

Western University of Health Sciences

## College of Veterinary Medicine

**Doctor of Veterinary Medicine (DVM)  
2015/2016 Catalog**

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# College of Veterinary Medicine

## *Doctor of Veterinary Medicine (DVM)*

### Accreditation

Western University of Health Sciences College of Veterinary Medicine (WesternU-CVM) is accredited by the Council on Education of the American Veterinary Medical Association (AVMA-COE), 1931 N. Meacham Road, Suite 100, Schaumburg, Illinois 60173; Telephone: (800) 248-2862. The College of Veterinary Medicine at Western University of Health Sciences has been granted full accreditation by the AVMA-COE until May 2020. For additional information, please visit the [WesternU CVM Accreditation Website](#).

### Complaints Regarding Accreditation Standards

The College of Veterinary Medicine provides a 24-hour access Suggestions/Complaint Box that is housed in the Veterinary Medicine Center's first floor where students can offer written suggestions/complaints anonymously on accreditation and other matters important to students. The contents of the box are checked weekly by the Office of the Dean and forwarded to the appropriate administrators who can address the suggestions/complaints in a timely matter.

### General Information

#### Mission Statement

The Mission of WesternU-CVM is to educate veterinary professionals and advance knowledge to address the contemporary needs of society.

#### The Degree

The Doctor of Veterinary Medicine (DVM) degree is earned through the completion of four years of professional study subsequent to completion of their undergraduate, pre-professional prerequisites at an accredited college or university. Graduates of this program are eligible to take national and state veterinary licensing examinations. Information on the North American Veterinary Licensing Examination is available on <http://www.nbvme.org>. Information on obtaining a state license to practice veterinary medicine is available from each state's veterinary medical board. The California Veterinary Medical Board is an agency within the California Department of Consumer Affairs. Information regarding the California Veterinary Medical Board is on <http://vmb.ca.gov>. Graduates who pass state licensing examinations may perform all of the duties and responsibilities of a practicing veterinarian as defined by the respective state's Veterinary Medicine Practice Act.

#### DVM Program Outcomes

All graduates of the program are competent in entry-level skills required by the profession, including but not limited to private/public practice, biomedical research, industry and regulatory medicine. These outcomes are consistent with the AVMA-COE core competencies for veterinary graduates (listed below):

1. Comprehensive patient diagnosis (problem solving skills), appropriate use of clinical laboratory testing, and record management;
2. Comprehensive treatment planning including patient referral when indicated;
3. Anesthesia and pain management, patient welfare;

4. Basic surgery skills, experience, and case management;
5. Basic medicine skills, experience and case management;
6. Emergency and intensive care case management;
7. Health promotion, disease prevention/biosecurity, zoonosis, and food safety;
8. Client communications and ethical conduct; and
9. Critical analysis of new information and research findings relevant to veterinary medicine

## Admissions Policies and Procedures

WesternU-CVM participates in the centralized application service of the Association of American Veterinary Medical Colleges (AAVMC). Information regarding this service, called the Veterinary Medical College Application Service (VMCAS), can be accessed on <http://www.aavmc.org/vmcas/vmcas.htm> or on the [Prospective Student website](#).

### Non-Discrimination Policy

In accordance with all applicable federal, state and local laws, Western University of Health Sciences (WesternU) is committed to ensuring a campus community free from unlawful discrimination. Accordingly, Western prohibits unlawful discrimination on the basis of race, color, national or ethnic origin, religion or religious creed, sex or gender (including gender identity or expression), marital status, sexual orientation, disability, age, genetic information, military or veteran status, or any other characteristic protected under applicable law, in the administration of its programs or activities. WesternU also prohibits unlawful harassment, including Sexual Harassment. Lastly, WesternU is committed to providing equal access to and equal opportunities to all members of its campus community in accordance with all applicable laws.

This non-discrimination policy applies to applicants, students and alumni. Additional nondiscrimination information can be found in the Nondiscrimination, Anti-Harassment and Anti-Retaliation Policy, located in the University Catalog.

### Application Requirements

The application requirements shown in this catalog apply to applicants who are seeking entry for the 2016/2017 academic year. Current admission and application requirements for the DVM program, including prerequisite coursework requirements, can be located on the [Prospective Student website](#).

The WesternU-CVM Admissions Committee will consider applicants who have earned a grade of “C” or above on all prerequisite courses. Applicants also must attain a minimum cumulative grade point average of 2.75 in all pre-professional course work taken prior to application and matriculation. Application procedures, materials, and prerequisite courses are subject to revision each year, and the information below provides only general guidelines. Prospective students should consult the [Prospective Student website](#) to confirm current application requirements Applicants are directed to consult both the VMCAS and WesternU websites after June 1<sup>st</sup> of each application year.

### Test of English as a Foreign Language (TOEFL)

TOEFL (including essay) is required for all applicants who are not U.S. citizens and for whom English is a second language. Applicants must attain a minimum score of 550 (paper-based exam) or 213 (computer-based exam). Official TOEFL scores are valid for three years, and valid scores must be submitted at the time of application. EXCEPTION: The TOEFL exam will be waived for students who are graduating with a confirmed baccalaureate or higher degree from an accredited United States institution of higher education at the time of application.

### Standardized Examinations

Each applicant is required to take the Medical College Admissions Test (MCAT) or Graduate Records Examination (GRE) within five years of application and must submit their scores to WesternU-CVM for consideration in the admissions process.

## Transcripts

Applicants are required to submit transcripts to VMCAS in accordance with their application policies and procedures. Final official transcripts for all previous institutions attended will be required by WesternU-CVM once an applicant has been accepted to the program.

## Animal Related Experience

WesternU-CVM requires that each applicant has worked no less than 500 hours in an animal related environment, including but not limited to veterinary clinical practice, farm animal production, public health animal control, animal training and animal research. The nature of the work must go beyond volunteer effort and generate demands whereby a supervisor may speak to the applicant's work habits, interest in animal well-being, and personal integrity.

## Prerequisite Courses

| Prerequisites                                       | Semester Credit Hours | Quarter Credit Hours |   |
|---|-----------------------|----------------------|---|
| Organic Chemistry with lab*                         | 3                     | 4                    | <ul style="list-style-type: none"><li>• All prerequisites must be completed at a regionally accredited US institution (exceptions will be made on a case-by case basis).</li><li>• All prerequisites must be completed with a grade of "C" or better (a grade of "C-" or lower is not acceptable)</li><li>• All prerequisites must be completed by the end of the spring term of the planned year of starting the veterinary professional program, if accepted.</li><li>• Prerequisites may be taken on an advanced-placement or CLEP credit basis. These credits must be listed by the university from which the credit was received on the official university transcript. Alternatively, a letter from the registrar detailing courses for which CLEP credit was awarded must be submitted.</li><li>• All coursework taken from non-US institutions must be submitted to an approved service for evaluation.</li></ul> <p>*Only courses with a laboratory component are acceptable</p> |
| Biochemistry or Physiological Chemistry             | 3                     | 4                    |   |
| Upper Division Biological & Life Sciences with lab* | 9                     | 12                   |   |
| Microbiology  | 3                     | 4                    |   |
| Upper-Division Physiology                           | 3                     | 4                    |   |
| Genetics or Molecular Biology                       | 3                     | 4                    |   |
| General Physics with lab*                           | 6                     | 8                    |   |
| Statistics  | 3                     | 4                    |   |
| English Composition                                 | 6                     | 8                    |   |
| Humanities/Social Sciences/<br>Psychology/Sociology | 9                     | 12                   |   |

## **Recommendations**

Three letters of recommendation are required and are submitted as part of the primary application.

## **Optional Application Materials**

Within federal guidelines, the applicant may submit and/or WesternU-CVM may request additional information documenting a basis for reasonable consideration under the diversity goals of the college. Scientific publications, or significant academic papers prepared as part of a course work requirement with evaluations included, may be submitted by the applicant and reviewed by the Admissions Committee in assessing the abilities and experiences of the applicant.

## **Applicants with Foreign Coursework**

Applicants who wish to use coursework completed outside the United States, including Canada, must submit their transcripts for evaluation to a [Western University of Health Sciences Approved Service](#) at the candidate's expense. A course-by-course evaluation is required and all coursework must be designated as undergraduate, graduate, or professional. WesternU only honors evaluations from one of the approved services found at the above link. The official evaluation must be submitted directly to the university during the application process.

## **International Students**

International students and any other applicants who are not U.S. citizens and who are living in the U.S. should be prepared to provide proof of legal U.S. residency at the time of interview. Proof of legal U.S. residency is required prior to any offer of acceptance. For more detailed information, please visit our web page for [International Students](#).

