Summary of Course Prerequisites

For All AAVMC Member Institutions for 2017 Matriculation

UPDATED AS OF March 23, 2016

Updates: See Change Log: Page 13

The Summary of Course Prerequisites is designed to supplement admission information provided by each institution. The colleges to which you apply may have additional requirements not summarized in this table. Contact each institution to which you wish to apply for a college brochure. This table is for use in 2016 for 2017 matriculation only and is subject to change. Please direct all questions regarding course prerequisites directly to the institution.

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(Please check www.aavmc.org for updates)
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### Summary of Course Prerequisites:

| Course                        | Adelaide | Auburn | California - Davis | Colorado State | Copenhagen* | Cornell | Edinburgh | Florida | Georgia | Glasgow | Illinois - Urbana | Iowa State | Kansas State | Lincoln Memorial | Louisiana State | Maine | Maryland | Massachusetts | Michigan State | Minnesota | Missouri | Montana | Murdoch | North Carolina State | Ohio State | Oklahoma State | Oregon State | Pennsylvania | Purdue | Prince Edward Island | Queensland | Royal | Russia | Salt Lake City | Sydney | Taiwan | Texas A&M | Tokyo* | Turin | Turku | UAE | Uppsala | University of Mexico | University of Liege | University of Sydney | Verona | Vrije University | Washington State | Western University | Wisconsin | Total |
|-------------------------------|----------|--------|-------------------|----------------|------------|---------|----------|---------|---------|---------|----------------|------------|--------------|-----------------|----------------|-------|----------|---------------|----------------|---------|----------|---------|-----------|--------|-------------------|-----------|--------|---------|-------------|--------|--------|-----------|--------|--------|----------|--------|--------|-------------|--------|---------|-----------|--------|--------|-------------|--------|--------|---------|--------|
Adelaide, University of

Prerequisites for Bachelor of Science (Veterinary Bioscience) program include mathematics and chemistry. Prerequisite for Doctor of Veterinary Medicine program include a Bachelor of Science (Veterinary Bioscience). For further information on prerequisites contact avs_enquiries@adelaide.edu.au.

Auburn University

Courses (Semester hours)

- Written Composition # (6)
- Literature* # (3)
- Fine Arts # (3)
- Humanities/fine arts electives # (6)
- History* # (3)
- Social/behavioral science electives # (9)
- Mathematics – pre-calculus with trigonometry # (3)
- Biology I (lab required) (4)
- Biology II (lab required) (4)
- Cell Biology – upper level (3)
- Fundamentals of chemistry (lab required) (8)
- Organic chemistry (lab required) (6)
- Physics I (4)
- Biochemistry (3)
- Science Electives** (6)
- Animal Nutrition ## (3)

* Students must complete a 6-semester-hour sequence either in literature or in history.

** Science electives must be two of the following: genetics, microbiology, physics II, comparative anatomy, histology, reproductive physiology, mammalian or animal physiology, parasitology, embryology or immunology.

# These requirements will be waived if the student has a bachelor’s degree.

## Will accept web based or correspondence course.

Central Luzon University

No Prerequisite courses submitted (http://admission.clsu.edu.ph/)

Colorado State University

Courses (Semester Hours)

- Biochemistry (that requires Organic Chemistry) (3)
- Genetics (3)
- Physics (lab required) (4)
- Statistics (3)
- Laboratory associated with a biological science course (1)
- Laboratory associated with a chemistry class (1)
- English composition (3)
- Social sciences and humanities (12)
- Electives (30)

Science electives recommended.

Copenhagen, University of

No Prerequisite courses submitted (http://healthsciences.ku.dk/education/exchange_guest_students/)
Cornell University

Courses (Semester Hours)
- English composition / writing courses (6)
- Biology or zoology (labs required) (6)
- Physics (labs required) (6)
- Inorganic (or general) chemistry (lab required) (6)
- Organic chemistry (lab recommended) (3)
- Biochemistry (half year required, full year recommended) (4)
- Advanced Life Sciences Course (lab recommended) (3)
- Non-prerequisite elective credits needed (26)

Edinburgh, University of

Applicants are required to complete certain prerequisite courses for the program, including: Organic Chemistry; Inorganic Chemistry; Biochemistry; Biology/Zoology; Physics; Mathematics/Statistics. Also highly recommended are: Genetics, Microbiology, and Cellular Biology. Candidates for the 4-year Graduate Entry Program should have a minimum GPA of 3.4 (4 point scale); high grades are expected in all the prerequisite subjects listed above.

