

DEPARTMENT OF AGRICULTURE

Pre-Professional Program in PRE-VETERINARY MEDICINE

Effective Fall 2008

The Pre-veterinary Medicine curriculum prepares students for entrance into a veterinary medicine school. The curriculum outlined below is specifically designed to meet the entrance requirements for the University of Missouri-Columbia, College of Veterinary Medicine. Students that are interested in attending other schools of veterinary medicine should work with their pre-vet advisor to adjust the curriculum to fit the specific requirements of that particular school. It is possible for a student to enter a veterinary-medicine school by taking only the required classes and not first obtain a B.S. degree, but the great majority first receive a B.S. degree. It is recommended that, in addition to the Pre-veterinary Medicine major, you select a complementary major for your B.S. degree. The majors recommended by the UMC College of Veterinary Medicine are Animal Science, Chemistry and Biology.

CURRICULUM CHECKLIST (Note: bold-face classes are required)

UNIVERSITY STUDIES (53 hours)

___ UI 100 First Year Seminar	3
___ Artistic Expression	3
___ Literary Expression	3
___ Oral Expression	3
___ EN 100 English Composition	3
___ Written Expression	3
___ Behavioral Systems (PY 101 or PY 220)	3
___ BI 151 Biological Reasoning (Living Systems; Biology)	3
___ MA 134 College Algebra (Logical Systems)	3
___ CH 185 General Chemistry I (Physical Systems)	5
___ Development of a Major Civilization	3
___ Economics Systems	3
___ Political Systems	3
___ Social Systems	3
___ UI 3xx Interdisciplinary University Studies Course (UI344 recommended)	3
___ UI 3xx Interdisciplinary University Studies Course	3
___ UI 4xx Senior Seminar	3
___ WP 003 Writing Proficiency Test (to be taken after completing 75 hours)	0
___ CCTST Critical Thinking Test (to be taken after completing 75 hours)	0

ADDITIONAL REQUIRED CLASSES (33 Hours)

___ BI 152 Intro to Sci. Investigation	1
___ BI 153 Intro to Organismal Biology	4
___ BI 154 Genetics and Cell Biology	4
___ CH 186 General Chemistry II	3
___ CH 341 Organic Chemistry I	4
___ CH 342 Organic Chemistry Lab I	1
___ CH 531or UI 331 Biochemistry	3
___ MA 133 Plane Trigonometry (Required for PH 120)	3
___ PH 120 Introductory Physics I	5
___ PH 121 Introductory Physics II	5

UMC Recommended ELECTIVES (10 credits required)

Classes deemed useful by the faculty at UMC College of Veterinary Medicine

___ AC 221 Financial Accounting*	3
___ AG 250 Agribusiness Management*	3
___ AY 101 Animal Science*	3
___ AY 105 Animal Science Lab*	2
___ AY 304 Principles of Animal Nutrition*	3
___ AY 311 Animal Breeding*	3
___ BI 200 General Microbiology	3
___ ZO 315 Comparative Anatomy	3
___ ZO 331 Animal Physiology	3
___ MA 155 Statistical Reasoning	3

Other Electives:

___ AD 101 Intro to Microcomputer Appl	3
___ AY 205 Horse Science*	3
___ AY 305 Advanced Horse Science*	3

Agribusiness-Animal Science Degree Requirements

Additional Classes Needed for the degree

-- Complete the University Studies Classes &
Additional Required Classes

--UMC Recommended Electives with Asterisk

--The following additional Agriculture classes:

___ AG 355 Agriculture Seminar	1
___ AG 465 Agriculture Internship	3
___ AY 405 Beef Production	3
___ Additional 4 Upper-division credits (300-500) from Agriculture or Recommended Electives	

--Substitutions may be made for AG 245, Ag 334,
AG 447, AG 470, AO 120 and HO 130,
replaced by the Additional Biology,
Chemistry, Math & Physics classes required
in this curriculum. Consult with your advisor
for appropriate substitutions.

--Total of 120 Credits to Graduate

SUGGESTED PROGRAM OF STUDY

Pre-veterinary Medicine

Effective Fall Semester 2008

FRESHMAN FALL SEMESTER (16 hrs)

AY 101/105 Animal Science*	5
CH 185 General Chemistry I	5
MA 134 College Algebra	3
UI 100 First Year Seminar	3
Total	16

FRESHMAN SPRING SEMESTER (16)

BI 151 Biological Reasoning	3
BI 152 Intro to Scientific Investigation	1
CH 186 General Chemistry II	3
EN 100 English Composition	3
MA 133 Plane Trigonometry	3
Behavioral Sys (PY 101 or 220)	3
Total	16

SOPHOMORE FALL SEMESTER (15)

BI 153 Intro to Organismal Biology	4
CH 341 Organic Chemistry I	4
CH 342 Organic Chemistry Lab I	1
EN 140 Rhetoric & Critical Thinking	3
Recommended Elective	3
Total	15

SOPHOMORE SPRING SEMESTER (15)

BI 154 Genetics and Cell Biology	4
CH 531 or UI 331 Biochemistry	3
Development Major Civilization	3
Recommended Elective	3
Social Systems	3
Total	16

JUNIOR FALL SEMESTER (14)

PH 120 Intro. Physics I	5
Oral Expression	3
University Studies or Rec. Elective	3
University Studies or Rec. Elective	3
Total	14

JUNIOR SPRING SEMESTER (14)

PH 121 Intro. Physics II	5
University Studies or Rec. Elective	3
University Studies or Rec. Elective	3
University Studies or Rec. Elective	3
Total	14

*A recommended elective by UMC Vet School

Students may enter veterinary medicine school after they have completed their Junior year. Application to a school of veterinary medicine normally begins 12-14 months before one plans to enter (Fall semester). The application and other information about veterinary medicine for UMC may be found at the web site: <http://www.cvm.missouri.edu/>

Guidelines from UMC College of Veterinary Medicine (Taken from: <http://www.cvm.missouri.edu/prep-undergrad.htm>)

Composition or Courses in Communication Skills such as Speech or Technical Writing	6
College Algebra or More Advanced Mathematics	3
Inorganic Chemistry	8
Organic Chemistry (Requires Laboratory)	5
Biochemistry (Requires Organic Chemistry Prerequisite)	3
Physics (Comprehensive Introductory Courses (5 hr. in only the first of a companion series In introductory physics will not suffice)	5
Biological Sciences	10
Social Science and /or Humanistic Studies	10
Electives	10
Minimum Total	60

Students should take in-depth courses in these areas

- Inorganic Chemistry courses which prepare them for Organic Chemistry and, finally, Biochemistry
- Biology Department courses which may be selected from zoology and botany or as required in foundation courses in a core program.