## **Transfers from Other Schools**

Due to its unique curriculum, WesternU-CVM does not currently accept transfer students from other institutions.

## **Student Selection Process**

The WesternU Admissions office assists the college in application processing, including the preparation, distribution, and handling of all admissions-related materials. Applications are reviewed by WesternU-CVM faculty using uniform criteria and acceptable applicants are recommended for interview.

Candidates whose application files pass the file review and interview processes are placed in the acceptable pool from which the Dean of the College of Veterinary Medicine, the Associate Dean for Academic Affairs, and the Chair of the Admissions Committee selects the class. The college attempts to select a class that reflects broadly diverse characteristics considering: gender, ethnicity, areas of critical need in veterinary medicine, economic and educational backgrounds, and species interest of the applicant. Invitations to successful applicants shall originate in the Dean's office and are signed by the Dean.

## Registration

All WesternU students are required to register by the registration deadlines specified by the University Registrar. Registration dates are posted on the [Registrar's Office website](#). Failure to register by the deadline may be grounds for administrative withdrawal. All students registering after the posted deadline will be assessed a \$30.00 per business day late fee.

Full tuition and fees and all prior debts must be paid in full on or by posted deadlines each academic year. Matriculation is subject to the satisfactory completion of all academic requirements and payment of all outstanding debts to the University. The receipt of a final transcript(s) from all colleges/universities attended and a physical examination with documentation of required immunizations (if applicable) prior to registration are additional requirements for incoming students.

### Registration Late Fee Appeals

If you are assessed late fees for a registration period, you may submit an appeal to the Registrar. For additional information on the appeal process, please see 'Registration Late Fee Appeals' in the University Catalog, General Academic Policies and Procedures section.

### Student Health Insurance Requirement

All full-time students at Western University of Health Sciences are required to have active health insurance while enrolled. All students are automatically assessed half of the entire year's insurance premium until they submit proof of coverage that meets the University's requirements; however, students are not automatically enrolled in the plan until the deadline to submit proof of coverage has passed for your program/year. For additional information on student health insurance requirements and/or waiving out of the student health insurance plan, please see 'Student Health Insurance Requirement' in the University Catalog, General Academic Policies and Procedures section.

### New Student Orientation/Welcome Week

Attendance at all Welcome Week activities is mandatory for all incoming first-year students. For additional information on Welcome Week activities for the College of Veterinary Medicine, please visit: <http://www.westernu.edu/students/welcome-week/>.

### Student Initiated Changes in Enrollment Status

#### *Leave of Absence*

A student may request a Leave of Absence (LOA) with the occurrence of a medical emergency or illness, personal issues, financial hardship, or military service. Students must be in good academic standing to be eligible for a Leave of Absence. For additional information on the University's Leave of Absence policy, please see 'Student Initiated Changes in Enrollment Status' in the University Catalog, General Academic Policies and Procedures section.

#### *Withdrawal from University/Academic Program*

Matriculation at the University is a privilege granted in consideration of specified levels of performance and of maintaining the established standards of scholarship and personal and professional conduct. The University reserves the right to require withdrawal at any time it deems necessary to safeguard its standards of scholarship, conduct and orderly operation. The student concedes this right by act of matriculation. For additional information on withdrawing from the DVM program, please see 'Student Initiated Changes in Enrollment Status' in the University Catalog, General Academic Policies and Procedures section.

**Full-Time/Part-Time Status**

All students enrolled in at least one class/rotation are considered full-time students.

**Time Limits**

The Doctor of Veterinary Medicine program is designed to be completed in four (4) years of full-time study. The requirements for the degree must be fulfilled within six (6) years from the date of matriculation to the program. Students who are unable to meet the 6 year time limit for the DVM program may be subject to administrative withdrawal.

## Tuition and Fees

By action of the Board of Trustees, DVM tuition and fees for the 2015-2016 academic year (subject to change) are as follows:

|             |                                  |
|-------------|----------------------------------|
| \$50,735.00 | Annual Tuition                   |
| \$40.00     | Student Body Fee (Years 1 and 2) |
| \$20.00     | Student Body Fee (Years 3 and 4) |

## Other Fees and Expenses

|          |  |
|----------|--|
| \$120.00 | SCAVMA Membership*                       |
| \$135.00 | Technology Fee                           |
| \$30.00  | Registration Late Fee (Per Business Day) |
| \$350.00 | Graduation Fee                           |
| \$470.00 | Annual Parking Permit (Auto)             |
| \$25.00  | Parking Permit Replacement Fee           |
| \$40.00  | Locker Key Replacement Fee               |
| \$10.00  | Official Transcript (Each)               |
| \$21.00  | Rush Transcript, First Class Mail (Each) |
| \$25.00  | Rush Transcript, Federal Express (Each)  |
| \$10.00  | Student ID Replacement Fee               |
| \$TBD    | Breakage Fee (Replacement Cost)          |

*\*All first year DVM students are assessed a \$120.00 SCAVMA Membership fee that covers all four years of the program. Students wish to opt out of SCAVMA membership should contact the Office of the Registrar at 909-469-5342.*

## Estimated Fees and Expenses

|                         |   |
|-------------------------|---|
| \$1,500.00              | Estimated Costs for Textbooks (Per Year)                |
| \$100.00                | Software Licenses (Per Year)                            |
| \$650.00                | Required Equipment (Year 1)                             |
| \$250.00                | Required Equipment (Years 2-4)                          |
| \$15.00                 | Dissection Kit (Year 1)                                 |
| \$1,500.00 - \$2,800.00 | Required Laptop Computer (Including Webcam)             |
| \$500.00                | Computer Peripherals (Printer, etc.)                    |
| \$150.00                | Estimated Clinical Activity Travel (Years 1-2)          |
| \$750.00 - \$1,000.00   | Estimated Clinical Activity Travel (Year 3)             |
| \$1,000.00 - \$5,000.00 | Estimated Clinical Activity Travel and Lodging (Year 4) |

## Computer Technology

Each WesternU-CVM student is required to have a laptop computer that meets the specifications outlined on: <http://www.westernu.edu/computing/computing-students/>.

The laptops will be used for e-mail communication with classmates and faculty, for accessing computer- and server-based course information, instructional software, online bibliographic databases, electronic

bibliographies, and for participating in course exercises/activities/exams. Computers will be needed by students on campus as well as at their local residences and when rotating in off-campus courses/rotations; therefore, laptop computers are required instead of desktop models. In addition, each student must have access to a printer, the Internet, and a webcam.

These specifications are subject to change. The college reserves the right to impose uniform requirements for computer technology, including the possible requirement of a specific model of laptop computer.

### **Clinical Training Expenses**

Students will rotate through off-campus clinical training experiences during all four years of the curriculum. For first and second year students, all clinical training activities will occur within a 60-mile radius of the university campus, and students are responsible for travel expenses to and from these locations. Most third year clinical training activities will occur within a 60-mile radius of the university campus. Students are responsible for travel expenses to and from these locations. Lodging will be provided for certain third year courses that require student travel beyond the 60-mile radius. Lodging and travel will be provided for out of state third year course sites. All meals and other personal expenses will be the responsibility of the student. Fourth year student-selected clinical training activities may occur worldwide. Any travel, food, housing or other expenses incurred by participating in fourth year Core or Selective Clinical Rotation course activities are the responsibility of the student. In addition, third and fourth year students are required to return to campus for various required activities. Travel costs to attend required on-campus activities are the responsibility of the student. Under special circumstances, requests for additional financial aid support may be directed to the Financial Aid office.

### **International Travel**

Students who would like to travel internationally for any fourth year rotation must complete the required application forms. Students are to contact Trena Rich ([trich@westernu.edu](mailto:trich@westernu.edu)) and Chique Magsino ([cmagsino@westernu.edu](mailto:cmagsino@westernu.edu)) for the required forms.

### **Licensing Examination Fees**

Licensing examinations may be taken during the fourth year of the curriculum. Fees and application requirements are determined by national and state examination services and are the responsibility of the student. Application procedures and fees are described on <http://www.nbvme.org> and the web site for the California Veterinary Medical Board is <http://www.vmb.ca.gov>.

## General Academic Policies and Procedures

### Academic Advisement

Students are assigned a faculty advisor which provides students the opportunity to develop sustained, individual advisement on academic and professional levels. Students may request a change of advisor, if needed, through the office of the Associate Dean for Academic Affairs (or designee).

### Attendance and Absences

Attendance requirements are provided in each course syllabus.