Florida, University of

Courses (Semester Hours)
- Biology (one must have Cell Biology content) (9)
- Biochemistry (3)
- Statistics (3)
- Genetics (3)
- Humanities and/or social sciences* (6)

* Consider topics such as ethics, logic, critical thinking, determinants of human behavior and human social interaction.

Guelph, University of

Courses (Credit Hours)
- Biology (lab required) (8)
- Chemical Sciences (lab required) (16)
- Physics (lab required) (8)

Georgia, University of

Courses (Semester Hours)
- English (writing intensive) (6)
- Humanities or Social studies (14)

Illinois - Urbana, University of

Courses (Semester Hours)
- Biological Science (lab required) (8)
- Chemical Sciences (lab required) (16)
- Physics (lab required) (8)

Organic Chemistry (lab required) (8)
Biochemistry (lab not required) (3)
General biology (lab required) (for science majors) (8)
Advanced biological science* (8)

* 300/3000 level or higher biology courses with general biology as a prerequisite. Nutrition, behavior and ecology courses typically do not count towards this requirement. Recommended courses: comparative anatomy, microbiology, cell biology, or genetics.

Glasgow, University of

Applicants are expected to have completed at least 2 years pre-veterinary or science courses at College or University, with a minimum of one year in Chemistry (including organic chemistry and organic chemistry lab). We would expect high grades in all science subjects. US applicant should have a minimum 3.4 GPA (4 point scale), and to have achieved at 3.0 in Science.
Iowa State University

Courses (Semester Hours)
General chemistry - 1 year series (lab required) (7)
Organic chemistry - 1 year series (lab required) (7)
Biochemistry (3)
Biology - 1 year series (labs required) (8)
Genetics (upper level Mendelian and molecular) (3)
Mammalian anatomy/physiology – all systems (3 req’d, 6-8 recommended)
Oral communication (interpersonal, group or public speaking) (3)
English composition (6)
Humanities and social sciences (8)
Physics (Physics 1 – first semester of a 2 semester series) (4)

Kansas State University

Courses (Semester Hours)
Expository writing I and II (6)
Public speaking (2)
Chemistry I and II (8)
General Organic chemistry (lab required) (5)
General Biochemistry (3)
Physics I and II (8)
Principles of biology or zoology (4)
Microbiology (lab required) (4)
Genetics (3)
Social Science and/or Humanities (12)
Electives (9)

Lincoln Memorial University

Course Requirements (Semester/Quarter Hours)
General Biology (lab required) (8/12)
Genetics (3/4)
Biochemistry (3/4)
Upper division science electives* (8/12)
Organic Chemistry (lab required) (6/9)
General Chemistry (lab required) (8/12)
Physics (3/4)
English (6/9)

Probability and Statistics (3/4)
Social and Behavioral Sciences (6/9)
Electives (6/9)

* Upper division courses (300 level or higher) including Anatomy, Animal Science, Cell Biology, Immunology, Microbiology, Molecular Biology, Physiology, Virology

Louisiana State University

Courses (Semester Hours)
General biology (8)
Microbiology (lab required) (4)
Physics (6)
General chemistry (8)
Organic chemistry (3)
Biochemistry (3)
English composition (6)
Speech communication (3)
Mathematics (5)
Electives (20)

Massey University

Applicants are required to have completed at least two full years of full-time, largely science-based university education, and have passed classes equivalent to the 4 standard Massey University veterinary prerequisite classes. The following list is a guideline of what would likely be equivalent, but the actual hours may vary for your institution. If you are unsure of whether or not your completed study will meet our prerequisites, please contact us at: vetschool@massey.ac.nz

Courses (Semester Hours)
General chemistry (labs required) (6)
Organic chemistry (lab required) (3)
General biology (lab required) (6)
Zoology or Animal Biology (lab required) (3)
Cellular Biology* (lab required) (3)
Physics (lab required) (6)

* Molecular Biology, genetics or microbiology may in some cases be substituted for cellular biology
Melbourne, University of

Entrance to the DVM as a graduate: Applicants will require a science degree from the University of Melbourne or another institution. Examples of appropriate degrees include Bachelor’s degrees with majors in: Agriculture, Animal Science, Biochemistry, Biomedicine, Physiology, or Zoology.

