

**ANIMAL SCIENCE PREVET OPTION**

**Fall 2013 to Spring 2015**

**GENERAL EDUCATION REQUIREMENTS (53 credits)**

**Communications (9 credits)**

English 1000 (≥ C-)	3 hrs
Comm 1200 or Ag Educ 2220	3 hrs
Communication Elective:	3 hrs
Ag Educ 2220	
Comm 1200, 3441, 3572, 3575	
CSD 1100	
English 2010, 2030	
IS&LT 4360	
Rural Soc 2225	
Sci Ag J 2210, 3210, 3240	
Theatre 1400	
Foreign Language Course	

**College Algebra (3 credits)**

Math 1100 or higher (≥ C-)	3 hrs
(i.e. 1160, 1320, 1400, 1500)	

**Biol, Phy &/or Math Sciences (26 credits)**

Biol 1500 or FW 1100*	5 hrs
Chem 1320 (MRP)	4 hrs
Chem 2030 or 2100	3 hrs
Biochem 3630 (sp)	3 hrs
Physics 1210 & 1220	8 hrs
Statistics 1200 or higher (MRP)	3 hrs

**Social & Behavioral Sciences (9 credits)**

Ag Econ 1041 or Econ 1014	3 hrs
Ag Econ 1042 or Econ 1015	3 hrs
History 1100 or 1200 or	3 hrs
Political Science 1100 or 2100	

**Humanistic Studies & Fine Arts (6 credits)**

Approved humanistics studies or fine arts	3 hrs
Select from:	3 hrs
<a href="http://generaleducation.missouri.edu">http://generaleducation.missouri.edu</a>	

\*\*One approved humanities, social or behavioral science must be at 2000 level or above

**GENERAL ELECTIVES (22 credits)**

\*\*General elective suggestions, based on interests, are on the back of this page

**DEPARTMENTAL REQUIREMENTS (45 credits)**

**Freshman Year (5 credits)**

A.S. 1011 Animal Science (f)	3 hrs
A.S. 1065 Lab Practicum <sup>2</sup>	2 hrs

**Sophomore Year (13-14 credits)**

A.S. 2111 Soph Seminar, WI (sp)	3 hrs
A.S. 2165 Ruminant Prod <sup>2</sup>	3 hrs
or A.S. 1001-sec 3 Biology of An Prod I (f)	
A.S. 2175 Monogastric Prod <sup>2</sup>	3 hrs
or A.S. 1001 Lect Only - Biology of An Prod II (sp)	
A.S. 3254 Physiol <sup>2</sup> & A.S. 3255 Lab <sup>2</sup>	4-5 hrs
or New Combined Physiology (w/Lab) (sp)	
or MMP 3202 or BioSci 3700	

**Junior Year (14 credits)**

A.S. 3212 Prin Nutr <sup>2</sup> & A.S. 3232 Feeds <sup>2</sup>	6 hrs
or A.S. 3001 Prin & Appl of An Nutr (f)	
<u>and</u> any >2000 A.S. Elective (list on back page)	
A.S. 3213 Gen of Plts & An (sp)	3 hrs
A.S. 4323 Appl Lvst Genetics (MRP, sp) or	2 hrs
A.S. 4324 Genomics of Plants & An (sp)	

**Senior Year (12 credits)**

<b>A.S. Production Systems</b>	3 hrs
<u>Select one Capstone WI course (≥ C-)</u>	
A.S. 4975 Beef Prod & Mgt (sp)	
A.S. 4976 Dairy Prod (f)	
A.S. 4978 Swine Prod (f)	
A.S. 4979 Poultry Prod (sp)	

**A.S. Senior Electives (select three)**

	7-11 hrs
A.S. 3085 Swine Science On-Line (min. 2 modules)	
A.S. 3275 Meat Animal Evaluation (f)	
A.S. 4001 Pasture Based Dairy (sp)	
A.S. 4312 Monogastric Nutr (f)	
A.S. 4314 Repro Physiol (f, sp)	
A.S. 4332 Ruminant Nutr (sp)	
A.S. 4384 Reproductive Mgt (f)	
A.S. 4387 Equine Breeding Mgt (sp)	
A.S. 4437 Environmental Physiol	
Add'l AS Genetics Course (4323 or 4324)	
Add'l AS Products (3214, 3231, 4344, 4354 <sup>2</sup> )	
Add'l AS Production (4975, 4976, 4977, 4978, 4979)	
A.S. 4940 Internship (f, sp, s; max of 3 hrs)	
A.S. 4950 Research (f, sp, s; max 3 hrs)	
AFNR 2190 or Approved Internatl Study (max 3 hrs)	

<sup>1</sup>Courses considered biology equivalent by the MU College of Veterinary Medicine.