For planned absences, students must complete and submit a Student Absence Form. In the case of an unplanned absence, appropriate documentation must be provided to the Associate Dean for Academic Affairs (or designee) as soon as reasonably possible, and no later than the day the student returns to class or campus. Absence from any curricular activities due to any unforeseen circumstances, including illness, should be reported to the Course Leader, Year Director, and/or the Associate Dean for Academic Affairs by telephone or e-mail within 24 hours of an absence, except in those cases of severe hardship. Absence from curricular activities for any reason does not relieve the student from responsibility for the material covered during these periods. Students should consult individual course syllabi for details. Unexcused absences may result in disciplinary action and may include failure of a course or dismissal from the program.

Planned absences longer than 30 consecutive days constitute a Leave of Absence, which requires completion of a Student Initiated Status Change Form and required documentation. Leave of Absence requests are reviewed and approved by the Dean (or designee). The Dean has authorized the Associate Dean for Academic Affairs to handle such requests and inform the office of the Dean of all decisions.

### Examinations

Students are required to be present for all scheduled examinations. Students cannot begin an examination after the scheduled starting time without permission from the Course Leader. For a student to be allowed to take any examination other than at the scheduled time, approval must be received from the appropriate Course Leader. If a student misses an examination, appropriate documentation (e.g., health care provider note) justifying the absence must be provided to the Course Leader, who will determine whether the absence is acceptable. If the absence is excused the student will be permitted to take a make-up examination, the nature and time of which will be determined by the Course Leader. If the absence is not excused by the Course Leader the student may appeal (in writing) the Course Leader's decision within five business days to the appropriate Year Director.

### Social Networking

There are many potential benefits to social networking web sites; however, it is important to also recognize and consider the inherent risks that may come with their use. In an effort to inform and protect our students, faculty, staff, and preceptors, we recommend that you consider the following:

- Understand that your online presence can negatively reflect upon your professional image – weigh the risks and benefits of self-disclosure;
- Remember that electronic sites are never completely secure, and that what is posted can be seen by many;

- Respect copyright laws, and reference or cite sources appropriately, plagiarism applies online as well as in print;
- Remember that WesternU, college or hospital partner logos and trademarks may not be used without written consent from the owner(s) of that logo or trademark;
- Always respect the delicate relationship between patient/client and health care provider; student and faculty member; and employer and employee;
- Ensure that information you post complies with existing policies and laws governing privacy and dissemination of data (e.g., HIPAA, FERPA, etc.);
- Clearly state that the views expressed are your own and do not represent the views of others; and;
- Review the privacy policy of the sites you use and consider your personal and property safety when posting information online.

### **Still and Motion Photography in the CVM Laboratories (Policy Number: C6.1.66.3)**

To ensure that the utmost respect is displayed to the family and the animal cadavers received through the Willed deceased Animals for Veterinary Education (W.A.V.E.) program, photography of the cadavers is allowed in the Multi-Discipline Classroom (MDC) on a limited basis. Above all else, photographs containing any animal cadaveric specimen(s) MUST NOT be posted to the internet or in any public forum, or to be used for any commercial intention unless written permission is granted by the Dean of the College of Veterinary Medicine of Western University of Health Sciences.

### **Survey Policy and Procedures**

The College of Veterinary Medicine defines a survey as a gathering of information to make inferences about our student, staff, faculty, and CVM-affiliated population. The purpose of this policy is to manage survey requests, to prevent survey fatigue, to protect confidentiality of our veterinary medicine community, and to ensure that the process of data collection conforms to standard practices.

Generally, survey requests from external sources must first seek approved endorsement from the Association of American Veterinary Medical Colleges (AAVMC) before being considered by the college. Exceptions may be made at the discretion of the Dean.

All requests from external institutions and individuals to distribute surveys to any members or prospective members of the College of Veterinary Medicine community (e.g. applicants, students, faculty, staff, preceptors, clinical sites and staff, board members, and alumni) must be approved by the Associate Dean for Academic Affairs.

### ***The Approval Process***

The external institution(s) or individual(s) wishing to conduct a survey must provide all of the following information at least 4 weeks prior:

- Description of the survey project, including the purpose and intended use of results;
- Specific population receiving the survey;

- Method of survey distribution (e.g. online or hard copy, via email, in class, at event, etc.);
- Time frame for administering the survey, including beginning and end dates;
- Description of any planned incentive program for respondents;
- Current draft of the survey and all invitation and cover letters;
- A copy of the institutional review board approval; and
- Evidence that the survey has been reviewed and accepted by the AAVMC.
- The College requests that results of the survey be provided to the College upon completion.

### **Issues/Dispute Resolution Procedure**

When an issue or dispute arises between students, the issue/dispute resolution process starts with communication among the involved students. If a satisfactory resolution is not arrived at that level, the matter should then be addressed with the Director of Student Affairs. If the problem is not resolved at this level, the matter should be brought to the Associate Dean for Academic Affairs, followed by the Dean, and then the Provost/COO. If the matter has not been resolved at those levels, the final arbiter is the President.

When an incident arises involving a student and a faculty member, the first step in the issue/dispute resolution process is discussion with the faculty member; the student should contact the Director of Student Affairs for guidance. If the matter is not satisfactorily resolved at that level, then the matter should be referred to the appropriate Associate Dean (depending on the nature of the incident), the Dean, and then the Provost/COO, in that order. The final arbiter is the Board of Trustees.

When an incident arises involving a staff member and a student, the dispute resolution process begins with the staff member's immediate supervisor followed by the Dean. The Office of Human Resources is the final arbiter.

Failure to follow this sequence of steps will only serve to delay the appropriate resolution of the issue or dispute as the matter will only be referred back to the correct level in this chain of responsibility.

## Standards of Academic and Professional Conduct

Complete confidence in the honor and integrity of the health professions student and health care professional is essential. Such confidence depends entirely on the exemplary behavior of the individual health care provider in his or her relations with patients, faculty and colleagues. Strict honesty as a personal way of life should be nurtured during the period of education for professional service.

The student shall conduct all aspects of his or her life with honor and integrity. This includes accountability to oneself and to relationships with fellow students, future colleagues, faculty, and patients who come under the student's care or contribute to his or her training and growth, and members of the general public. This applies to personal conduct that reflects on the student's honesty and integrity in both academic and non-academic settings, whether or not involving a University sponsored activity.

Upon accepting admission to the University, each student agrees to abide by basic standards of honesty and academic integrity. Students should only matriculate here if they agree with these basic standards. They include, but are not limited to, the following:

1. A student never represents the work of others as his/her own.
2. A student should acknowledge the other members of the group when work is carried out jointly.
3. A student never gives or receives assistance during an exam.
4. A student is always accountable to clinical faculty while on clinical training.

Acts of dishonesty, invasion of privacy, theft, acts of violence, sexual harassment, disrespect for personal and University property are examples of unacceptable behavior.

The administration, faculty and staff are here to serve the students. Personal gifts are discouraged, and monetary gifts are prohibited.

A violation of these standards is an abuse of the trust placed in every student and could lead to suspension or dismissal. For additional information on the University's Standards of Academic and Professional Conduct, please see the University Catalog.

## Standards of Academic Progress

WesternU-CVM students must maintain a cumulative grade point average (GPA) of at least 2.00 on a yearly basis to be considered making satisfactory academic and professional progress.

### Scholastic Standing Committee (SSC)/Student Performance Committee(SPC)

The SPC is comprised of seven faculty members and the following ex officio members: Associate Dean for Academic Affairs, the Director of Student Affairs and the Director of LEAD. The SPC shall review the performance and comprehensive evidences of progress of students who are pursuing the DVM degree. Particular attention will be given to students in academic difficulty as their grades are made available to the Committee by the Registrar or Dean of WesternU/CVM. For purposes of clarification, "performance" is defined as those activities of a behavioral-conduct or academic nature that negatively affect or impair the continued ability of a WesternU/CVM student to successfully matriculate within CVM. The office of the Dean and Associate Dean for Academic Affairs may provide additional input to this process.

After reviewing a student's performance records, the SPC may recommend to the Associate Dean for Academic Affairs any of the following courses of action: promotion, probation, remediation, dismissal from the College, academic or conduct suspension, educational assessment and other appropriate recommendations. It may also recommend that no action be taken. After considering the recommendations of the SPC, the Associate Dean for Academic Affairs will make a recommendation to the Dean who will make a final determination. The student will be notified in writing of the final decision. The SPC also has the responsibility of recommending to the faculty, as a whole, the awarding of the DVM degree to all students who satisfactorily complete all requirements for graduation as stated in the University Catalog.

### Promotion

Promotion is defined as academic progression to the subsequent academic year or to Commencement. Students must maintain a cumulative grade point average of at least 2.00 in College of Veterinary Medicine courses in order to be promoted.

