

# INTEGRATIVE APPROVED ELECTIVES

## Approved Animal Science Planned Electives (Group P)

From this list, you must choose **6 approved lecture credits** and **3 approved lab credits** as Animal Sciences electives.

**Approved Lectures: Minimum 6 credits required.**

Course Number	Course Title	Credits	Notes
*ANS 2002	The Meat We Eat	3	
*ANS 2090	Survey of Veterinary Medicine	2	
†ANS 3008	Livestock Behavior & Welfare	3	
†ANS 3216	Intro to Equine Science	3	
‡ANS 3251	Biology & Management of Dairy Cattle	2	
‡ANS 3404C	Food Animal Nutrition & Feeding	4	<a href="#">ANS 3440 is a pre-requisite</a>
†ANS 3405	Equine Nutrition & Feeding	2	<a href="#">ANS 3440 is a pre-requisite</a>
‡ANS 4079L	Relationship of Form to Function in Horses	3	<a href="#">ANS 3043 is a pre-requisite</a>
‡ANS 4320C	Applied Ruminant Reproductive Management	3	Must have completed ANS 3319C
†ANS 4240C	Sustainable Cattle Systems	2	
†ANS 4243	Beef Cow/Calf Management	5	
‡ANS 4245	Beef Background & Feedlot Management	2	Must have been enrolled in ANS4243 in the previous fall and/or have prior approval from Dr. Thrift
†ANS 4382	Equine Genetics	2	ANS 3384C (or equivalent genetics course) is a pre-requisite
‡ANS 4389L	Techniques in Molecular Genetics	2	Must have completed ANS 3384, AGR 3303, or PCB 3063 with a "C" or better <b>Offered Odd Years</b>
*ANS 4931	Senior Seminar	1	
‡ANS 4932	HACCP Systems	2	
‡ANS 4932	Seedstock Management & Marketing	3	
†ANS 4932	Behavior and Welfare Assessment	2	

Color Codes: Fall & Spring (\*), Fall (†), Spring (‡), Summer (††)

Approved Labs: Minimum **3 credits required.**

Course Number	Course Title	Credits	Notes
†ANS 3239L	Techniques in Equine Science (Remedial Horsemanship)	2	<b>Departmentally controlled</b> and does not require equine experience
‡ANS 3239L	Techniques in Equine Science – Ranch Horse Management <b>*offered every other spring – odd years</b>	2	<b>Departmentally controlled</b> and requires equine experience; contact Joel McQuagge
*ANS 3246L	Beef Production Practicum	2 Fall + 2 Spring 4 total	<b>Departmentally controlled;</b> must be co-enrolled in ANS 4243 in the fall and ANS 4245C in the spring with pre-approval from Dr. Thrift; course is conducted at the Beef Teaching Unit.
‡ANS 3250L	Dairy Cattle Practicum	2	Must be co-enrolled in ANS 3251; some labs conducted at Dairy Research Unit
*ANS3500L	Growth & Development Poultry Lab	1	Must be co-enrolled in ANS3043
†ANS 3934C	Practicum: Weanling Behavior Modification	2	Located at the HTU; no equine experience is needed.
‡ANS 4212L	Techniques in Farrier Science	2	<b>Departmentally controlled;</b> contact Joel McQuagge
†ANS 4218L	Horse Psychology & Training	3	<b>Departmentally controlled;</b> significant riding experience required; must enroll in ANS 4241L in the following spring. contact Joel McQuagge
‡ANS 4241L	Intermediate Horse Training	2	<b>Departmentally controlled;</b> must have been enrolled in ANS 4218L in the previous fall; contact Joel McQuagge
†ANS 4231	Practicum in Horse Management & Training Techniques Horse Care & Grooming	1	Located at the HTU; no equine experience necessary. <b>Offered Spring, Summer A &amp; C, and Fall.</b> <b>SUMMER IS DEPARTMENTALLY CONTROLLED</b>
‡ANS 4231	Practicum in Horse Management & Training Techniques Foaling Practicum	1	Located at the Equine Sciences Center in Ocala; no equine experience necessary.

