

PRE-VETERINARY MEDICINE

Description

The Nebraska Pre-Veterinary Medicine program (PVET) is designed for students who want to become veterinarians. The doctor of veterinary medicine (DVM) degree, or its equivalent, must be earned to become a veterinarian. Students wishing to earn the DVM degree must complete the required coursework for the pre-veterinary medicine program of their choosing.

The Nebraska PVET program can help students qualify for admission to any of the American Veterinary Medical Association Council on Education (AVMA-COE) accredited veterinary schools which offer the DVM degree or its equivalent. Students completing our PVET program do not earn baccalaureate degrees nor are they guaranteed admission to any veterinary school.

There are three general PVET requirements for admission to veterinary schools:

- Academic
- Career exploration
- Leadership development

Applicants are assessed in each of those areas during the application process.

Academic requirements include specific undergraduate courses that must be successfully completed and course and cumulative grade point averages (GPAs). The specific courses included in a PVET program are specified by each of the veterinary schools. There is no standard curriculum, so each veterinary school publishes its PVET course requirements. The undergraduate courses included in our PVET program are those for the Professional Program in Veterinary Medicine (PPVM); however, our PVET program can be modified so that a student can qualify academically for admission to any AVMA-COE accredited veterinary school. The PVET course requirements for other veterinary schools may be found on those schools' websites. A list of AVMA-accredited veterinary schools may be obtained on the AVMA website at https://www.avma.org/ProfessionalDevelopment/Education/Accreditation/Colleges/Documents/colleges_accredited.pdf.

Veterinary schools require that their applicants attain a minimum cumulative GPA to be considered for admission. The PPVM requires a cumulative GPA of at least 2.50 for application consideration. Minimum cum GPA requirements for other veterinary schools may be found on their respective websites.

The veterinary medical career exploration requirement is intended to help PVET students learn what veterinarians do professionally, typically done by working in a veterinary clinic in either a paid or unpaid capacity. Students may also explore other aspects of veterinary medicine, including government service, academic or industrial research, or military service. It is recommended that students develop a professional relationship with a veterinarian so that the veterinarian may write a good letter of recommendation in support of that student's application to veterinary school.

Because completion of the PVET program does not earn the student a baccalaureate degree, we recommend that students wishing to become veterinarians start as a PVET major so they can take every advantage of our PVET advising program. Our PVET advisors will help their advisees

reach their academic and career goals. We strongly recommend that PVET students declare a degree-granting major such as veterinary science, animal science, fisheries and wildlife, or biochemistry and pursue a baccalaureate degree while completing the PVET requirements. A particular baccalaureate degree does not provide any advantage over other majors for admission to a veterinary school. The student may choose any baccalaureate program that interests the student.

A student can expect to spend 2-3 years completing the PVET program. If the student is not prepared to start the science-intensive PVET program, its completion will take longer. Adequate preparation includes math proficiency as indicated by the Nebraska Math Proficiency Examination (MPE). Students who do not place into at least MATH 102 Trigonometry may take longer to complete the PVET program and baccalaureate degree.

Additional requirements for the pre-vet program:

- Courses intended to satisfy veterinary school requirements must be taken on a graded A-F basis to satisfy entry requirements. Veterinary school required courses taken for Pass/Not Pass will not be accepted. Please consult with your advisor and pertinent veterinary medicine programs.
- A grade of C or better is necessary for courses intended to satisfy veterinary school requirements. If a course is repeated to obtain a higher grade or to earn a grade of C or better, some professional programs may consider the average of all grades earned for that course. Other programs may consider the highest grade or the most recent grade. Check the policy of each veterinary school to which application is to be made.
- The acceptability of AP, CLEP, or IB earned credits varies by veterinary school. It is important for each student to check the policies of the veterinary school to which application is to be made.

College Requirements

College Admission

Requirements for admission into the College of Agricultural Sciences and Natural Resources (CASNR) are consistent with general University admission requirements (one unit equals one high school year): 4 units of English, 4 units of mathematics, 3 units of natural sciences, 3 units of social sciences, and 2 units of world language. Students must also meet performance requirements: a 3.0 cumulative high school grade point average OR an ACT composite of 20 or higher, writing portion not required OR a score of 1040 or higher on the SAT Critical Reading and Math sections OR rank in the top one-half of graduating class; transfer students must have a 2.0 (on a 4.0 scale) cumulative grade point average and 2.0 on the most recent term of attendance.