Students who have earned a grade of "U" or "NCR" in any course or have a cumulative GPA below 2.00 will be referred to the Scholastic Standing Committee (SSC)/Student Performance Committee (SPC) for review and recommendation to the Associate Dean for Academic Affairs. The Associate Dean for Academic Affairs will provide a recommendation to the Dean, who will then provide the final decision. Students may not be promoted with an "I" grade. Additional fees may apply for remediation or repeated courses.

In addition to the successful completion of Year 1 and 2 courses, the College of Veterinary Medicine also has progression requirements that need to be met in order for students to progress to Year 3. The College requires that students demonstrate proficiency in anatomy, behavior, epidemiology, genetics, immunology, microbiology, nutrition, parasitology, pathology, pharmacology, physiology, and toxicology. Proficiency levels are determined in the CVM 5000, 5020, 5100, 5120, 6000, 6020, 6100, 6120 courses, and students should review course syllabi which specify the minimum proficiency levels required for successful progress. If a student's performance does not meet the minimum proficiency levels required for successful progress at the end of Spring Semester in Year 2, students will need to meet with the designated CVM content expert (or in the absence of the content expert, the Course Leader) and successfully complete assignments designed to ensure that they meet the minimum requirements.

A student that is unable to successfully meet the minimum requirements needed for promotion by July 15<sup>th</sup>; will be referred to the Scholastic Standing Committee (SSC)/Student Performance Committee (SPC) for review and recommendation to the Associate Dean for Academic Affairs. The Associate Dean for Academic Affairs will provide a recommendation to the Dean, who will then provide the final decision, which may include repeating the year or dismissal.

Promotion will be revoked if the student fails to meet all academic legal, ethical/professional conduct, health/immunization, and financial requirements of the college and/or University.

## **Graduation**

A student will be recommended for the Doctor of Veterinary Medicine degree when the student meets the following:

1. Is not on probation or suspension and has completed all prescribed academic and clinical requirements with a cumulative grade point average of 2.00 or above and has no outstanding grade of "I," "NCR," or "U".
2. Has demonstrated no serious deficiencies in ethical, professional, or personal conduct, as defined in the WesternU Catalog, "General Academic Policies and Procedures" section, which would make it inappropriate to award the degree of Doctor of Veterinary Medicine.
3. Has complied with all the legal and financial requirements of the University as stated in the WesternU Catalog.
4. Has attended in person and participated in the Commencement ceremony at which time the Doctor of Veterinary Medicine degree is conferred. Unless special permission has been granted by the Dean, each student must participate in their respective commencement ceremony. If the Dean grants special permission for excusal from commencement, the graduate may be required to present themselves to the Dean or their designee at another specified date to take their profession's oath before their diploma will be released. Requests for excusal will only be granted for extenuating circumstances.

Students may participate in commencement activities provided they will complete all requirements of the program by December 31<sup>st</sup> of that calendar year. No student will receive his or her degree until the student has completed all requirements for graduation. Degrees will be dated as appropriate to the completion date.

## **Adverse Actions**

### ***Probation***

Students may be placed on academic probation or academic suspension by the Dean for any of the following reasons:

1. Inadequate academic progress, as defined above in the section on Satisfactory Progress and Promotion;
2. A pattern of unexcused absences from scheduled curricular activities;

3. Ethical, professional, or personal misconduct as defined in the WesternU-CVM Standards of Academic and Professional Conduct.
4. A semester GPA of less than 2.00; or
5. Receipt of a “U” or “NCR” grade in any course.

Students on probation must meet with their faculty advisor once a month and complete required documentation. At the discretion of the faculty advisor, these meetings can be via electronic communication, over the phone, or in person. It is the student’s responsibility to contact the faculty advisor to arrange these meetings or contacts. Students on academic probation must bring their cumulative GPA to a 2.00 or greater and/or satisfactorily remediate deficient coursework within two semesters of the imposition of academic probation. Other requirements may be specified by the Dean and will be communicated in writing to the student.

Students will remain on academic probation for at least one semester following placement on academic probation. Upon meeting the requirements to be taken off of academic probation, it is the students’ responsibility to provide all documents and a request in writing to be taken off of academic probation. These documents are to be provided to the office of the Associate Dean for Academic Affairs. Students who do not meet the specified requirements to be removed from academic probation may be subject to further disciplinary actions.

Fourth year students can petition to be removed from academic probation once the requirements for academic probation and graduation have been completed. A student may not graduate (receive a diploma) unless all requirements for removal from academic probation have been fulfilled.

Students on academic probation are not permitted to hold leadership positions in extracurricular activities associated with the university and/or college. If it is found that the student has not resigned from all leadership positions in extracurricular activities associated with the university or college, they will be violating the conditions of academic probation and thus will be subject to administrative action as discussed above in the section on Academic and Professional Misconduct Policies.

#### ***Financial Aid Warning Policy (Title IV and Title VII)***

If a student is not making Satisfactory Academic Progress (SAP) they may be placed on “Financial Aid Warning” status for the next payment period and continue to receive financial aid for that period. Financial Aid is any financial assistance offered to the student for paying for their education, such as loans, scholarships, Federal Work-Study, grants and stipends (judged on the criteria of the stipend). Students who fail to make SAP by the end of the payment period lose Financial Aid eligibility.

It is the policy of the Financial Aid Office (FAO) that once a student has been placed on academic probation for not meeting SAP standards as defined by the college, the FAO will automatically place the student in a Financial Aid Warning status. During the next academic term, if the student does not meet SAP standards and the college places the student on academic suspension, the student will no longer be eligible for financial aid. If the student appeals the academic suspension and the appeal is approved, financial aid will be reinstated. If the student is directed to audit courses, those courses will **not** be covered by financial aid.

### ***Tutorial Assistance Program***

A Tutorial Assistance Program (TAP) has been established to assist students experiencing academic difficulty. Students will be recommended for this program by a faculty mentor or professor. Students may self-identify to TAP to receive assistance. The tutors will be chosen on the recommendation of the faculty in each discipline. Group tutoring is the methodology most used by the TAP department. For assistance, contact the Learning Enhancement and Academic Development Office (LEAD).

### ***Remediation***

In accordance with the WesternU Catalog, remediation for lack of satisfactory progress in the program as defined in the previous section (Satisfactory Progress and Promotion) is approved by the Dean after consultation with appropriate academic personnel which may include Course Leaders, content experts, the Scholastic Standing Committee (SSC)/Student Performance Committee (SPC), the appropriate Year Director, and/or the Associate Dean for Academic Affairs. Options for remediation may include, but are not limited to, the following;

1. Completing an academic exercise designed by the Course Leader and/or content expert(s) to address particular deficiencies demonstrated by the student. These remediation exercises may be of various lengths of time (depending on the demonstrated severity of deficiencies), but generally will not exceed one semester in duration;
2. Repeating the course or clinical rotation; or
3. Repeating the academic year.

A student who is required to remediate a course grade of “U” or “NCR” must be notified in writing by the Dean. Notification is usually sent by certified mail, to the students’ official address on university record; or hand-delivered to the student and must be acknowledged with the signature of the student.

Upon successful remediation by completing an academic exercise, the transcript is notated with the grade earned alongside the original grade. For example, a student who originally received a “U” grade and, who, by remediation, earned a “C” grade will have a grade of “U/C” entered on their transcript. The amount of tuition charged for this type of remediation is determined on a case-by-case basis and at the discretion of WesternU-CVM. After completing this type of remediation, the highest grade a student will be able to achieve for the course will be a ‘C’ or ‘PA’.

If a student is directed to repeat a course or a clinical rotation in its entirety, the grade for the repeated course will be recorded on the official transcript separately and within the semester the repeated course was completed. The original course grade will remain recorded in the semester it was originally taken. Students will be charged full tuition for repeated coursework.

If a student is required to repeat the academic year, the original grades will remain listed on the transcript in the original semester(s) and the repeated course grades will be recorded in the semester they were completed. Students will be charged full tuition for repeating the academic year.

Only the remediated or repeated grade(s) for the course(s) will be included in the student’s GPA calculation.

### ***Academic Suspension***

Students who are deemed unable to continue in the curriculum due to inadequate performance and are required to repeat a given academic year or portion thereof will be placed on academic suspension through such time as they can resume their studies by starting the courses the student is required to repeat. Throughout the time the student is academically suspended, he or she is also on academic probation, and remains on academic probation until all coursework has been satisfactorily remediated. A student may not receive financial aid during any time of a suspension.

### ***Summary Suspension***

Actions that threaten or endanger, in any way, the personal safety and/or well-being of self or others, or that disrupt or interfere with the orderly operation of the College or University are cause for immediate disciplinary action. Either the University President, Provost/COO, or Dean of CVM has the authority to summarily suspend a student when the student admits to guilt or when, in the opinion of these entities, such action is appropriate to protect the health or safety of any individual, or to preserve the orderly operation of the University. Further details regarding notification and appeal may be found in the University Catalog.