<sup>2</sup>Courses no longer offered. If requirement still needed contact advisor for substitute options.

### General Elective Suggestions Based on Interests<sup>3</sup>

#### Veterinary Medicine<sup>4</sup>

##### Must complete (or equiv.):

Phys 1210 College Phys I	4 hrs
Phys 1220 College Phys II	4 hrs
Chem 2030 Surv Organic or 2100 Organic Chem I	3 hrs
Biochem 3630 General Biochem or 4270 Biochemistry	3 hrs

##### Suggest:

Chem 1330 College Chem II	4 hrs
Bio_Sci 2300 Intro to Cell Biology	4 hrs
Bio_Sci 3750 General Microbiology	3 hrs
Microb 3200 Med Microbio & Immunol	3 hrs
Microb 4304 Immunology	3 hrs
MPP 4204 Medical Pharmacology	5 hrs

#### Animal Production:

An_Sci 2115 Livestock Judging (f)	3 hrs
Ag_Ed_Ld 2250 Intro to Leadership	3 hrs
Ag_Ed_Ld 2260 Team & Organizational Leadership	3 hrs
Ag_Ec 3260 Gen Farm Mgmt	3 hrs
Ag_Ec 3256 Agribusiness & Biotech Law	3 hrs
Ag_Ec 4962 Planning the Farm Bus	3 hrs
AG_S_M 4220 Material Handl & Conditioning	3 hrs
Plnt_S 2110 Plant Growth & Culture	3 hrs
Plnt_S 3270 Forage Crops	3 hrs
Soil 2100 Intro to Soils	3 hrs

#### Agribusiness:

An_Sci 2115 Livestock Judging (f)	3 hrs
Ag_Ed_Ld 2250 Intro to Leadership	3 hrs
Ag_Ed_Ld 2260 Team & Organ Leadership	3 hrs
Acct 2036 Accounting 1	3 hrs
Ag_Ec 2183 The Agri Mkt system	3 hrs
Ag_Ec 2225 Statistical Analysis	3 hrs
Ag_Ec 3224 Agr Sales	3 hrs
Ag_Ec 3256 Agribusiness & Biotech Law	3 hrs
Ag_Ec 3294 Agri Mkt & Procurement	3 hrs
Mangmt 3000 Fundamentals of Mgmt	3 hrs
AFNR 1120 Computing & Infor Technology	2 hrs
AFNR 2120 Working with Data Using Excel	1 hr

#### Additional Animal Sciences Courses

An_Sci/F_W 1012 Intro Captive Wild An Mgt (f)	3 hrs
An_Sci 2001-sec 1 Careers in Animal Sci (f)	1 hr
An_Sci 2045 Equine Practicum (f, sp, s)	1-2 hrs
An_Sci 2095 Equine Behavior and Training (f)	3 hrs
An_Sci 2110 Global Animal Agriculture (f)	2 hrs
An_Sci 2115 Livestock Judging (f)	3 hrs
An_Sci/Biomed 2140 Companion Animals (sp)	3 hrs
An_Sci 2195 Equine Facility Mgt & Marketing (f)	3 hrs
An_Sci/F_S 3190 St. Abroad: Intl. Meat, Dairy, Enology	3 hrs

#### Animal Products:

An_Sci/F_S 3214 Principles of Meat Science (f)	3 hrs
An_Sci/F_S 3231 Principles of Dairy Foods Science (sp)	3 hrs
An_Sci/F_S 4344 Processing of Muscle Foods (sp)	3 hrs
F_S 1030 Food Sci & Nutr	3 hrs
F_S 2172 Elements of Food Microbiology	3 hrs
F_S 4970 Food Product Development	3 hrs
F_S 4980 Food Quality Assurance	3 hrs

#### Biotechnology/Research:

Biochem 3630 General Biochemistry	3 hrs
Biochem 4270 Biochemistry	3 hrs
Biochem 4272 Biochemistry	3 hrs
Bio_Sci 2300 Intro to Cell Biology	4 hrs
Bio_Sci 3800 Developmental Biology	3 hrs
Bio_Sci 4976 Molecular Biology	3 hrs
Chem 2110 Organic Chemistry II	3 hrs
Chem 2030 Organic Laboratory I	2 hrs
Chem 3200 Quant Methods Anal w/Lab	3 hrs
MPP 4310 Mamm Cell Function	3 hrs

<sup>3</sup>Students must ensure prerequisite coursework for courses has been completed.

<sup>4</sup>Veterinary school admission requirements vary. Students should review requirements for all places they wish to apply.