Admission Deficiencies/Removal of Deficiencies

Students who are admitted to CASNR with core course deficiencies must remove these deficiencies within the first 30 credit hours at the University of Nebraska—Lincoln, or within the first calendar year at Nebraska, whichever takes longer. College-level coursework taken to remove deficiencies may be used to meet degree requirements in CASNR.

Deficiencies in the required entrance subjects can be removed by the completion of specified courses in the University or by correspondence.

The Office of Admissions, Alexander Building (south entrance), City Campus, provides information to new students on how deficiencies can be removed.

College Degree Requirements

Curriculum Requirements

The curriculum requirements of the College consist of three areas: ACE (Achievement-Centered Education), College of Agricultural Sciences and Natural Resources Core, and Degree Program requirements and electives. All three areas of the College Curriculum Requirements are incorporated within the description of the Major/Degree Program sections of the catalog. The individual major/degree program listings of classes ensure that a student will meet the minimum curriculum requirements of the College.

World Languages/Language Requirement

Two units of a world language are required. This requirement is usually met with two years of high school language.

Experiential Learning

All undergraduates in the College of Agricultural Sciences and Natural Resources must take an Experiential Learning (EL) designated course. This may include 0-credit courses designed to document co-curricular activities recognized as Experiential Learning.

Minimum Hours Required for Graduation

The College grants the bachelors degree in programs associated with agricultural sciences, natural resources, and related programs. Students working toward a degree must earn at least 120 semester hours of credit. A minimum cumulative grade point average of C (2.0 on a 4.0 scale) must be maintained throughout the course of studies and is required for graduation. Some degree programs have a higher cumulative grade point average required for graduation. Please check the degree program on its graduation cumulative grade point average.

Grade Rules

Removal of C-, D, and F Grades

Only the most recent letter grade received in a given course will be used in computing a student's cumulative grade point average if the student has completed the course more than once and previously received a grade or grades below C in that course.

The previous grade (or grades) will not be used in the computation of the cumulative grade point average, but it will remain a part of the academic record and will appear on any transcript.

A student can remove from their cumulative average a course grade of C-, D+, D, D-, or F if the student repeats the same course at the University of Nebraska and receives a grade other than P (pass), I (incomplete), N (no pass), W (withdrew), or NR (no report). If a course is no longer being offered, it is not eligible for the revised grade point average computation process.

For complete procedures and regulations, see the Office of the University Registrar website at <http://www.unl.edu/regrec/course-repeats> (<http://www.unl.edu/regrec/course-repeats/>).

Pass/No Pass

Students in CASNR may take any course offered on a Pass/No Pass basis within the 24-hour limitation established by the Faculty Senate. However, a department may specify that the Pass/No Pass status of its

courses be limited to non-majors or may choose to offer some courses for letter grades only.

GPA Requirements

A minimum cumulative grade point average of C (2.0 on a 4.0 scale) must be maintained throughout the course of studies and is required for graduation. Some degree programs have a higher cumulative grade point average required for graduation. Please check the degree program on its graduation cumulative grade point average.

Transfer Credit Rules

To be considered for admission a transfer student, Nebraska resident or nonresident, must have an accumulated average of C (2.0 on a 4.0 scale) and a minimum C average in the last semester of attendance at another college. Transfer students who have completed less than 12 credit hours of college study must submit either ACT or SAT scores.

Ordinarily, credits earned at an accredited college are accepted by the University. The College, however, will evaluate all hours submitted on an application for transfer and reserves the right to accept or reject any of them. Sixty (60) is the maximum number of hours the University will accept on transfer from a two-year college. Ninety (90) is the maximum number of hours the University will accept from a four-year college. Transfer credit in the degree program must be approved by the degree program advisor on a Request for Substitution Form to meet specific course requirements, group requirements, or course level requirements in the major. At least 9 hours in the major field, including the capstone course, must be completed at the University of Nebraska–Lincoln regardless of the number of hours transferred.

The College will accept no more than 10 semester hours of C-, D+, D, and D- grades from other schools. The C-, D+, D, and D- grades can only be applied to free electives. This policy does not apply to the transfer of grades from UNO or UNK to the University of Nebraska–Lincoln.