### ***Dismissal***

The Dean of the College of Veterinary Medicine may require dismissal of a student from the program for one or more of the following reasons:

1. Earning a cumulative GPA of less than 2.00;
2. Failing one course or clinical rotation;
3. Failing to successfully repeat or remediate any required course;
4. Receiving a “U” or “NCR” while on academic probation, regardless of the student’s GPA;
5. A pattern of unexcused absences from scheduled curricular activities;
6. Failing to meet requirements of academic probation; and/or
7. Ethical, professional or personal misconduct as defined in the WesternU-CVM Standards of Academic and Professional Conduct.

### ***Readmission***

Students dismissed from the program must reapply to be considered for readmission. All students readmitted after being dismissed will be subject to all curricular requirements in effect at the date of re-matriculation. Failure to achieve these requirements will result in permanent dismissal from the program. All readmitted students will be placed on academic probation for one year from the date the student matriculates into the program and may be dismissed at any time due to unsatisfactory performance. Exceptions to these requirements may be granted by the Dean after consultation with the Associate Dean for Academic Affairs.

### ***Student Appeal Process***

The Dean of CVM has the authority to make decisions regarding a student’s status in matters of academic suspension, student conduct, academic progression/promotion and graduation. However,

students may appeal the Dean's decision to the University Provost/COO as indicated in the Student Appeal Process section of the University Catalog.

## Evaluation and Grading

WesternU-CVM uses the following letter grades as defined in the specific course syllabus:

### Grading Scale, Years 1-3

| <u>Grade</u> | <u>Equivalent</u>   | <u>GPA Points</u> |
|--------------|---------------------|-------------------|
| A            | Excellent           | 4.00              |
| B            | Good                | 3.00              |
| C            | Adequate            | 2.00              |
| U            | Unsatisfactory/Fail | 0.00              |
| CR           | Credit              | N/A               |
| NCR          | No Credit           | N/A               |

### Grading Scale, Year 4

| <u>Grade</u> | <u>Equivalent</u>   | <u>GPA Points</u> |
|--------------|---------------------|-------------------|
| H            | Honors              | 4.00              |
| PA           | Pass                | 3.00              |
| U            | Unsatisfactory/Fail | 0.00              |
| CR           | Credit              | N/A               |
| NCR          | No Credit           | N/A               |

### Administrative Grades

| <u>Grade</u> | <u>Equivalent</u> | <u>GPA Points</u> |
|--------------|-------------------|-------------------|
| AU           | Audit             | N/A               |
| I            | Incomplete        | N/A               |
| W            | Withdrawal        | N/A               |
| M            | Missing           | N/A               |

### Incomplete

An “I” (Incomplete) is assigned to a student who does not complete all course requirements as a result of unexpected or unavoidable circumstances (i.e. death of a family member, personal illness, or personal injury). If a student does not successfully complete the course requirements for which the “I” was assigned prior to the end of the following academic semester and/or the scheduled promotion to the next year, a “U” grade for that course will be issued. If the course is successfully completed, the “I” grade is notated with the grade earned. For example, a student with an “I” grade who completes the course with an “A” grade, will have the grade notated on the transcript as “I/A”.

### Audit

An “AU” (Audit) is assigned to a student who pays tuition for the course and attends class activities but does not complete examinations and does not receive course credit. However, under certain circumstances, at the discretion of the College Dean, a student who is repeating or undergoing remediation may be required to complete course examinations and/or other required work products while auditing the course for no grade.

### **Missing Grades**

A grade of 'M' for Missing will be input by the Office of the Registrar if a student's grade is not available by the deadline for grade submission. An 'M' grade is not included in the GPA calculation and will be replaced by the grade earned in the course once submitted by the course director/instructor. 'M' grades should not be used by the program in place of an Incomplete (I) grade.

### **Withdrawal**

A "W" (Withdrawal) is assigned to a student who initiates voluntary withdrawal prior to the administration of the final exam or the final day of a clinical course or rotation. Students may also be assigned a "W" by the Office of Academic Affairs.

### **Grade Reports**

Course grades are electronically entered by the Course Leader into BanWeb. Grades may be viewed and unofficial transcripts are available on the BanWeb student record system. The student must satisfy course requirements as defined by the course syllabus and clinical handbook to receive academic credit. Course syllabi and clinical handbooks inform students of the levels of academic accomplishment required for each grade.

A semester grade point average and a cumulative grade point average are calculated and posted on each student's transcript. Class ranking is also available upon request from the Registrar's Office.

### **Grade Changes**

Grade changes will be initiated by the Course Leader, using the appropriate form, and approved by the Year Director and Associate Dean for Academic Affairs. All recorded grades remain on the official transcript unless a clerical error is discovered.

### **Appeal of Recorded Grades**

Grade appeals must first be submitted to the Course Leader. If there is evidence of bias, discrimination, or failure to follow grading procedures a student can then appeal to the appropriate Year Director, followed by the Associate Dean for Academic Affairs.

Students have a maximum of five (5) business days – after they are notified by the Course Leader that course grades have been posted by the Registrar – to notify, in writing, the Course Leader and respective Year Director of their intention to appeal any errors or irregularities in grading. All appeals must be completed within ten (10) business days after the appeal notification, unless approved by the respective Year Director.

### **Credit Hour Calculations**

WesternU-CVM follows the WesternU Credit Hour Policy which defines one credit hour as 15 contact hours plus an average of 30 hours out of class. Given that the pace of learning and studying is not identical for everyone, it is understood that actual time on task will vary from student to student.

This formula will be applied to instructional terms of any duration. An equivalent amount of time on task (i.e., contact time + out of class student work) per credit hour is required for non-classroom based academic activities such as laboratory or small group practice, clinical rotations, asynchronous online or distance instruction, and other non-classroom modalities and delivery methods. Calculation of credit hours will be rounded to the nearest 0.5 credit hours per course.

## Curriculum Organization

### Year 1

| Year 1, Fall Semester, DVM 2019   |  |              |
|-----------------------------------|--|--------------|
| Course                            | Title                                      | Credit Hours |
| CVM 5000                          | Veterinary Basic and Medical Sciences I    | 8.00         |
| CVM 5020                          | Veterinary Basic and Medical Sciences II   | 8.00         |
| CVM 5030                          | Molecular and Cellular Biology I           | 1.00         |
| CVM 5040                          | Veterinary Issues I                        | 2.00         |
| CVM 5060                          | Veterinary Clinical Sciences and Skills I  | 2.00         |
| IPE 5000                          | Patient Centered Cases I                   | 1.00         |
| <b>Semester Total:</b>            |  | <b>22.00</b> |
| Year 1, Spring Semester, DVM 2019 |  |              |
| Course                            | Title                                      | Credit Hours |
| CVM 5100                          | Veterinary Basic and Medical Sciences III  | 8.00         |
| CVM 5120                          | Veterinary Basic and Medical Sciences IV   | 8.00         |
| CVM 5130                          | Molecular and Cellular Biology II          | 1.00         |
| CVM 5140                          | Veterinary Issues II                       | 2.00         |
| CVM 5160                          | Veterinary Clinical Sciences and Skills II | 2.00         |
| IPE 5100                          | Patient Center Cases II                    | 1.00         |
| <b>Semester Total:</b>            |  | <b>22.00</b> |
| <b>Year 1 Total:</b>              |  | <b>44.00</b> |

### Year 2

| Year 2, Fall Semester, DVM 2018   |   |              |
|-----------------------------------|---|--------------|
| Course                            | Title                                       | Credit Hours |
| CVM 6000                          | Veterinary Basic and Medical Sciences V     | 8.00         |
| CVM 6020                          | Veterinary Basic and Medical Sciences VI    | 8.00         |
| CVM 6030                          | Molecular and Cellular Biology III          | 1.00         |
| CVM 6040                          | Veterinary Issues III                       | 2.00         |
| CVM 6060                          | Veterinary Clinical Sciences and Skills III | 2.00         |
| IPE 6000                          | Team Training in Healthcare I               | 1.00         |
| <b>Semester Total:</b>            |   | <b>22.00</b> |
| Year 2, Spring Semester, DVM 2018 |   |              |
| Course                            | Title                                       | Credit Hours |
| CVM 6100                          | Veterinary Basic and Medical Sciences VII   | 8.00         |
| CVM 6120                          | Veterinary Basic and Medical Sciences VIII  | 8.00         |
| CVM 6130                          | Molecular and Cellular Biology IV           | 1.00         |
| CVM 6140                          | Veterinary Issues IV                        | 2.00         |
| CVM 6160                          | Veterinary Clinical Sciences and Skills IV  | 2.00         |
| IPE 6100                          | Team Training in Healthcare II              | 1.00         |
| <b>Semester Total:</b>            |   | <b>22.00</b> |
| <b>Year 2 Total:</b>              |   | <b>44.00</b> |