Prerequisites for entry as a graduate are at least one semester of study in each of general or cellular biology and biochemistry as part of a science degree. [http://futurestudents.unimelb.edu.au/info/international](http://futurestudents.unimelb.edu.au/info/international)

Michigan State University

**Courses (Semester Hours)**

- English composition (3)
- Social and Behavioral Sciences (6)
- Humanities (6)
- General Inorganic Chemistry (lab required) (3)
- Organic chemistry (lab required) (6)
- Biochemistry (Upper division) (3)
- General Biology (lab required) (6)
- College Algebra and Trigonometry (3)
- College Physics (lab required) (8)
- Nutrition* (3)
- Genetics (3)
- Upper Division Biology Course** (3)
- Microbiology (w/lab) (4)

*Animal, general or human nutrition will satisfy the requirement

** A general/animal science course in cell biology, physiology, immunology, histology, or neurobiology will satisfy the requirement

Midwestern University

**Courses (Semester Hours)**

- Biology (8)
- General Chemistry (lab required) (8)
- Organic Chemistry (lab required) (8)
- Mathematics (6)
- Physics with lab (4)
- English Composition (6)
- Science Electives (8)

Minnesota, University of

**Courses (Semester Hours)**

- English (6)
- College algebra, pre-calculus or calculus (3)
- General chemistry (labs required) (6)
- Organic chemistry (3)
- Biochemistry (3)
- General biology (lab required) (3)
- Zoology (lab required) (3)
- Genetics (3)
- Microbiology (lab required) (3)
- Physics (6)
- Liberal Education (9)
- Statistics (3)

Mississippi State University

**Courses (Semester Hours)**

- English composition and/or academic writing (6)
- Speech or technical writing (3)
- Mathematics (college algebra or higher) (6)
- General biology (labs required) (8)*
- Microbiology (lab required) (4)
- General chemistry (labs required) (8)*
- Organic chemistry (labs required) (8)*
- Biochemistry (3)
- Physics (may be trigonometry-based) (6)
- Advanced (upper-level) science electives (12)
- Humanities/fine arts/social/behavioral sciences electives (15)

*indicates requirement of a minimum 6 hours of lecture and 2 hours of laboratory.

Midwestern University

**Courses (Semester Hours)**

- Biology (8)
- General Chemistry (lab required) (8)
- Organic Chemistry (lab required) (8)
- Mathematics (6)
- Physics with lab (4)
- English Composition (6)
- Science Electives (8)

Missouri, University of

**Courses (Semester Hours)**

- English composition or communication (6)
- College algebra or higher math (3)
- Physics (5)
- Biological sciences (not animal science courses) (10)
- Social sciences or humanities (10)
Biochemistry with organic chemistry prerequisite (3)
Electives (10)

Montreal, University of

Courses (Level)
Physics (101, 201, 301–78)
Chemistry (101, 201, 202)
Biology (301, 401)
Mathematics (including calculus) (103, 203)

Murdoch University
Students who have completed one or more years of tertiary study and who have satisfied the appropriate prerequisites are eligible to apply for entry into second year of the 5 year program. Currently, prerequisites includes units in: Chemistry; Statistics & Data analysis; Introductory animal anatomy and physiology; Cell and molecular biology and Vertebrae structure and function; plus a unit that explores the basic building blocks for science students and another that introduces the history and philosophy of science and the interconnected nature of scientific disciplines. Principles of livestock science in an Australian context is also a prerequisite.

North Carolina State University

Courses (Semester Hours)
Animal nutrition (3)
Biochemistry (3-4)
Biology (4)
Calculus or logic (3)
Chemistry, general (8)
Chemistry, organic (8)
English composition, communications or public speaking (6)
Humanities/social sciences (6)
Microbiology (4)
Physics (8)
Statistics (3)
Genetics (3-4)

Ohio State University, The

Courses (Semester Hours – may vary*)
Biochemistry (4)
Microbiology (lab required) (4)
Physiology (5)
Public Speaking (Communication) (3)
Science Electives (35)
Humanities / Social Science Electives (16)
*The number of hours provided is a guideline. In assessing course content for equivalency, actual hours may vary for your institution. In some cases a multiple course series may be needed to fulfill prerequisite coursework. For full details on prerequisites, see school website or VMSAR. If you are unsure of whether or not a course will be accepted to fulfill a prerequisite, please contact us at: dvmprospective@osu.edu

Oklahoma State University

Courses (Semester Hours)
Animal nutrition (3)
Biochemistry (3)
Biology/Zoology (8)
English, Speech or Composition (9)
Genetics (3)
Humanities/social sciences (6)
Inorganic Chemistry (8)
Mathematics (college algebra, no statistics (3)
Microbiology (4)
Organic Chemistry (8)
Physics I & II (8)