Joint Academic Transfer Programs

The College of Agricultural Sciences and Natural Resources has agreements with many institutions to support joint academic programs. The transfer programs include dual degree programs and cooperative degree programs. Dual degree programs offer students the opportunity to receive a degree from a participating institution and also to complete the requirements for a bachelor of science degree in CASNR. Cooperative programs result in a single degree from either the University of Nebraska–Lincoln or the cooperating institution.

Dual Degree Programs

A to B Programs

The A to B Program, a joint academic program offered by the CASNR and participating community colleges, allows students to complete the first two years of a degree program at the participating community college and continue their education and study in a degree program leading toward a bachelor of science degree.

The A to B Program provides a basic knowledge plus specialized coursework. Students transfer into CASNR with junior standing.

Depending on the community college, students enrolled in the A to B Program may complete the requirements for an associate of science at the community college, transfer to the University of Nebraska–Lincoln, and work toward a bachelor of science degree.

Participating community colleges include:

- Central Community College
- Metropolitan Community College
- Mid-Plains Community College
- Nebraska College of Technical Agriculture
- Nebraska Indian Community College
- Northeast Community College
- Southeast Community College
- Western Nebraska Community College

3+2 Programs

Two specialized degree programs in **animal science** and **veterinary science** are offered jointly with an accredited college or school of veterinary medicine. These two programs permit CASNR animal science or veterinary science students to receive a bachelor of science degree from the University of Nebraska–Lincoln with a degree in animal science or veterinary science after successfully completing two years of the professional curriculum in veterinary medicine at an accredited veterinary school. Students who successfully complete the 3+2 Program, must provide transcripts and complete the Application for Degree form via MyRED. Students without MyRED access may apply for graduation in person at Husker Hub in the Canfield Administration Building, or by mail. Students should discuss these degree programs with their academic advisor.

Cooperative Degree Programs

Academic credit from the University and a cooperating institution are applied towards a four-year degree from either the University of Nebraska–Lincoln (University degree-granting program) or the cooperating institution (non-University degree-granting program). All have approved programs of study.

UNL Degree-Granting Programs

A University of Nebraska–Lincoln degree-granting program is designed to provide students the opportunity to complete a two-year program of study at one of the four-year institutions listed below, transfer to CASNR, and complete the requirements for a bachelor of science degree.

Chadron State College. Chadron State College offers a 2+2 program leading to a grassland ecology and management degree program and a transfer program leading to a bachelor of science in agricultural education in the teaching option.

Wayne State College. Wayne State College offers a 3+1 program leading to a bachelor of science in plant biology in the ecology and management option and a 3+1 program leading to a bachelor of science in Applied Science.

University of Nebraska at Kearney. Transfer programs are available for students pursuing degree programs leading to a bachelor of science degree.

University of Nebraska at Omaha. Transfer programs are available for students pursuing degree programs leading to a bachelor of science degree.

Non University of Nebraska–Lincoln Degree-Granting Programs

CASNR cooperates with other institutions to provide coursework that is applied towards a degree at the cooperating institution. Pre-professional programs offered by CASNR allow students to complete the first two or three years of a degree program at the University prior to transferring and completing a degree at the cooperating institution.

Chadron State College–Range Science. The 3+1 Program in range science allows Chadron State College students to pursue a range science degree through Chadron State College. Students complete three years of coursework at Chadron State College and one year of specialized range science coursework (32 credit hours) at CASNR.

Residency

Students must complete at least 30 of the total hours for their degree using University of Nebraska–Lincoln credits. At least 18 of the 30 credit hours must be in courses offered through CASNR¹ (>299) including the appropriate ACE 10 degree requirement or an approved ACE 10 substitution offered through another Nebraska college and excluding independent study regardless of the number of hours transferred. Credit earned during education abroad may be used toward the residency requirement if students register through the University of Nebraska–Lincoln and participate in prior-approved education abroad programs. The University of Nebraska–Lincoln open enrollment and summer independent study courses count toward residence.

¹ *Includes courses taught by CASNR faculty through interdisciplinary prefixes (e.g., LIFE, MBIQ, ENVR, SCIL, EAEP, ENSC) and CASNR crosslisted courses taught by non-CASNR faculty.*

Online and Distance Education

There are many opportunities to earn college credit online through the University of Nebraska–Lincoln. Some of these credits may be applicable not only as elective credits but also toward the fulfillment of the College's education requirements. Credits earned online may count toward residency. However, certain offerings may not be counted toward scholarship requirements or academic recognition criteria.