### Year 3

| Year 3, Fall/Spring Semester, DVM 2017 |  |              |
|--|--|--------------|
| Course                                 | Title                                  | Credit Hours |
| CVM 7000                               | Financial and Practice Management      | 1.00         |
| CVM 7010                               | Small Animal Practice I                | 2.00         |
| CVM 7011                               | Small Animal Practice II               | 2.00         |
| CVM 7012                               | Small Animal Practice III              | 2.00         |
| CVM 7013                               | Small Animal Practice IV               | 2.00         |
| CVM 7020                               | Livestock Practice I – Dairy           | 2.00         |
| CVM 7021                               | Livestock Practice II – Meat and Fiber | 2.00         |
| CVM 7025                               | Population Health and Production       | 2.00         |
| CVM 7030                               | Equine Practice I                      | 2.00         |
| CVM 7031                               | Equine Practice II                     | 2.00         |
| CVM 7035                               | Surgery/Anesthesia                     | 2.00         |
| CVM 7040                               | Diagnostic Laboratory & Pathology      | 2.00         |
| CVM 7045                               | Laboratory Animal & Research           | 2.00         |
| CVM 7050                               | Zoo Animal & Wildlife                  | 2.00         |
| CVM 7055                               | Veterinary Public Health               | 2.00         |
| CVM 7060                               | Food & Feed Safety                     | 2.00         |
| CVM 7065                               | Global Health                          | 2.00         |
| CVM 7090                               | Third Year Student Presentations       | 1.00         |
| <b>Year 3 Total:</b>                   |  | <b>34.00</b> |

### Year 4

| Year 4, Fall/Spring Semester, DVM 2016 |  |              |
|--|--|--------------|
| Course                                 | Title  | Credit Hours |
| CVM 7510<br>CVM 7515                   | Core Veterinary Internal Medicine Rotation <b>OR</b><br>Core Food Animal Medicine Rotation | 4.00         |
| CVM 7520A<br>CVM 7520B                 | Core Surgery (Small Animal) Rotation <b>OR</b><br>Core Surgery (Equine) Rotation           | 4.00         |
| CVM 7530 –<br>CVM 7599                 | Selective Clinical Rotations (6)   | 24.00        |
| <b>Year 4 Total:</b>                   |  | <b>32.00</b> |

## Course Descriptions

Courses listed in this Catalog are subject to change. New courses and changes in existing course work are initiated by the faculty, reviewed and approved by the WesternU-CVM Curriculum Committee, the Associate Dean for Academic Affairs, the Dean, and the Provost/COO.

All courses are awarded letter grades, except when indicated otherwise.

### **CVM 5000 Veterinary Basic and Medical Sciences I (8 credits)**

The Veterinary Basic and Medical Sciences courses promote student-centered, self-directed learning of the fundamental concepts in the primary basic medical sciences (anatomy, behavior, epidemiology, genetics, immunology, microbiology, nutrition, parasitology, pathology, pharmacology, physiology and toxicology). A Problem-Based Learning (PBL) environment is generated using cases that describe real patients with specific diseases providing the context for learning. Students are assigned to groups of 6 to 8 students with a faculty facilitator. Facilitators guide the students through the PBL process. Students problem-solve by defining patient problems, evaluating facts/data, exploring ideas/hypotheses, and considering action plans/action items that will further define or resolve patient problems. PBL sessions are dynamic, interactive meetings that also enhance students' communication and collaboration skills. A body-systems approach is used to integrate the basic medical sciences. Correlative laboratories and learning activities are provided to enhance the learning experience.

### **CVM 5020 Veterinary Basic and Medical Sciences –II (8 credits)**

Taken concurrently with CVM 5000. See CVM 5000 for course description.

### **CVM 5030 Molecular and Cellular Biology I (1 credit)**

This course provides correlative activities to the Veterinary Basic and Medical Sciences cases, focusing on the central biological principles and mechanisms that underlie animal health and disease at the molecular and cellular levels.

### **CVM 5040 Veterinary Issues I (2 credits)**

This course introduces the student to significant issues facing the veterinary profession, which may include public policy, biomedical ethics, and legislation affecting animals or the veterinary profession, animal welfare, public health, and veterinary career opportunities. The format includes invited presentations, small group discussions and assigned readings and projects. This and subsequent courses include material on the California Veterinary Medical Practice Act.

### **CVM 5060 Veterinary Clinical Sciences and Skills I (2 credits)**

This course provides learning activities that lead to functional competence in basic veterinary clinical skills and common clinical procedures used in veterinary medicine. Various instructional arenas in small and large animals will be employed.

### **CVM 5100 Veterinary Basic and Medical Sciences - III (8 credits)**

Continuation of CVM 5000 and 5020. Prerequisite: successful completion of all prior required courses.

### **CVM 5120 Veterinary Basic and Medical Sciences - IV (8 credits)**

Taken concurrently with CVM 5100, focusing on other veterinary problems. Prerequisite: successful completion of all prior required courses.

**CVM 5130 Molecular and Cellular Biology II (1 credit)**

Continuation of CVM 5030. Prerequisite: successful completion of all prior required courses.

**CVM 5140 Veterinary Issues II (2 credits)**

Continuation of CVM 5040. Prerequisite: successful completion of all prior required courses.

**CVM 5160 Veterinary Clinical Sciences and Skills II (2 credits)**

Continuation of CVM 5060. Prerequisite: successful completion of all prior required courses.

**CVM 6000 Veterinary Basic and Medical Sciences - V (8 credits)**

Continuation of CVM 5100 and 5120. Prerequisite: successful completion of all prior required courses.

**CVM 6020 Veterinary Basic and Medical Sciences - VI (8 credits)**

Taken concurrently with CVM 6000, focusing on other veterinary problems. Prerequisite: successful completion of all prior required courses.

**CVM 6030 Molecular and Cellular Biology III (1 credit)**

Continuation of CVM 5130. Prerequisite: successful completion of all prior required courses.

**CVM 6040 Veterinary Issues III (2 credits)**

Continuation of CVM 5140. Prerequisite: successful completion of all prior required courses.

**CVM 6060 Veterinary Clinical Sciences and Skills III (2 credits)**

Continuation of CVM 5160. Prerequisite: successful completion of all prior required courses.

**CVM 6100 Veterinary Basic and Medical Sciences - VII (8 credits)**

Continuation of CVM 6000 and 6020. Prerequisite: successful completion of all prior required courses.

**CVM 6120 Veterinary Basic and Medical Sciences - VIII (8 credits)**

Taken concurrently with CVM 6100, focusing on other veterinary problems. Prerequisite: successful completion of all prior required courses.

**CVM 6130 Molecular and Cellular Biology IV (1 credit)**

Continuation of CVM 6030. Prerequisite: successful completion of all prior required courses.

**CVM 6140 Veterinary Issues IV (2 credits)**

Continuation of CVM 6040. Prerequisite: successful completion of all prior required courses.

**CVM 6160 Veterinary Clinical Sciences and Skills IV (2 credits)**

Continuation of DVM 6060. Prerequisite: successful completion of all prior required courses.

**CVM 7000 Financial and Practice Management (1 credit)**

This course is an on-campus orientation to practice management, practice economics, and career and personal development. The course focuses on aspects of modern veterinary practice and life skills management, including but not limited to: preparation of contemporary medical records (emphasis placed on Problem- Oriented Veterinary Medical Records - POVMR), how to run a veterinary practice as a business, time management, team communications skills, contract law, compensation and benefits in employment contracts, personal budgets and tax issues, negotiation skills, and establishing fee schedules.

**CVM 7010 Small Animal Practice I (2 credits)**

Supervised clinical education in the academic and practical aspects of small animal (canine, feline, pet birds, reptiles) medicine and surgery carried out in carefully selected high quality and high volume private practices. Students see a wide variety of cases and directly manage medical and surgical examinations, diagnosis and management. Students are active participants in the diagnostic and therapeutic management of patients, and, as such, perform physical diagnosis and actively manage or participate in diagnostic problem-oriented decision-making. Students have the opportunity to observe clinicians as role models and become familiar with how clinicians apportion their time spent with clients, staff and other hospital matters. Students also consult with hospital managers to learn issues including records, inventories, and client billing.