<b>ANS 4231</b>	Practicum in Horse Management & Training Techniques Foal Handling	1	Offered only Summer A
<b>*ANS 4605</b>	Horse Judging Team Livestock Judging Team Meats Judging Team Meat Animal Evaluation Team	1	This is a <b>calendar</b> year commitment (spring and fall) for the judging teams; must have coach approval for enrollment

Color Codes: Fall & Spring (\*), Fall (+), Spring (‡), Summer (††)

### Approved Lecture OR Lab

Course Number	Course Title	Credits	Notes
†ANS 2615C	Introduction to Livestock and Meat Evaluation	3	Recommended for students interested in joining the Meats Judging Team
†ANS 3217C	Equine Health Management	2	<b>Departmentally controlled;</b> recommend students take MCB 2000/L or MCB 3020/L prior to enrollment
‡ANS 3613C	Value Determination of Meat Animals	3	
†ANS 3634C	Meats	3	
‡ANS4318C	Equine Reproductive Management	3	Must have completed ANS3319C
†ANS 4635C	Meat Processing	3	
‡ANS 4320C	Applied Livestock Reproduction	3	Must have completed ANS 3319C

Color Codes: Fall & Spring (\*), Fall (+), Spring (‡), Summer (††)

## **Advisor Approved Electives:**

*\*This list is subject to change based on course availability, updates, and new course offerings. Always reference the [UF Catalog](#) and [UF Schedule of Courses](#) to check for availability and the semester a course is offered.\* If you have a course you believe should be added to a concentration, feel free to write it in the bucket in an empty space.*

<b>Nutrition Concentration Courses</b>		
CHM2046/L Chemistry 2 w/ lab (4)	ANS3405 Equine Nutrition (2)	ANS3404C Food Animal Nutrition (4)
FOS3042 Introductory Food Science (3)	AGR4231C Forage & Range Mgmt. (4)	HUN2201 Fundamentals of Human Nutrition (3)
ANS4911 Supervised Research (1-3)	HUN3403 Nutrition Through the Life Cycle (2)	

<b>Behavior &amp; Welfare Concentration Courses:</b>		
PSY2012 General Psychology (3)	CBH3003 Comparative Psychology (3) Spring Only	ANS3008 Livestock Behavior & Welfare (3)
WIS4570C Wildlife Behavior and Conservation (3)	ZOO4050 Animal Behavior (3)	ANS4231 Weanling Handling
ANS4218L Horse Psychology & Training (2)**	ANS4241C Intermediate Horse Training (3)**	ANS4932 Behavior and Welfare Assessment
ANS4911 Supervised Research (1-3)		

<b>Environment &amp; Society Concentration Courses:</b>		
AOM2520 Global Sustainable Energy: Past, Present and Future (3)	ALS3133 Agricultural and Environmental Quality (3)	AEB4126 Agriculture and Natural Resource Ethics (3)
AEB4123 Agricultural and Natural Resource Law (3)		

<b>Reproduction Concentration Courses:</b>		
ANS4318C Equine Reproduction (3)	ANS4231 Foaling Practicum (1)	ANS4932 Applied Reproductive Management (3)
ANS4701 Lactation Physiology (3)	ANS6704 Mammalian Endocrinology (2, Prereq: BCH3025)	ANS4911 Supervised Research (1-3)
ANS4905 Supervised Breeding Mgmt. (1-3)	GMS6419 Medical Endocrinology and Reproduction – Human	

**Agricultural Communication and Education Concentration Courses:**

AEC3065 Issues in Agricultural and Life Sciences (3)	AEC3070C Digital Media Production in Ag and Life Sciences (3)	AEC3073 Intercultural Communication (3)
AEC4035 Communication Practices for Ag and Life Sciences (3)	AEC4031 The Communication Process in Ag and Life Sciences (3)	AEC4434 Communication and Leadership in Groups and Teams (3)

**Agricultural Business & Marketing Concentration Courses:**

AEB3133 Principles of Ag Business (3)	AEB3300 Ag & Food Marketing (3)	AEB3341 Selling Strategically (3)
AEB3122 Financial Planning for Agribusiness (3)	AEB3315 Futures Markets & Risk Mgmt. in Agriculture (3)	AEB4424 Human Resources Mgmt. in Agribusiness (3)

**One-Health Concentration Courses:**

CHM2046/L Chemistry 2 w/ lab (4)	APK2100C Applied Human Anatomy w/ lab (4)	APK2105C Applied Human Physiology w/ lab (4)
HSC3537 Health & Medical Terminology (3)	PCB3402 Disease Ecology and Evolution (3)	MCB3020/L Basic Biology of Microorganisms (4)
MCB4203 Bacterial Pathogens (3)	ENY4660 Medical and Veterinary Entomology (3)	FOS4222 Food Microbiology (3)
ANS4932 HACCP Systems (2)		

**Data Science/Artificial Intelligence Concentration Courses:**

COP3502C Programming Fundamentals I (4)	COP3503 Programming Fundamentals II (3)	MAC2311 Analytic Geometry and Calculus I (4)

**Agronomy & Soil Science Concentration Courses:**


**Genetics Concentration Courses:**

ANS4911 Supervised Research (1-3)		

UF Minor OR Certificate Concentration		*Must have 6 unique credits*