For further information, contact:

Office of Online and Distance Education
University of Nebraska–Lincoln
305 Brace Labs
Lincoln, NE 68588-0109
402-472-4681
<http://online.unl.edu/>

Independent Study Rules

Students wishing to take part in independent studies must obtain permission; complete and sign a contract form; and furnish copies of the contract to the instructor, advisor, departmental office, and the Dean's Office. The contract should be completed before registration. Forms are available in 103 Agricultural Hall or online at the CASNR website.

Independent study projects include research, literature review or extension of coursework under the supervision and evaluation of a departmental faculty member.

Students may only count 12 hours of independent study toward their degrees and no more than 6 hours can be counted during their last 36 hours earned, excluding senior thesis, internships, and courses taught under an independent study number.

Other College Degree Requirements

Capstone Course Requirement

A capstone course is required for each CASNR degree program. A capstone course is defined as a course in which students are required to integrate diverse bodies of knowledge to solve a problem or formulate a policy of societal importance.

ACE Requirements

All students must fulfill the Achievement Centered Education (ACE) requirements. Information about the ACE program may be viewed at ace.unl.edu (<https://ace.unl.edu/>).

The minimum requirements of CASNR reflect the common core of courses that apply to students pursuing degrees in the college. Students should work with an advisor to satisfy ACE outcomes 1, 2, 3, 4, 6, and 10 with the college requirements.

Catalog Rule

Students must fulfill the requirements stated in the catalog for the academic year in which they are first admitted to the University of Nebraska–Lincoln or when they were first admitted to a Joint Academic Transfer Program. Students transferring from a community college, but without admission to a Joint Academic Transfer Program, may be eligible to fulfill the requirements as stated in the catalog for an academic year in which they were enrolled at the community college prior to attending the University of Nebraska-Lincoln. This decision should be made in consultation with academic advisors, provided the student a) was enrolled in a community college during the catalog year they are utilizing, b) maintained continuous enrollment at the previous institution for 1 academic year or more, and c) continued enrollment at the University of Nebraska-Lincoln within 1 calendar year from their last term at the previous institution. In consultation with advisors, a student may choose to follow a subsequent catalog for any academic year in which they are admitted to and enrolled as a degree-seeking student at the University of Nebraska–Lincoln in the College of Agricultural Sciences and Natural Resources. Students must complete all degree requirements from a single catalog year. The catalog which a student follows for degree requirements may not be more than 10 years old at the time of graduation.

Learning Outcomes

Graduates in pre-veterinary medicine will be able to:

1. Qualify academically for admission to the Professional Program in Veterinary Medicine (PPVM), a joint program between the University of Nebraska–Lincoln and the Iowa State University College of Veterinary Medicine.
2. Qualify academically for admission to any of the AVMA-accredited colleges or schools of veterinary medicine. (Add required pre-veterinary courses for the other college or school.)

Major Requirements

PPVM Pre-Veterinary Medicine Core

The following courses fulfill the PVET requirements for the Professional Program in Veterinary Medicine (PPVM), a cooperative program between the University of Nebraska–Lincoln and Iowa State University. Criteria for admission to that program may be found on the PPVM website at <http://vetmed.unl.edu/prospectivestudents> (<http://vetmed.unl.edu/prospectivestudents/>). This program may be modified so that a student may qualify academically for admission to any American Veterinary Medical Association Council on Education-accredited veterinary school. Students planning to attend other veterinary schools must check with those schools to determine the differences between the other veterinary schools and the PPVM PVET requirements.

