

K-State Core Courses		See K-State Core List at https://www.k-state.edu/general-education/students/		34-35
Required Section	Required Course			
Written Communication 6 hours	ENGL 100: Expos. Writing I <i>F, S, U, O</i>		3	
	ENGL 200: Expos. Writing II <i>F, S, U, O</i> Prereq: ENGL 100		3	
Oral Communication 3 hours	COMM 106: Pub Speaking I <i>F, S, U, O</i> Transfer may apply interspersnl comm		3	
Any course applied in the following K-State Core sections that is also applied to other degree requirements, such as those identifies as Overlap Courses, increases available electives.				
Required Section	Overlap Courses	Options		
Math & Statistics 3 hours	MATH 100 (3)	KSU Core List		
Science 4-5 hours, lab required	BIOL 198 (4) or CHM 210 (4)	KSU Core List		
Social & Behavioral Science 6 hours in 2 subject areas	AGEC 120 (3) or ECON 110 (3)	KSU Core List		
Arts & Humanities 6 hours in 2 subject areas	n/a	KSU Core List		
	AGCOM 222, COMM 120, 210, 260, or MC 110 (3)	KSU Core List		
Institutionally Designated 6 hours	ENGL (170-187, 220-299), ENTOM 202, Foreign Lang.	KSU Core List		
	First 6 hours of 100- and 200-level courses taken and not applied above			

Animal Science Concentration Area		25
Animal Products 3 hours	ASI 350: Meat Science <i>F, S</i> Prereq: BIOL 198/CHM ASI 361: Meat Processing <i>F, S</i> Prereq: Soph status ASI 405: Milk Processing <i>F</i> Prereq: BIOL 198 ASI 601: Endocrinology/Lactation <i>F</i> Prereq: BIOL 198, Jr ASI 640: Poultry Products Technology <i>F</i> even ASI 695: Equine Exercise Physiology <i>F</i> Prereq: Jr status	3
Animal Breeding & Genetics 4 hours	ASI 500: Genetics (3) <i>S</i> Prereq: BIOL 198, MATH 100, Jr status ASI 501: Prin. Anim. Breeding (1) <i>F</i> Prereq: ASI 500 or ASI 511: Appl. Anim. Breeding & Genetics (4) <i>F</i> Prereq: BIOL 198, MATH 100, Jr status	4
Animal Management 6 hours	ASI 515: Beef Science <i>F, S</i> Prereq: Jr status ASI 520: Companion Animal Mangt <i>S</i> Prereq: Jr status ASI 521: Horse Science <i>S</i> Prereq: Jr status ASI 524: Sheep & Meat Goat Science <i>F</i> Prereq: Jr status ASI 535: Swine Science <i>F, S</i> Prereq: Jr status ASI 621: Dairy Cattle Management <i>F</i> Prereq: Jr status ASI 645: Poultry Management <i>F</i> odd Prereq: Jr status	3
	Any ASI course from ASI 300 to 799	3
Animal Science Specialization Courses 12 hours at 300-level+		

Math & Science Foundations		15
Mathematics 3 hours	MATH 100: College Algebra <i>F, S, U, O</i>	3
Biology for Science Majors 4 hours	BIOL 198: Prin. of Biology <i>F, S, U, O</i>	4
Chemistry 8 hours	CHM 210: Chemistry I <i>F, S, U, O</i>	4
	CHM 230: Chemistry II <i>F, S, U, O</i> Prereq: CHM 210	4

Build Breadth for Your Unique Goals		26
Required Section	Overlap with Prereqs for Veterinary School	Options
Agriculture or Business Courses 6 hours at 300-level+	If stat is required, STAT 703: Intro to Statistical Methods for Scientists <i>3, F, S, U, O</i>	Block A or B Dept. List
	n/a	
Applied or Foundational Science Courses 8 hours 7 hours at 300-level+	CHM 350/531: Organic Chem <i>3, F, S, U, O</i> Prereq: CHM 230	Block C Dept. List
	CHM 351/532: Org Chem Lab <i>2, F, S, U</i> Prereq: CHM 350/531 or concurrnt	
Additional Specialization Courses 12 hours	BIOCH 521: Biochemistry <i>3, F, S, U, O</i> Prereq: CHM 350 or 531	
	BIOL 255: Microbiology <i>4, F, S, U</i> Prereq: BIOL 198 + CHM	Block D Dept. List
	PHYS 113: Gen. Physics I <i>4, F, S, U, O</i> Prereq: MATH	
	PHYS 114: Gen. Physics II <i>4, F, S, U, O</i> Prereq: PHYS 113	

