

# Pre-Veterinary Curriculum

MSU offers pre-veterinary coursework and advising for students interested in pursuing admission into any school or college of veterinary medicine. MSU's pre-veterinary curriculum is **not** a major from which students will graduate, and 'pre-vet' is **not** a degree-granting option on the MSU campus. Rather, it is an advising program and a series of required undergraduate classes that prepare students for admission into schools of veterinary medicine. The Pre-Veterinary Intake major is supported through the College of Agriculture, and we offer several resources to students who are interested in attending a veterinary medical program after their MSU baccalaureate careers. MSU's College of Agriculture and College of Letters and Science have pre-vet advisors available who work with students as they prepare to apply for admission to schools of veterinary medicine.

The State of Montana does not have a college of veterinary medicine. However, Montana State University participates in the WIMU Regional Program in Veterinary Medicine, a cooperative program offered through Washington State University's College of Veterinary Medicine. The program's first year of study is on the MSU campus, with the next three years of study housed in Pullman, on the Washington State University campus. Montana currently supports ten students through this program. Montana residents may also compete for admission to veterinary school through a contract agreement with WICHE (Western Interstate Commission for Higher Education). Information on the current status of this program in Montana may be obtained by contacting the Commissioner for Higher Education Office in Helena, MT.

## MSU Pre-Veterinary Course Requirements

This outline is designed to qualify students to apply to the WIMU program; carefully read all information on required courses, and if you have any questions about qualifying for admission to a veterinary medicine program, please contact your academic advisor(s).

### 1. Chemistry \*

CHMY 141 & CHMY 142	College Chemistry I and College Chemistry I Lab
CHMY 143 & CHMY 144	College Chemistry II and College Chemistry II Lab
CHMY 211 & CHMY 212 or CHMY 321 & CHMY 323	Elements of Organic Chemistry and Elements of Organic Chemistry Lab and Organic Chemistry I and Organic Chemistry II
BCH 380 & BCH 381	Biochemistry and Biochemistry Lab

For students without a strong background in chemistry, consider taking CHMY 121IN as a preparatory course before taking CHMY 141. This is not usually done, but it is an option. CHMY 121IN is not required for the pre-veterinary curriculum and does not count as an elective. Some undergraduate degree curricula may require CHMY 321 and CHMY 323 or equivalent; these will substitute for CHMY 211 for all vet schools.

\*Includes appropriate labs.

### 2. Biology

BIOB 160 or BIOB 260	Principles of Living Systems Cellular and Molecular Biology
BIOB 170IN	Principles of Biological Diversity
BIOB 375 or ANSC 322	General Genetics Principles of Animal Breeding and Genetics

### 3. Mathematics

M 161Q	Survey of Calculus
The math requirement changes frequently, but all science degrees require M 161Q.	

### 4. Statistics

STAT 216Q	Introduction to Statistics
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### 5. Physics

PHSX 205	College Physics I
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### 6. English

WRIT 101W	College Writing I
COMX 111US	Introduction to Public Speaking

### 7. Electives

WSU requires 27 General Education requirements and electives. The general education requirements concern only those students who have not obtained a B.S. degree before entering the professional program.

### 8. Recommended Electives

Remaining electives are recommended to be in Biotechnology/Animal System, Animal Science, Biology, Microbiology, Chemistry, Business courses, or possibly other areas. Electives should be used to obtain credits in the curriculum chosen for a degree. Once a degree curriculum is decided on, proper selection of electives may make it easier to complete the pre-veterinary requirements and degree requirements simultaneously.

## Veterinary School Course Reverse Transfer

Pre-veterinary students are strongly encouraged to complete a Bachelor's degree before enrolling in a College of Veterinary Medicine. Bachelor's degrees are necessary for graduation from some veterinary schools. Baccalaureate degrees are usually required for entrance to graduate schools, so if the student intends to pursue a graduate degree after completing veterinary school, the lack of a bachelor's degree is prohibitive. Additionally, certain scholarships or fellowships require the applicant to have an undergraduate degree. However, a completed baccalaureate degree is not required for admission to many of the 33 accredited Veterinary Schools in the United States. Montana State University developed a reverse-transfer process for those students who chose to begin their Veterinary Medicine studies before completing their Bachelor's degree.