College Integrative Course

SCIL 101	Science and Decision-Making for a Complex World ¹	3
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Credit Hours Subtotal: 3

Veterinary Science

PVET 101	Success in Veterinary Science	1
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Credit Hours Subtotal: 1

Natural Science Courses

Life Sciences²

LIFE 120 & 120L	Fundamentals of Biology I and Fundamentals of Biology I laboratory (ACE 4)	4
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LIFE 121 & 121L	Fundamentals of Biology II and Fundamentals of Biology II Laboratory (ACE 4)	4
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Genetics⁸

BIOS 201	General Genetics	4
or PLAS 215	Genetics	

Veterinary School Science³

Select one course from the following: 4-5

ASCI 340	Animal Physiological Systems	
BIOS 213 & 213L	Human Physiology and Human Physiology Laboratory	
BIOS 214	Human Anatomy	
VBMS 407	Introduction to Veterinary Anatomy	

Chemistry

CHEM 109A & CHEM 109L	General Chemistry I and General Chemistry I Laboratory (ACE 4)	4
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CHEM 110A & CHEM 110L	General Chemistry II and General Chemistry II Laboratory (ACE 4)	4
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CHEM 251	Organic Chemistry I	3
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CHEM 253	Organic Chemistry I Laboratory	1
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Physics

Select one of the following:⁴ 5

PHYS 141	Physics for Life Sciences I (ACE 4)	
PHYS 211 / PHYS 211H & PHYS 221	General Physics I and General Physics Laboratory I	

Biological Chemistry

Select one of the following: 3

BIOC 401	Elements of Biochemistry	
BIOC 431 / BIOS 431 / CHEM 431	Biochemistry I: Structure and Metabolism	

Credit Hours Subtotal: 36

Mathematics and Statistics

Select 5-6 hours of the following:⁵ 5-6

MATH 102	Trigonometry	
MATH 103	College Algebra and Trigonometry (only 2 credit hours apply)	
MATH 104	Applied Calculus	
MATH 106	Calculus I	

STAT 218	Introduction to Statistics	
Credit Hours Subtotal:		5-6
Communications		
<i>Written Communication (ACE 1)</i> ⁶		
Select any two ACE 1 courses		6
<i>Oral Communication (ACE 2)</i> ⁶		
Select any ACE 2 course		3
Credit Hours Subtotal:		9
Economics (ACE 6) ⁷		
Select one of the following:		3
AECN 141	Introduction to the Economics of Agriculture	
ECON 200	Economic Essentials and Issues	
ECON 211	Principles of Macroeconomics or ECON 211 Honors: Principles of Macroeconomics	
ECON 212	Principles of Microeconomics or ECON 212 Honors: Principles of Microeconomics	
Credit Hours Subtotal:		3
ACE Requirement		
Select one course each from ACE outcomes 5, 7, 8, and 9		12
Credit Hours Subtotal:		12
Total Credit Hours		69-70

C- and D Grades

Most veterinary schools require a grade of at least a C in courses required for admission. Exact course grade requirements for admission should be determined for each veterinary school to which an application is to be made.

GPA Requirements

A minimum cumulative GPA of 2.50 is generally required for application to a veterinary school. The exact GPA requirement for admission should be obtained for each veterinary school to which application is to be made.

¹ PVET students not seeking a degree from CASNR can take any ACE 8 that is allowed by their degree-granting major.

² BIOS 101 & BIOS 101L or their equivalents will not satisfy this requirement.

³ Nebraska's Professional Program in Veterinary Medicine will accept BIOS 201 or PLAS 215. However, certain undergraduate courses or programs may only accept one of the listed courses. Please consult with the Pre-Vet advisor.

⁴ Nebraska's Professional Program in Veterinary Medicine (PPVM) requires one of these: ASCI 340, VBMS 407, BIOS 213 & BIOS 213L or BIOS 214. In addition, nine (9) credit hours of upper-level biomedical science courses (300-level or higher) are required. Other veterinary schools may require other courses in addition to the ones listed. Please consult with your Pre-Vet Advisor.

⁵ PHYS 151 and AGST 109 & AGST 109L do not meet the requirement.

⁶ Beyond MATH 101 College Algebra. Only 2 hours of MATH 103 will count toward this requirement. Math requirements vary by degree-granting major. Consult your advisor.

⁷ Some veterinary schools have specific written and/or oral communication course requirements. Please refer to the veterinary school(s) to which you plan to apply.

⁸ PVET students not seeking a degree from CASNR can take any ACE 6 that is allowed by their degree-granting major.

Additional Major Requirements

Grade Rules

Pass/No Pass

Courses intended to satisfy veterinary school requirements must be taken on a graded A-F basis to satisfy entry requirements. Veterinary school required courses taken for Pass/Not Pass will not be acceptable. Please consult with your advisor and pertinent veterinary medicine programs.