

OTTERBEIN UNIVERSITY - DEPARTMENT OF EQUINE SCIENCE

EQUINE SCIENCE PREVETERINARY MEDICINE – PREGRADUATE STUDIES

Entry into colleges of veterinary medicine is extremely competitive. Students intending to apply to a college of veterinary medicine need to maintain a minimum GPA=3.5 in order to even be considered at most colleges of veterinary medicine. Graduate schools may be more flexible.

Requirements: The required courses for this major are EQSC 1100, 1110, 1200, 1250, 1400 (pick two from this series), 2800, 3000, 3020, 3100, 3120, 3410, 4000, and 4100. Required support courses are BIO 1010, 1020, and CHEM 1400, 1410, 1500, and 1510, and MATH 1700.

Additional courses in organic chemistry, biochemistry, physics, microbiology, genetics, and/or statistics may also be required of preveterinary medicine/pregraduate studies majors. Due to requirement variation from one college/university to the next, in your first year, you should acquire specific information from all the colleges/universities to which you intend to apply. Furthermore, depending on your level of proficiency in mathematics, there may be semesters in which you need to carry an overload.

Grades: A minimum grade of "C" must be achieved in all the required courses of this major, including all required support courses. If you earn a grade that is less than "C" in any of these courses, you will need to repeat that course. Should that course be a prerequisite for subsequent coursework, you must earn a satisfactory grade (minimum = C) in the prerequisite course before continuing with subsequent coursework.

Mathematics Placement: Your math placement is determined by your ACT/SAT score. If you would like to try to place at a higher math level than that indicated by your ACT/SAT score, **you have the option of taking Otterbein's on-line math placement test offered in the spring of your senior high school year.** MATH 0900 is the prerequisite math course for BIO 1010. If you place out of MATH 0900, you will take MATH 1250 first semester of your freshman year. **If you only qualify for / test into MATH 0900, plan to take a MATH 0900 course or the ALEKS over the summer.** A B- or better in MATH 0900 is required for entry into MATH 1250. The ALEKS is a completely self-paced assessment and learning system for individualized instruction over the web. Register online with ALEKS for a 6-week Otterbein "class." ALEKS www.aleks.com.

Skill Development Options Courses: At minimum of 8 credits are required to fulfill this block. Options can be found in the Course Catalog, and include modern languages, some oral and written communication courses, and some basic laboratory courses.

Writing Intensive Courses: At least three WI courses are required to graduate.

Lifestyle, Fitness, and Wellness: One credit of lifestyle, fitness, and wellness is required.

Physics: Otterbein offers both calculus based (1500 and 1600) and non-calculus based (1100 and 1200) physics. You should verify the type of physics required at any veterinary college to which you are applying.

Experiential Courses: An EQSC 1400 series course is offered almost every semester. You must register for a minimum of two experiential courses. Topics include Standard and Medical Bandaging, Medicine Administration, Lungeing, Course Design and Building, and Forage Analysis, to name a few.

The "May" Term: You may decide to fulfill 1 of your required courses during each of the 4 May-terms, 3 weeks in May, during which you have a total immersion experience into just 1 course. Taking advantage of this opportunity may lighten your load during the regular semester and/or provide opportunities to take more electives.

The Senior Year Experience: The SYE courses at Otterbein are designed to expose you to significant contemporary issues, to give you the tools for understanding and making ethical choices when faced with these issues, and to integrate learning across disciplinary boundaries.

Summer Experiences: During every summer, it is important that pre-veterinary medicine students involve themselves in a veterinary practice. Try to acquire many different types of veterinary practices: food animal, small animal, equine, exotics. Your references for vet school will be coming from veterinarians in these practices.

Undergraduate Research Opportunities: Please contact a faculty member if you think you might be interested in pursuing an undergraduate research project.

TYPICAL SCHEDULE

NOTE THAT PREREQUISITE COURSES VARY AMONG VETERINARY MEDICINE/GRADUATE SCHOOLS. CHECK WITH THOSE SCHOOLS TO WHICH YOU INTEND TO APPLY TO ASSURE THAT YOU TAKE THE CORRECT COURSES. THOSE LISTED HERE FOLLOW THE OHIO STATE UNIVERSITY COLLEGE OF VETERINARY MEDICINE PREREQUISITES.

IF YOU INTEND TO APPLY TO A COLLEGE OF VETERINARY MEDICINE/GRADUATE SCHOOL, REQUEST ALL APPLICATION INFORMATION FROM YOUR INTENDED COLLEGE(S). PLEASE MEET WITH YOUR ADVISOR AT THE BEGINNING OF YOUR COURSE OF STUDY TO MAKE ANY NECESSARY ADJUSTMENTS TO YOUR SCHEDULE.