**CVM 7011 Small Animal Practice II (2 credits)**

This course consists of supervised clinical education in the diagnosis, treatment planning and administration of therapeutics in companion animals admitted to the Pet Health Center on the campus of Western University of Health Sciences. Students have primary responsibility for the pre-procedural evaluation of and client education for adopted and client-owned animals. Students receive, examine, diagnose and treat adoptable patients from local rescue groups and other sources. Animals requiring additional medical management are treated accordingly.

**CVM 7012 Small Animal Practice III (2 credits)**

Supervised clinical education in the academic and practical aspects of small animal (canine, feline, pet birds, reptiles) medicine and surgery carried out in carefully selected high quality and high volume private practices. Students will see a wide variety of cases and directly manage medical and surgical examinations, diagnosis and management. Students are active participants in the diagnostic and therapeutic management of patients, and, as such, perform physical diagnosis and actively manage or participate in diagnostic problem-oriented decision-making. Students have the opportunity to observe clinicians as role models and become familiar with how clinicians apportion their time spent with clients, staff and other hospital matters. Students also consult with hospital managers to learn issues including records, inventories, and client billing.

**CVM 7013 Small Animal Practice IV (2 credits)**

Supervised clinical education in the academic and practical aspects of small animal (canine, feline, pet birds, reptiles) medicine and surgery carried out in carefully selected high quality and high volume private practices. Students will see a wide variety of cases and directly manage medical and surgical examinations, diagnosis and management. Students are active participants in the diagnostic and therapeutic management of patients, and, as such, perform physical diagnosis and actively manage or participate in diagnostic problem-oriented decision-making. Students have the opportunity to observe clinicians as role models and become familiar with how clinicians apportion their time spent with clients, staff and other hospital matters. Students also consult with hospital managers to learn issues including records, inventories, and client billing.

**CVM 7020 Livestock Practice I - Dairy (2 credits)**

The goal of this course is to expose students to the practice of food animal medicine with specific focus on dairy production systems. Students may also be afforded the opportunity to be active participants in the diagnostic and therapeutic management of individual animal patients, including physical diagnosis, patient care and therapeutic problem-oriented decision-making. Emphases will be on herd health preventive programs, population medicine, record analysis, facility evaluation and animal welfare issues. While in this clinical setting, students are expected to continue building knowledge in the basic sciences through self-directed study, while developing an understanding of the clinical sciences through their experiences.

**CVM 7021 Livestock Practice II - Meat & Fiber (2 credits)**

The goal of this course is to educate students about production systems involved in the rearing of beef cattle, sheep and swine, and the practice of food animal medicine and surgery. Major emphases will be on herd health preventive programs, population medicine, record analysis, facility evaluation and animal welfare issues. The curriculum will also focus on active participation in individual animal medicine in the diagnostic and therapeutic management of patients including physical diagnosis, patient care and therapeutic problem-oriented decision-making opportunities. Core curricular competencies related to reproductive management and evaluation, surgical and obstetric techniques may be addressed. Students are expected to continue building basic science knowledge in a clinical setting and develop an understanding of clinical sciences through clinical experiences and self-directed study.

**CVM 7025 Population Health & Production (2 credits)**

This course will be administered by on-campus Western University faculty. On-campus activities will involve in depth discussions of population health and production topics. Concepts related to disease dynamics and transmission, biosecurity, disease monitoring and surveillance, disease eradication and/or control, and cost/benefit analysis of disease interventions will be discussed in the context of an outbreak investigation in both small and large group formats. This course will also focus on critical appraisal and use of population-based information for individual animals, including topics related to evaluation and application of diagnostic tests, record analysis as a diagnostic tool, and management related health issues in populations. Timely topics or current events impacting population health and production can be discussed throughout the course. As part of student assessment in the course, each student will prepare a 10-15 minute oral presentation critically appraising an observational study or clinical trial published in primary literature. This presentation will be delivered to one or more faculty, including at least one faculty member involved in the delivery of this course, as well as a group of peers concurrently taking the course.

**CVM 7030 Equine Practice I (2 credits)**

This third year course provides supervised clinical education in hospital-based equine care. The students will have an opportunity to work along-side high quality, community-based equine clinicians. The students will be active participants in the diagnostic and therapeutic management of equine patients and continue to develop problem-oriented decision processes. The students will develop skills in the management of primary care patients, medical, surgical, and emergency issues as well as gaining exposure to the economics of the equine practice.

**CVM 7031 Equine Practice II (2 credits)**

This third year course provides supervised clinical education in ambulatory-based equine practice. The students will have the opportunity to work along-side high quality, community-based equine clinicians. The students are active participants in the diagnostic and therapeutic management of the patient, and will continue to develop problem-oriented decision-making skills directed toward the care of the patient. These students will assume progressive responsibility in the management of primary care patients, preventive care programs, and emergencies that occur in practice as well as gaining exposure to the economics of equine practice.

**CVM 7035 Surgery/Anesthesia (2 credits)**

This is a clinical experience supervised by WesternU faculty in the Upland Shelter or other facilities as needed. Students are responsible for anesthesia, surgical procedures (such as sterilization), peri-operative care and client education for adopted and client-owned animals. Surgical and anesthetic experience will be gained through participation in ovariohysterectomies and/or castrations during the course. Additional surgical procedures will be performed if indicated.

**CVM 7040 Diagnostic Laboratory & Pathology (2 credits)**

This course emphasizes the efficient and effective use of laboratory services in veterinary medicine. This course includes aspects of diagnostic clinical pathology, anatomical pathology, parasitology, and microbiology (bacteriology and virology). Specimens from a variety of species are used as they are routinely processed in a veterinary diagnostic laboratory. Particular emphasis is placed on the practical applications of gross pathology and histopathology as an aid to assist general veterinary practitioners and animal owners in the identification of disease processes. Emphasis is placed on the proper collection and submission of clinical specimens from sick and deceased animals. The interpretation of laboratory test results are reviewed and discussed. In this course, students will acquire practice experience/skills in techniques used for an effective necropsy, proper examination of specific organs, and identification of lesions and postmortem changes. Students will become familiar with basic principles of tissue preservation and processing for histopathology and the recognition and interpretation of microscopic findings.

**CVM 7045 Laboratory Animal & Research (2 credits)**

This course provides an introduction to laboratory animal veterinary medical practice. Primary laboratory animal species are identified as rodents, ferrets, rabbits, and non-human primates. Students are expected to understand individual and population based medical aspects for these species. This includes basic husbandry, bi methodology (handling, restraint, injection sites and diagnostic sample collection), assessment of animal well-being and major diseases (etiology, pathogenesis, diagnosis, treatment, health surveillance methods, prevention and zoonotic risks). Animal facility management relating to animal care, biosecurity, occupational health and safety will be addressed. Students will become familiar with local, state, and Federal regulations governing research animal care and use to understand the critical role the veterinarian plays in ensuring regulatory compliance.

**CVM 7050 Zoo Animal & Wildlife (2 credits)**

This course provides an introduction to veterinary practice in the field of zoological, wildlife and exotic medicine and surgery through participation in the daily activities of the veterinary staff providing medical care for these animals. Students will acquire basic knowledge in a variety of clinical, surgical, and managerial skills. Emphasis will be placed on management (husbandry), transport, handling, restraint, capture, anesthesia, internal medicine, emergency and critical care, necropsy techniques and appropriate specimen collection in a variety of zoo, wildlife and/or exotic animals. Students are expected to dedicate a portion of their time to student-centered learning activities determined by the group of students attending the course. In addition to seeing clinical cases, sessions with the course director and/or a clinical veterinarian are set aside to discuss anatomy/physiology/husbandry of non-domestic animals, journal discussion, and ethics in the medical care of these animals. Students are expected and highly encouraged to actively participate in the diagnostic and therapeutic problem-oriented decision-making of each particular case. Issues pertaining to the conservation of wildlife may be discussed depending upon the students' interest and staff availability. Students are expected to work in groups and actively apply problem-based learning (PBL) techniques to every case they encounter.

**CVM 7055 Veterinary Public Health (2 credits)**

This course will introduce the student to how veterinarians function as public health professionals. The course will build on concepts introduced in Veterinary Basic Sciences but it will challenge students to delve more deeply into the arena of Veterinary Public Health. Students will develop and understanding of the public health system in the US. They will be introduced to major zoonoses that impact human health and common methods used to diagnose, prevent and control these diseases. Other topics will include occupational health risks to people working with animals, the role of veterinarians in disaster and bioterrorism preparedness, and the concepts of emerging and re-emerging diseases. Visits to Veterinary Public Health facilities are included. On-campus activities will consist of a mix of student-centered learning activities, group discussions, presentations, written assignments and presentation by content experts.