Oregon State University

Courses (Semester Hours)
General Biology I & II (6)
Upper Division Biology (lab required) (4)
Physics I & II (8)
General Chemistry I & II (labs required) (8)
Organic Chemistry I (3)
Biochemistry I (4)
**Pennsylvania, University of**

**Courses (Semester Hours)**
- English (including composition) (6)
- Physics (lab required) (8)
- Chemistry – General (with at least 1 lab) (8)
- Chemistry – Organic (4)
- Biology or zoology (covering basic genetics & cell biology) (9)
- Biochemistry (3)
- Microbiology (3)
- Humanities or social sciences (6)
- Calculus & statistics (any intro Stats course) (6)
- Electives (37)

**Prince Edward Island, University of**

**Courses**
- Animal Biology (labs required) (3 courses)
- Genetics
- Mathematics (2 courses, one being Statistics)
- Chemistry (labs required) (3 courses, one being Organic Chemistry)
- English (Composition)
- Electives (10 courses)

**Purdue University**

**Courses (Semesters)**
- Chemistry (labs required) (4 [2 each Inorganic and Organic])
- Biochemistry (upper level) (1)
- Biology (labs required) (2)

**Genetics (3)**
**Calculus or Algebra & Trig (4)**
**Statistics (3)**
**Physiology (Human or Animal) (3)**
**English* (4)**
**Humanities or Social Sciences* (8)**
**Public Speaking* (3)**
*These requirements will be considered met if the applicant has earned a bachelor’s degree by July 1 of the year in which they are accepted into the program.

**Queensland, University of**

To gain entry into the University of Queensland program, a non-resident (international) student must have completed a high school qualification that is deemed equivalent to the Queensland Year 12 high school qualification and have the following subject pre-requisites or their equivalent: English; Chemistry; Mathematics; either Physics or Biology. Full details can be found at [https://future-students.uq.edu.au](https://future-students.uq.edu.au).

**Ross University School of Veterinary Medicine**

**Courses (Semester Hours)**
- Cell Biology or Genetics (lab recommended) (3)
- Chemistry (General or Inorganic) (lab required) (8)
- Biochemistry (3)
- Physics (lab required) (4)
- Mathematics (Pre-calculus, Calculus, or Statistics) (3)
- English (3)
- Electives / Humanities / Social Sciences* (9)
  *Once of the elective courses must be one of the following: Comparative anatomy, medical terminology, microbiology, nutrition, physiology, foreign language, public speaking, introduction to business.

**Royal Veterinary College**

**Courses (Semester Hours)**
- Physics (4)
- Biochemistry (4)
- Upper-level Biology/Biological Science* (8)
- Anatomy/Physiology (4)
Organic chemistry (4)
Mathematics (4)
* Including but not limited to: Animal Biology, Zoology, Microbiology, Genetics, Anatomy, Physiology

Saskatchewan, University of

Courses (Semester Hours)
English (6)
Physics (3)
Biology (6)
Genetics (3)
Introductory Chemistry (6)
Organic Chemistry (3)
Mathematics or Statistics (6)
Biochemistry (3)
Microbiology (3)
Electives (21)

Seoul National University
No Prerequisite courses submitted (http://en.snu.ac.kr/apply/info)

St. George’s University

Courses (Semester Hours)
General Biology or Zoology (lab required) (8)
Inorganic Chemistry (General or Physical) (lab required) (8)
Organic Chemistry (lab required) (4)
Biochemistry (3)
Genetics (3)
Physics (lab required) (4)
Calculus, Computer Science or Statistics (3)
English (3)

St. Matthews University

Courses (Semester Hours)
General Biology (lab required) (6)
General Chemistry (lab required) (6)
Organic Chemistry (lab required) (3)

Sydney, University of

For application to the four-year DVM program, students must have completed a bachelor’s degree including at least one semester in each of the following courses: General Chemistry (Physical and Inorganic); Organic Chemistry; Biology; Biochemistry.

Tennessee, University of

Courses (Semester Hours)
General inorganic chemistry (lab required) (8)
Organic chemistry (lab required) (8)
General biology/zoology (lab required) (8)
Cellular/Molecular biology (upper level course preferred) (3)
Genetics (3)
Biochemistry (upper-level), exclusive of laboratory (4)
Physics (lab required) (8)
English composition (6)
Social sciences/humanities (18)
Applicants are encouraged to take additional science courses especially comparative anatomy, mammalian physiology, microbiology with laboratory, and statistics.