Animal Science Core		19-20
Foundations in Animal Sci 1 course	ASI 101: First-time students <i>1, F</i> ASI 301: Transfer students <i>0, F, S</i>	0-1
Introduction 3 hours	ASI 102: Prin. Anim. Sci <i>F, S</i>	3
Species-Focused Laboratories 3 hours	ASI 105: Animal Sci Lab <i>F, S</i>	1
	ASI 106: Dairy Lab <i>F, S</i>	0.5
	ASI 107: Comp. Anim. Lab <i>F, S</i>	0.5
	ASI 108: Poultry Lab <i>F, S</i>	0.5
	ASI 109: Horse Lab <i>F, S</i>	0.5
Anatomy & Physiology 3 hours	ASI 150: Anatomy & Phys <i>F, S</i>	3
Animal Nutrition 3 hours	ASI 202: Animal Nutrition <i>F, S</i> Prereq: MATH 100	3
Professional Skills 3 hours	ASI 300: Career Prep ASI <i>F, S</i> Prereq: ASI Major, Soph status	1
Animal Reproduction 3 hours	ASI 400: Animal Repro. <i>F, S</i> Prereq: ASI 102, BIOL 198, Soph status	3
Industry Issues 3 hours	ASI 595: Issues in Anim Sci <i>F, S</i>	3
Applied Learning Experience	All ASI students must complete at least one course representing the completion of an applied learning experience in animal science. Example experiences include internships, education abroad, competition teams, or undergraduate research. See back for more info.	

Maintain Flexibility		Up to 23
Unrestricted Electives Number varies to total of 120 undergraduate credits earned	+ 3 if MATH 100 is applied in the Mathematics & Statistics section of the K-State Core + 4 if BIOL 198 or CHM 210 is applied in the Natural & Physical Sciences of the K-State Core + 3 if a 3-hr course from Social & Behavioral Sci is also applied to Specialization Electives/Block D + 3 if a 3-hr course from Arts & Humanities is also applied to Specialization Electives/Block D + 3 if another 3-hr course from Arts & Humanities is applied to Spec. Electives/Block D + 6 for courses from Institutionally Designated area applied to any other degree requirements + 1 if ASI 301 is applied instead of ASI 101	

- 120 Hours Total (max. 60 from a 2-year College)
- 45 Hours at the 300-Level or Above

K-State Core Courses Most Often Taken by ASI Majors

See the full list of current courses at <https://www.k-state.edu/general-education/students/>

Social & Behavioral Sciences

AGEC 120	Ag Econ and Agribus	3, F, S, U, O
ECON 110	Principles of Macroecon	3, F, S, U, O
GEOG 100	World Geography	3, F, S, U, O
POLSC 115	U.S. Politics	3, F, S, U, O
POLSC 250	Futre of Food, Air, Water Soil	3, S
PSYCH 110	General Psychology	3, F, S, U, O
SOCIO 211	Intro to Sociology	3, F, S, U, O

Arts & Humanities Courses

AGCOM 222	Ag Bus Communications	3, F, S, O
ART 102	Ceramics for Non-Majors	3, F, S
ART 103	Jewelry Dsgn Non-Majors	3, F, S
ART 106	Art Appreciation	3, U, O
CLSCS 105	Medicl Trmnlgy: Ltn/Grek	2, S, O
ENGL 251	Intro to Literature	3, S
ENTOM 202	Art and Insects	3, F, S, U, O
HIST 111	World History to 1450	3, F, S
HIST 112	World History from 1450	3, F, S
HIST 151	History of US to 1877	3, F, S, O
HIST 152	Hist of US Since 1877	3, F, S, U, O
MC 110	Mass Comm. in Soc	3, F, S, U, O
MUSIC 114	Cat Band	0-1, F, S
MUSIC 115	Marching Band	0-1, F
MUSIC 170	History of Rock & Roll	3, F, S, U, O
MUSIC 172	Hist of Country Music	3, F, S, U, O
SPAN 110	Spanish in the Workplace	3, S

Applied Learning Experience

The most impactful education is when students apply practical experiences outside the conventional classroom with the scientific concepts they learned through formal courses. Each student must enroll in at least one course designated as an applied learning experience. To qualify, experiences must emphasize verbal or written communication, professional and ethical behavior, application of adv. animal science knowledge, critical thinking, and problem-solving. Example courses include:

ASI 310	Poultry and Poultry Product Eval	2, F
ASI 326	Adv. Horse Evaluation	2, F Prereq: ASI 325
ASI 385	Wool Grading and Evaluation	1, F
ASI 420	Adv. Dairy Cattle Judging	1, F Prereq: ASI 396
ASI 470	Form and Function in Livestock	2, F Prereq: ASI 390
ASI 495	Adv. Meat Evaluation	2, F Prereq: ASI 470
ASI 560	Course-Based Undergrad Rsrch	2, F, S
ASI 561	Undergrad Rsrch (mentored)	0-3, F, S Prereq: Identify faculty mentor and their approval
ASI 599	ASI Internship	1-6, F, S
ASI 610	Processed Meat Operations	2, F, S Prereq: ASI 350
ASI 660	International Experience	ASI 0-6, F, S
ASI 661	ASI Special Problems (independent)	Prereq: Identify faculty mentor, receive consent to enroll *Not all experiences apply. Request approval in WB 134
ASI 662	Special Topics in Animal Sci	0-6, F, S *Not all experiences apply. Request approval in WB 134

Courses outside ASI but with similar intent may fulfill this requirement if they include the application of adv. animal sci. knowledge. Request approval in Weber 134.