This procedure provides a standardized process whereby veterinary students who have not completed their MSU undergraduate degrees are able to use up to 15 veterinary school course credits for reverse-transfer back to MSU to complete the baccalaureate degrees. Each reverse-transferred course may be used towards fulfillment of a single requirement (i.e., double-counting is not allowed).

*Reverse-transfer courses* are graduate (veterinary school) courses transferred back to MSU to complete a degree at MSU. This process may be used by veterinary school students from any department that files the appropriate paperwork to be posted to the Registrar's Office website. Note that it is the student's responsibility to complete the required procedures and all paperwork according to the specified deadlines.

## Qualifications

MSU students desiring to follow this plan must meet the following qualifications:

1. The student must have a minimum of 105 undergraduate credits posted to their MSU transcript prior to reverse transfer of Veterinary School credits. Of those 105 credits:

- All general education requirements (e.g., Core 2.0) must be complete.
- No more than 15 other upper-division credits may be substituted by reverse-transferred courses.
- Grades in courses counting toward degree requirements must meet established grade requirements, typically C- or better, or P for Veterinary School courses if they are only offered as Pass/Marginal/Fail or Pass/Fail.
- All department-specified required courses (as applicable) for each degree must be completed.
- Reverse-transfer courses can substitute for up to 15 department-specified courses to fulfill degree requirements. All courses selected to be eligible for fulfillment by reverse-transfer courses must be preapproved by the department and will be maintained on file at the Registrar's Office and in the departmental office.

- The 9-credit limit on reservation-of-credit when using graduate-level courses for an undergraduate degree.
- The 12-credit limit as to applicability of Pass/Fail courses used toward undergraduate degree requirements.
- The use of Pass/Fail courses for degree requirements.

The need for these exceptions varies depending upon the given veterinary school and their embedded grading policies.

### Procedure

2. Prior to their last date of course enrollment at MSU, students must submit a *Petition to Reserve Veterinary School Courses for Reverse-Transfer* indicating the student's intent to use Veterinary School courses to complete their MSU baccalaureate degree requirements. The petition will identify the department-preapproved courses for which reverse-transfer courses will be substituted. The petition must be approved by the academic advisor, Department Certifying Officer, College Dean's Office, and Registrar. Petitions should be submitted at the time of acceptance to an accredited veterinary medical program/school.

3. The student can apply for completion of their undergraduate degree requirements (using reverse-transfer courses) only after the first year of veterinary school has been completed. This would most commonly occur during the next fall semester but may occur later as well. The following steps are required:

- File an "Intent to Register" Form, making sure to declare the degree specified above in the reverse-transfer petition (see item 2), with the Registrar's Office by the established deadline in the semester prior to the intended term of graduation (October 1<sup>st</sup> for graduation in spring, March 1<sup>st</sup> for graduation in summer or fall).
- Complete an Application for Baccalaureate Degree and submit this application with the graduation fee required of all graduating students. The deadlines for graduation application are the same as those for the "Intent to Register" (October 1<sup>st</sup> for graduation in spring, March 1<sup>st</sup> for graduation in summer or fall).
- Register for credit in absentia (*prior to the 10<sup>th</sup> day of class of the intended graduation term*).
- Have an official copy of their veterinary school transcript submitted to Montana State University - Office of the Registrar once the required courses have been completed.

### Policy Considerations

This reverse-transfer policy has been approved by the faculty senate and adherence to the procedures herein circumvent the need for a Graduation and Admissions Review Committee (GARC) petition in relation to the following graduation standards:

- The residency requirement that 23 of a student's last 30 credits be completed through MSU.