Bioscience/Biotechnology

*** 126 Total Hours for Graduation ***
45 hours must be at the 300 level or above

COMMUNICATIONS
ENGL 100 Expository Writing I 3
ENGL 200 Expository Writing II 3
COMM 105 Public Speaking IA 2
COMM 106 Public Speaking I 3
Communications Elective (Select 1)

BUSINESS/ECONOMICS
ECON 110 Prin Macro Econ 3
Electives 2 courses (Minimum 6 hrs)

MATH/STATISTICS/PHYS/COMP
MATH 100 College Algebra 3
(Stats-select 1)
STAT 325 Intro to Stats –OR– 3
STAT 340 Biometrics I –OR– 3
STAT 350 Business Econ Stats 3
Elective (minimum 3 hours)

SCIENCES
Biological Science (required)
BIOL 198* Principles of Biology 4
BIOL 455* Gen Microbiology 4
Chemistry (1 course)
CHM 210* Chemistry I 4
Electives (minimum 9 hours)
CHM 230* Chemistry II 4
CHM 350* Gen Organic Chem 3
CHM 351* Gen Organic Chem Lab 2
CHM 531 Organic Chem 1 3
CHM 532 Organic Chem Lab 2
CHM 550 Organic Chem 2 3
BIOCH 265 Intro Organic & Bioch 5
BIOCH 521* Gen Biochem 3
BIOCH 522 Gen Biochem Lab 2
* Required Pre-Vet Courses

BIOSCIENCES/BIOTECHNOLOGY
Introductory Core (Required)
ASI 200 Intro Rsrch An Sci 1
ASI 210 Intro to Animal Biotech 3
Biotechnology Requirement (Select 1)
ASI 600 Appl Animal Biotech 3
PLPTH 610 Biotechnology 3
Electives (Select 3)
ASI 598 Bioscience Internship 1-6
ASI 658 Growth & Develop 3
BIOL 330 Public Health Biology 3
BIOL 410 Bio of Cancer Cells 2
BIOL 450 Modern Genetics 4
BIOL 510 Developmental Biology 3
BIOL 511 Developmental Biology 1
BIOL 530 Pathogenic Micro 3
BIOL 541 Cell Biology 3
BIOL 545 Human Parasitology 3
BIOL 546 Human Para. Lab 1
BIOL 625 Animal Parasitology 4
BIOL 670 Immunology 4
BIOL 671 Immunology Lab 2
ENTOM 305 Animal Health Entom 2
ENTOM 306 Animal Health Entom Lab 1
PLPTH 610 Biotechnology 3
PLPTH 611 Ag Biotechnology Lab 2
PLPTH 612 Genomics Applications 3
PSYCH 470 Psychobiology 3

HUMANITIES/SOCIAL SCIENCE
(Minimum 9 hours)
Courses options listed on back.
Must be taken from more than one dept.

ANIMAL SCIENCE COURSES (cont.)
Animal Management (Select 1)
ASI 515 Beef Science 3
ASI 521 Horse Science 3
ASI 524 Sheep & Meat Goat Sc 3
ASI 535 Swine Science 3
ASI 621 Dairy Cattle Mgmt 3
ASI 645 Poultry Management 3
Electives (Minimum 6 hours)
ASI 315 Livstk & Meat Eval 3
ASI 320 Principles of Feeding 3
ASI 350 Meat Science 3
ASI 361 Meat Animal Process 2
ASI 405 Fund Milk Processing 3
ASI 510 Animal Breeding Prin 3
ASI 540 Pr Animal Disease 3
ASI 561 Undergrad Research 0-3
ASI 595 Cntmp Issues Anml Ag 3
ASI 599 Animal Sci Internship 1-6
ASI 601 Endocrinology & Lactation 3
ASI 608 Dairy Food Process 3
ASI 640 Poultry Product Tech 3
ASI 655 Behavior of Dom. Animal 3
ASI 695 Equine Exercise Physiology 3
FDSCI 600 Food Microbiology 2
FDSCI 601 Food Microbiology Lab 2

AGRICULTURE
Two courses from 2 other AG Depts. (Minimum 5 hours)
(1 credit hour courses will not apply)

K-STATE 8 REQUIREMENTS
- Each student completes credit-bearing courses to cover all of the K-State 8 areas.
- A minimum of four different prefixes (e.g., AGEC, MATH, FSHS, COMM) must be represented.
- When a course is tagged twice it counts for both.

Emp/Quant B Biol 198
Global E Econ 110
Nat/Phys Sci CHM 210
Social E Econ 110
Aesthetics E
Ethical E
Historical E
Diversity E

Animal Sciences & Industry
Kansas State University
College of Agriculture
**Suggested Business Courses:**
(1 hour courses do not apply)
Agricultural Economics – AGEC 202 to 799
Accounting – Any course
Entrepreneurship – Any course
Family Studies - PFP 105
Finance - Any course
Management - Any course
Marketing - Any course
*Students considering Veterinary Medicine are strongly encouraged to take at least one course in Accounting.*

**Suggested Ag Courses:**
(1 hour courses do not apply)
Ag Communications – Any course
Ag Economics – Any course
Ag Technology Management – Any course
Agronomy – Any course
Animal Science – ASI 660
Entomology – Any course
Food Science – Any course
Forestry – Any course
Grain Science – Any course
Horticulture – Any course
Recreational Resources – Any course except RRES 200
Plant Pathology – Any course
General Agriculture – GENAG 450, 505

**Suggested Communications Courses:**
Ag Communications – AGCOM 310, 400, 410, 590, 610 & 712
Animal Sciences & Industry – ASI 326, 420, 470, & 495
Communications – COMM 311, 321, 322 & 326
English – ENGL 417, 510, & 516
General Agriculture – GENAG 450
Journalism & Mass Communications – MC 110, 111, 112, 120 & 180
Modern Language – Any course in ARAB, CHINE, FREN, GRM, ITAL, JAPAN, LATIN, PORT, RUSSN, SPAN, URDU

**Suggested Humanities/Social Science Courses:**
(A maximum of 3 credit hours may be taken from participatory courses. Courses must be taken from more than one department.)
American Ethnic Studies – AMETH 160 to 501
Anthropology – Any course
Architecture – ARCH 301
Art – Any course
Dance – DANCE 120 to 200, 225 to 420, 495 to 690
Dean of Engineering – DEN 325, 450
Economics – ECON 120-799
English – ENGL 150, 210 to 299, 310, 320 to 399, 420 to 499, 536 to 599, 605 to 660, 670 to 695, 700 to 760, 790 to 799
Environmental Design – ENVD 250, 251
Geography – GEOG 100, 200, 201, 300 to 799
History – Any course
Family Studies and Human Services – Any course
Music – Any course
Modern Language – Any course in ARAB, CHINE, FREN, GRM, ITAL, JAPAN, LATIN, PORT, RUSSN, SPAN, URDU
Philosophy – Any course
Political Science – Any course
Psychology – Any course
Sociology – Any course
Social Work – Any course
Theater – Any course
Women’s Studies – Any course