Departmental Lists

Block A – Agriculture Courses

AGCOM, AGECE, AGED, AGRON, ENTOM, FDSCI, FOR, GENAG, GRSC, HORT, PMC, PLPTH, UFS, WOEM

Block B – Business Courses

ACCTG, AGECE, BUS, ECON, ENTRP, FINAN, LEAD, MANGT, MIS 366, MKTG, STAT, SALES

Block C – Applied & Foundational Science Courses

ASI 210, 290, 302, 533, 540, 560, 561, 600, 601, 658, 675, 680, 695

AGRON 120, 121, 202, 205, 206, 251, 330, 335, 360, 462, 490, 660, 661, 681

BIOCH 110, 111, 265, 266, 521, 522, 571

221, 255, 330, 401, 410, 435, 441, 442, 450, 510, 511, 513, 515, 520, BIOL 521, 529, 530, 541, 542, 543, 544, 580, 604, 640, 642, 670, 671, 675, 676

CHM 350, 351, 371, 372, 500, 531, 532, 545, 550, 551, 566, 585, 595, 596

DMP 313, 314, 610, 611, 650, 690, 691, 710, 725, 726, 754

ENTOM 305, 306, 312, 399

FDSCI 202, 305, 501, 530, 600, 601, 625, 690, 695, 711

FNDH 400, 412

GRSC 312, 500, 602, 620, 645, 650, 661

HORT 201

MATH 150, 151, 160, 205, 210, 211, 215, 216, 220, 221, 222

PHYS 113 or 213, 114 or 214

PLPTH 610

STAT 225 or 240 or 250, 341 or 351, 510, 511, 701, 703, 705, 720

Block D – Major Specialization Elective Courses

ASI, ACCTG, AGCOM, AGECE, AGED, AGRON, ANTH 315 or 383, ARAB, ATM, BIOCH, BIOL, BUS, CHINE, CHM, CC, CIS, CLSCS, CMST, COMM (not 106), CYBR, DMP, ECON, ENGL (not 100 or 200), ENSCI, ENTOM, ENTRP, DIGME, FDSCI, FNDH, FINAN, FREN, GENAG, GENBA, GEOG 360 or 460, GRAD 740, GRSC, GRMN, HIST 557, HORT, IDFS, ITAL, JAPAN, KIN 110 or 312, LATIN, LEAD, MANGT, MATH (not 100 or 199), MC, MIS, MKTG, MLAS, MPH, PFP, PHIL 365 or 565, PHYS, PMC, PSYCH 370 or 470, SALES, SOCIO 363 507, 533 or 536, SPAN, STAT, WOEM

Example: Earn a B.S. in Animal Sciences & Industry + simultaneous minor in Biology + certificate in Equine Science

Animal Products	ASI 695: Equine Exercise Phys
Animal Management	Select one course as ASI 521: Horse Science
Animal Science Specialization Courses	ASI 325 Beginning Horse Eval 2, S
	ASI 326 Adv. Horse Evaluation 2, F Prereq: ASI 325
	ASI 403 Foaling 1, S Prereq: Sophomore status
	ASI 444 Equine Health 3, F Prereq: Sophomore status
	ASI 504 Equine Repro Mangt 3, S Prereq: Junior status
ASI 505 Equine Repro Mangt Lab 1, S Prereq: ASI 504 or conc. enroll	

Specialization Courses in ASI

Courses can be applied in ASI specialization electives, Block D, or unrestricted electives