Texas A&M

Courses (Semester Hours)
General Biology (lab required) (4)
General Microbiology (lab required) (4)
Genetics (3)
Animal Nutrition or Feeds & Feeding (3)
Inorganic Chemistry I & II (lab required) (8)
Organic Chemistry I & II (lab required) (8)
Biochemistry (Lecture hours only) (3)
Statistics (Upper-level) (3)
Physics I & II (lab required) (8)
Composition and Rhetoric (3)
Introduction to Psychology (3)
Technical Writing (3)  
Speech Communication (3)

Tokyo, University of  
*No Prerequisite courses submitted*  

Tufts University  
*Courses (Semester Hours)*  
- Biology (lab required) (8)  
- Chemistry (lab required) (8)  
- Organic chemistry (lab required) (8)  
- Biochemistry (3)  
- Physics (3)  
- Genetics (unless included in biology) (3)  
- Math/Statistics (6)  
- English/ Speech (6)  
- Humanities and Fine Arts (6)  
- Social and Behavioral sciences (6)

Tuskegee University  
*Courses (Semester Hours)*  
- English or Written Composition (6)  
- Mathematics (6)  
- Social Sciences / Humanities (6)  
- Liberal Arts (6)  
- Advance Biology (300 Level or Above)* (9)  
- Biochemistry (lab required) (4)  
- Advance Biology Elective (8)  
- Organic Chemistry (lab required) (4)  
- Physics (lab required) (8)  
- Introduction to Animal Science (3)  
- Animal Nutrition (3)  
*Advanced biology courses, e.g., anatomy, physiology, ecology, immunology, zoology, microbiology, genetics, toxicology, and histology.*

Universidad VERITAS  
*No Prerequisite courses submitted*  

University of Mexico (UNAM)  
*Courses (Semesters)*  
- Mathematics (4)  
- Physics (4)  
- Inorganic and Organic Chemistry (4)  
- Principles of Biology and General Biology (4)  
- Social Sciences/Humanities (6)  
- Electives (selected topics on biology, statistics, morphophysiology or physicochemistry) (2)

Universiteit Utrecht  
*No Prerequisite courses submitted*  

University College - Dublin  
*Courses (Semesters)*  
- Physics (lab required) (1)  
- Biochemistry (lab required) (1)  
- General biology (1)  
- General inorganic chemistry (lab required) (1)  
- Microbiology (1)  
- Cellular biology (1)

VetAgro Sup  
*No Prerequisite courses submitted*  

Virginia / Maryland Regional College  
*Courses (Semester Hours)*  
- General Biology (8)  
- Organic chemistry (6)
General or Introductory Physics (8)
Biochemistry (3)
Humanities/social sciences (6)
Math: algebra, geometry, trigonometry, calculus or statistics (6)
English (6 [3 must be Composition or writing-intensive])

Washington State University

Courses (Semester Hours)
Biology (labs required) (8)
Inorganic chemistry (labs required) (8)
Organic chemistry (labs required) (4)
Physics (lab required) (4)
Math (algebra or higher) (3)
Genetics (3-4)
Biochemistry (3)
Statistics (methods) (3)
Arts & humanities/social science/history* (21)
English composition/communication* (6)
*General education requirements will be waived if student has a bachelor's degree

Western University of Health Sciences

Courses (Semester Hours)
Organic chemistry (lab required) (3)
Biochemistry or physiological chemistry (3)
Upper-Division Biological & Life Sciences (labs required) (9)
Microbiology (3)
Upper-Division Physiology (Animal, Human or Comparative Only) (3)
Genetics (3)
General or College Physics (labs required) (6)
Statistics (General, Introductory, or Bio-) (3)
English Composition (6)
Humanities / Social Sciences (9)

Wisconsin, University of

Courses (Semester Hours)
Biology or zoology (4)
Genetics or animal breeding (3)
General chemistry (8)
Organic chemistry (3)
Biochemistry (3)
General Physics (6)
Statistics (3)
English composition or journalism (6)
Social sciences/humanities (6)
Anatomy (3)*
Microbiology (3)*
Physiology (3)*
Cell/Molecular Biology (3)*
*Recommended

Applicants are encouraged to prepare themselves for the curriculum by taking additional upper-level science courses such as anatomy, physiology, microbiology, or cell/molecular biology.

CHANGE LOG – 2016/2017

• 03/10/2016: Document updated for VMCAS 2017
• 03/23/2016: Document updated after schools’ review