lecture-discussion	G1	12:00 PM - 12:50 PM	W	room 107 Animal Sciences Laboratory	Parsons, C
44003: 1 hours						
44004	lecture-discussion	G2	12:00 PM - 12:50 PM	W	room 107 Animal Sciences Laboratory	Parsons, C
44004: 2 hours						

36774	lecture-discussion	H	04:00 PM - 04:50 PM	T	room 404 Animal Sciences Laboratory	White, B
36774: Topic: Microbiology.						
44005	lecture-discussion	H1	04:00 PM - 04:50 PM	T	room 404 Animal Sciences Laboratory	White, B
44005: 1 hours						
44006	lecture-discussion	H2	04:00 PM - 04:50 PM	T	room 404 Animal Sciences Laboratory	White, B
44006: 2 hours						
36776	lecture-discussion	I	ARRANGED			Johnson, R
36776: Topic: Immunobiology.						
44007	lecture-discussion	I1	ARRANGED			Johnson, R
44007: 1 hours						
44008	lecture-discussion	I2	ARRANGED			Johnson, R
44008: 2 hours						
42694	lecture-discussion	L	ARRANGED		room ARR Animal Sciences Laboratory	Gaskins, H; Schook, L
44009	lecture-discussion	L1	ARRANGED		room ARR Animal Sciences Laboratory	Schook, L
44009: 1 hours						
44010	lecture-discussion	L2	ARRANGED		room ARR Animal Sciences Laboratory	Schook, L
44010: 2 hours						
36777	lecture-discussion	N	ARRANGED			Wheeler, M
36777: Topic: Developmental Biology.						
44011	lecture-discussion	N1	ARRANGED			Wheeler, M
44011: 1 hours						
44012	lecture-discussion	N2	ARRANGED			Wheeler, M
44012: 2 hours						

**592 Adv Topics in Animal Science** Credit: 1 to 4 hours.

(ANSCI 492) Selected topics associated with teaching, research, and production related to the animal industry.

Prerequisite: Consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
42524	lecture-discussion	AG	01:00 PM - 01:50 PM	W	room ARR Animal Sciences Laboratory	Schook, L; Beever, J

**593 Res Studies in Animal Sciences** Credit: 1 to 4 hours.

(ANSCI 493) Directed and supervised study of selected research topics in Animal Sciences. Approved for both S/U and letter grading. May be repeated to a maximum of 4 hours. Prerequisite: Consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
10258	independent study		ARRANGED			
10258: Instructor Approval Required						

**599 Thesis Research** Credit: 0 to 16 hours.

(ANSCI 499) May be repeated. Approved for S/U grading only.

CRN	Type	Section	Time	Days	Location	Instructor
10264	independent study		ARRANGED			
10264: Instructor Approval Required						