100	Special Topics in Animal Sci	0-6, F, S Prereq: Instr. Consent
210	Intro to Animal Biotechnology	3, F Prereq: Fresh or Soph
261	Animal Science Problems	0-6, F, S, U Prereq: Instr. Consent
262	Special Topics in Animal Science	0-6, F, S
290	Computer Apps in Animal Science	3, F, S
302	Adv. Animal Nutrition	3, F, S Prereq: ASI 202, CHM, BIOL
310	Poultry and Poultry Product Eval	2, F
315	Livestock and Meat Evaluation	3, S Prereq: ASI 105
325	Beginning Horse Evaluation	2, S
326	Advanced Horse Evaluation	2, F Prereq: ASI 325
333	Equine Enterprise Management	1, F
345	Beginning Horse Training & Mangt	2, F (Equine Sci Cert)
350	Meat Science	3, F, S
361	Meat Animal Processing	3, F, S Prereq: Soph. status
370	Principles of Meat Evaluation	2, F
385	Wool Grading and Evaluation	1, F
390	Principles of Livestock Selection	2, F
395	Intermediate Horse Training & Mangt	2, F (Equine Sci Cert)
396	Dairy Cattle Judging	2, S
401	Farm Animal Repro Lab	1, S Prereq: ASI 400 or conc enroll.
402	Calving	1, S
403	Foaling	1, S Prereq: Soph. status (Equine Sci Cert)
404	Lambing	1, S
405	Fundamentals of Milk Processing	3, F Prereq: BIOL 198
420	Advanced Dairy Cattle Judging	1, F Prereq: ASI 396
422	Livestock Sales Management	0-1, F, S
444	Equine Health	3, F Prereq: Soph. status (Equine Sci Cert)
470	Form and Function in Livestock	2, F Prereq: ASI 390
495	Advanced Meat Evaluation	2, F Prereq: ASI 370
504	Equine Reproduction Management	3, S Prereq: Jr Status
505	Equine Repro Mangt Lab	1, S Prereq: ASI 504 or conc enroll
512	Bovine Reproductive Technology	2, F Prereq: ASI 400, Sr
515	Beef Science	3, F, S Prereq: Jr status
520	Companion Animal Management	3, S Prereq: Jr status
521	Horse Science	3, S Prereq: Jr status
524	Sheep and Meat Goat Science	3, F Prereq: Jr status
533	Anatomy and Physiology	4, F, S Prereq: BIOL 198
535	Swine Science	3, F, S Prereq: Jr status
540	Principles of Animal Disease Control	3, S Prereq: Jr status
560	Course-Base Undergraduate Research	2, F, S
561	Undergraduate Research	ASI 0-3, F, S Prereq: Instr. Consent
599	ASI Internship	1-6, F, S, U Prereq: Dept. Consent
600	Applied Animal Biotechnology	3, S Prereq: ASI 500 Jr status
601	Endocrinology and Lactation	3, F Prereq: BIOL 198 Jr status
610	Processed Meat Operations	2, F, S Prereq: ASI 350
620	Beef Systems Management	2, S Prereq: ASI 515
621	Dairy Cattle Management	3, F Prereq: Jr status
635	Gamebird Production and Management	3, S
640	Poultry Products Technology	3, F odd years
645	Poultry Management	3, F odd years, Prereq: Jr status
650	ID & Data Mangt of Food Animals	2, F Prereq: Jr status
655	Behavior Domestic Animals	3, F Prereq: BIOL 198, Jr status
658	Animal Growth Development	3, S Prereq: ASI 533, Jr status
660	Intl Study Experience	ASI 0-6, F, S, U Prereq: Instr. Consent
661	ASI Problems	0-18, F, S, U Prereq: Instr. Consent
662	Special Topics in ASI	0-6, F, S
675	Monogastric Nutrition	1, F Prereq: ASI 302
676	Avian Nutrition	1, F Prereq: ASI 675
677	Companion Animal Nutrition	1, F Prereq: ASI 675
678	Equine Nutrition	1, F Prereq: ASI 675
679	Swine Nutrition	1, F Prereq: ASI 675
680	Ruminant Nutrition	1, S Prereq: ASI 302
681	Dairy Cattle Nutrition	1, S Prereq: ASI 680
682	Formulatn Livstck Poultry Diets	1, S Prereq: ASI 675 or 680
683	Grazing Livestock Nutrition	1, S Prereq: ASI 680
684	Nutrition of Feedlot Cattle	1, S Prereq: ASI 680
685	Stored Forage System Ruminant Anim	1, S Prereq: ASI 680
695	Prin. of Equine Exercise Physiology	3, F Prereq: Jr status
710	Physiology of Reproduction	3, S even years Prereq: ASI 400
776	Meat Industry Technology	3, F, S Prereq: ASI 350
777	Meat Science & Muscle Biol	3, F Prereq: ASI 350, Sr status

Block C	ASI 561	Undergrad Research	2, F, S, U Prereq: Instr Consent
	BIOL 413	Phys. Adaptations Animals	4, F Prereq: BIOL 221, CHM 350
Block D	CHM 350	Organic Chemistry	3, F, S, U, O Prereq: CHM 230
	BIOL 221	Organismic Biology	5, F, S Prereq: BIOL 198
	BIOL 521	Evol of Infectious Diseases	3, S Prereq: ASI 500
	BIOL 529	Ecology	3, F, S Prereq: BIOL 198, CHM 210
	BIOL 632	Ecology Lab	1, S Prereq: BIOL 529, STAT