Freshman

<i>First Semester – Fall</i>	<i>Second Semester – Spring</i>
FYS (3 credit hours) Math 1700 (3 ch) BIO 1010 Intro Molecular and Cell Bio (4 ch) BIO 1010 Intro Molecular and Cell Bio Lab (0 ch) EQSC 1100 Horsemastership (3 ch) EQSC 1110 Horsemastership Lab (1 ch)	INST 1500 Identity Projects (WI) (3 credit hours) EQSC 1200 Equine A & P + Lab (4 ch) EQSC 1250 Equine Health Monitoring (1 ch) BIO 1020 Intro Organisms and Ecology (4 ch) BIO 1020 Intro Organisms and Ecology Lab (0 ch) Lifestyle Fitness Wellness (1 ch) EQSC 1400 or elective (1-3 ch)
Total hours: 14	Total hours: 14-16

Sophomore

<i>Third Semester – Fall</i>	<i>Fourth Semester – Spring</i>
INST 2000 Self, Power and Difference (3 ch) EQSC 3000 Systems I Lecture + Lab (4 ch) EQSC 3020 Systems I Seminar (2 ch) BIO 2010 Genetics Lecture + Lab (4 ch) CHEM 1400 General Chemistry I Lecture (3 ch) CHEM 1410 General Chemistry I Lab (1 ch)	INST 2200 Reflection and Responsibility (3 ch) EQSC 3100 Systems II Lecture + Lab (4 ch) EQSC 3120 Systems II Seminar (2 ch) EQSC 2800 Farrier Science (2 ch) CHEM 1500 General Chemistry II Lecture (3 ch) CHEM 1510 General Chemistry II Lab (1 ch) EQSC 1400 or elective (1 – 3 ch)
Total hours: 17	Total hours: 16 - 18

Junior

<i>Fifth Semester – Fall</i>	<i>Sixth Semester – Spring</i>
INST 2400 Natural Foundations (3 ch) CHEM 2400 Organic Chemistry I Lecture (3 ch) CHEM 2410 Organic Chemistry I Lab (1 ch) Modern Language or Skill Development (3 ch) PHYS 1100 or 1500 Physics Lecture + Lab (4-5 ch)	INST 2600 Creativity and Culture (3 ch) CHEM 2500 Organic Chemistry II Lecture (3 ch) CHEM 2510 Organic Chemistry II Lab (1 ch) Modern Language or Skill Development (3 ch) PHYS 1200 or 1600 Physics Lecture + Lab (4-5 ch)
EQSC 1400 or elective (1 – 3 ch)	EQSC 1400 or elective (1 – 3 ch)
Total hours: 15-18	Total hours: 15-18

TAKING THE GRADUATE RECORD EXAMINATION: MOST COLLEGES OF VETERINARY MEDICINE AND GRADUATE SCHOOLS ACCEPT THE GRE TEST SCORES. YOU WILL NEED TO CHECK WHETHER OR NOT YOUR COLLEGE FALLS INTO THAT CATEGORY. MOST VET SCHOOL APPLICATIONS ARE DUE EARLY IN FALL SEMESTER OF YOUR SENIOR YEAR.

PLEASE REQUEST AN APPLICATION FOR DEGREE FROM THE OFFICE OF THE REGISTRAR.

Senior

<i>Seventh Semester – Fall</i>	<i>Eighth Semester – Spring</i>
SYE* Senior Year Experience (3 ch) INST 2800* Global Cultures (3 ch) EQSC 4000 Animal Nutrition Lecture + Lab (WI) (4 ch) EQSC 3410* Service Learning (1 ch) COMM 1100 Public Speaking (3 ch) BMB 4500 Biochemistry I (3 ch)	INST 3000* Interdisciplinary Seminar (3 ch) EQSC 4100 Contemporary Issues (WI) (3 ch) BIO 2800 Human Microbiology (3 ch) Electives (3-9 ch)

Total hours: 17

Total hours: 12-18

***Can be taken either semester senior year**

Total Hours: 108 + 12 hours minimum for electives (120 total needed for graduation)

EQUINE SCIENCE ELECTIVES:

EQSC 2400	Equine-Assisted Psychotherapy	(Spring even years)	3
EQSC 2900	Therapeutic Riding	(Spring odd years)	3
EQSC 3050	Equine Medical Management	(Fall)	3
EQSC 3200	Applied Equine Business Principles	(Fall)	3
EQSC 3300	Facility Design	(Spring)	3
EQSC 3400	Evaluating Equine Conformation	(Spring)	3
EQSC 3500	Legal Aspects of the Equine Industry	(Fall)	3
EQSC 3900	Independent Study		2-4
EQSC 4900	Internship		2-16

OTHER RECOMMENDED ELECTIVES:

BIO 2030	Cell Biology		4
BIO 3030	Animal Reproduction		4
BIO 3100	Molecular Genetics		4
BIO 3120	Immunology		4
BIO 3140	Developmental Biology		3
BIO 3420	Comparative Vertebrate Anatomy		4
BIO 3440	Animal Systems Physiology		4
PUBH 2400	Public Health Epidemiology		4

Important Phone Numbers and Email Addresses

Sheri Birmingham, DVM, Equine Science Department Chair **614-823-1032**

sbirmingham@otterbein.edu

Steffanie Burk, PhD, EPRE Advisor **614-823-1102**

sburk@otterbein.edu

Jane Kidder, Knowlton Center Administrative Assistant **614-823-3020**

kidder@otterbein.edu

Registrar's Office **614-823-1350**

registrar@otterbein.edu

Financial Aid Office **614-823-1502**

financialaid@otterbein.edu