**CVM 7060 Food & Feed Safety (2 credits)**

The primary aim of this course is to provide students with the basic knowledge regarding the role of veterinary medicine in the production of safe foods of animal origin (meat, dairy products, and eggs) and safe feeds for companion animals, poultry, livestock, and other species. The continuum from pre-harvest through post-harvest food and feed safety will be covered with emphasis on the physical, chemical and biological aspects of food safety. Principles of cleaning, disinfection, sterilization and radiation as it applies to food production will also be discussed. Students should understand the concepts of developing a Hazard Analysis Critical Control Points (HACCP) program at both the pre-harvest and post-harvest stages.

**CVM 7065 Global Health (2 credits)**

The goal of this course is to educate veterinary students on foreign animal diseases and global health issues so that they understand their roles and responsibilities as veterinarians within and outside the USA, understand the global impact of foreign animal and zoonotic diseases and contribute to their control and prevention. This course will include three components: Foreign Animal Diseases, Global Health and USDA Accreditation. Students will gain knowledge of foreign animal diseases that are reportable in the US, including Office International des Epizooties (OIE) reportable diseases as well as the Centers for Disease Control and Prevention's Category A, B, C Bioterrorism Agents/Diseases and other important high consequence livestock pathogens and toxins. They will be introduced to major Global Health concepts. The role of USDA in international activities and other national and international animal and public health organizations, including United Nations (UN) organizations such as the Food and Agriculture Organization of the UN (FAO) and the World Health Organization (WHO), as well as the OIE, will be discussed. Students will meet with representatives from both the area office of USDA-APHIS and the California Department of Food and Agriculture Animal Health and Food Safety Service to become familiar with their role in disease control, eradication and prevention and to review their professional, legal and ethical responsibilities as accredited veterinarians. Students will complete the required USDA – Initial Accreditation Training.

**CVM 7090 Third Year Student Presentations (1 credit)**

The goal of this course is to give the student the responsibility and opportunity to select, study, and present a topic of interest or original research. The topics must be explored extensively in regards to both the clinical and pre-clinical sciences and include pathophysiologic, pharmacologic, cellular and genetic basis, etc. Students are expected to conduct an extensive and exhaustive literature review, critically appraise relevant publications and utilize the dictums of evidence-based medicine in preparing the presentation. Presentations will be evaluated by the faculty using formal criteria.

**CVM 7510 Core Veterinary Internal Medicine Rotation (4 credits, Graded H/PA/U)**

Supervised clinical instruction occurs in selected, high-quality specialty internal medicine practices. Students participate in the practice of veterinary internal medicine, including the diagnosis, management and treatment of diseases. Students submit Problem Oriented Veterinary Medical Records (SOAPs) to WesternU Core Medicine faculty for feedback, and participate in online group rounds with WesternU faculty and other classmates participating in the Core Internal Medicine rotation. Not open for credit to students completing CVM 7515.

**CVM 7515 Core Food Animal Medicine Rotation (4 credits, Graded H/PA/U)**

This clinical rotation will provide the fourth year veterinary student interested in Food Supply Veterinary Medicine (FSVM) an opportunity to investigate, analyze and solve herd level production problems. Supervised by ACVIM, ACVPM or ACT certified veterinarians, or DVM/MBA qualified practitioners, students will participate in the practice of FSVM, including the diagnosis and management of food animal cases and weekly herd reports. Daily SOAPs are required and include the thought processes utilized in making recommendations and a proposed plan for change that would correct and/or alleviate the problems. Although all food and fiber species are covered in this course, the emphasis will be on dairy production medicine. Not open for credit to students completing CVM 7510.

**CVM 7520A Core Surgery (Small Animal) Rotation (4 credits, Graded H/PA/U)**

Supervised clinical instruction occurs in selected, high-quality specialty surgery practices. Students participate in the practice of veterinary surgery, including diagnosis, management and treatment of diseases. Students submit medical records and surgery reports as well as participate in weekly rounds-type activities with faculty and classmates also participating in the Core Surgery rotation. Not open for credit to students completing CVM 7520B.

**CVM 7520B Core Surgery (Equine) Rotation (4 credits, Graded H/PA/U)**

Supervised clinical instruction occurs in selected, high-quality specialty equine surgery practices. Students participate in the practice of veterinary surgery, including diagnosis, management and treatment of surgical and musculoskeletal diseases. Students submit medical records and surgery reports as well as participate in weekly rounds-type activities with faculty as well as other students also participating in the Core Surgery (Equine) rotation. Not open for credit to students completing CVM 7520A.

**CVM 7530 Selective Complementary, Alternative and Integrative Veterinary Medicine Rotation (4 credits, Graded H/PA/U)**

This rotation is designed to provide a clinical experience in the application of alternative medicine practices, including alternative, complementary and homeopathic medicine, in managing animal health. Students will gain experience in both the clinical application and scientific basis for alternative approaches to medical and surgical management of veterinary patients. Under direct supervision of an alternative medicine practitioner, students will be given responsibility for the management of individual cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7531 Selective Anatomic Pathology Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with hands-on experience in diagnostic pathology of multiple species, with an opportunity to perform necropsies, review pathology submission forms, review and write pathology reports (description and diagnosis) and request ancillary tests. Students will also have an opportunity to follow up on the histopathology of assigned cases, and to look into histopathology of submitted surgical materials (biopsies) if available. Depending on a student's interest and availability, the rotation may also include some clinical pathology experience. These activities will be performed under the supervision of pathologists and pathology residents. Repeatable to a maximum of 8 credits.

**CVM 7532 Selective Clinical Pathology Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with hands-on experience in ancillary diagnostic methods available to clinicians and pathologists. This rotation may include some or all of the following: clinical pathology (hematology, cytology, clinical chemistry and urinalysis), microbiology (bacteriology, virology with immunology, and mycology), toxicology and parasitology. It will provide an opportunity to review the appropriate submission forms and gain experience in available tests and methods for isolation/identification of agents (also, antibodies and histopathological changes) including specimen handling and processing, data collection and evaluation with assessment of their role in final diagnosis. Students will also have an opportunity to discuss and follow up on their diagnostic findings. These activities will be performed under the supervision of pathologists, expert diagnosticians and/or residents. Repeatable to a maximum of 8 credits.

**CVM 7533 Selective Anesthesia Rotation (4 credits, Graded H/PA/U)**

This rotation is designed to provide clinical experience in the use of anesthetics in small companion animals, horses, and/or food animals. The student will develop an understanding of the selection, dosage, and administration of anesthetic drugs and other life supportive therapy. Under direct supervision of the anesthesia team, students will ideally be given responsibility for the management of individual cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7534 Selective Aquatic Medicine Rotation (4 credits, Graded H/PA/U)**

This rotation is designed to provide a clinical experience focused on the health and management of freshwater and/or marine species, including diagnosis and treatment of common diseases and the pathology associated with them. Students will be exposed to the importance of water quality management. Under direct supervision of an aquatic animal medicine veterinarian, students may be given responsibility for the management of individual and population cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7535 Selective Avian Practice Rotation (4 credits, Graded H/PA/U)**

This rotation is designed to provide a clinical experience focused on the practice of veterinary medicine on avian species, including pet birds and non-agricultural poultry. Students will develop an understanding of the diagnosis and treatment of common and zoonotic diseases and the nutritional management of pet birds. Under direct supervision of an avian medicine veterinarian, students will ideally be given responsibility for the management of individual and population cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7536 Selective Beef Cattle Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides students the opportunities to gain experience in cow/calf, feedlot and/or stocker health management. Students will become familiar with common diseases of beef cattle and the epidemiology, diagnosis, treatment, prevention and control of those diseases in individual animals and cattle populations. Along with gaining an understanding of cattle management practices related to housing, feeding, marketing and culling, students will become familiar with the structure and organization of the beef industry. Under direct supervision of a beef cattle practitioner, students will be given responsibility for the management of individual and population cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7537 Selective Behavior Rotation (4 credits, Graded H/PA/U)**

This rotation provides an opportunity to study basic principles of animal behavior (ethology, psychology, and neuroscience) and their application in clinical, shelter, ambulatory veterinary practices and other environments. Under the direct supervision of a veterinary behaviorist, students will have an opportunity to learn how to take behavioral histories, identify, assess and treat common behavioral problems. The degree to which students will actively participate in the interviewing, assessment, and interactions with the patient and client and decision making processes regarding treatment will vary with the student, practice, and type of problem. Repeatable to a maximum of 8 credits.

**CVM 7538 Selective Camelid Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides opportunities to learn diagnosis, treatment, prevention and control common diseases in camelids. The student will develop competence in health management and fiber production topics at both the individual animal and herd level. Under direct supervision of a camelid practitioner, students will ideally be given responsibility for the management of individual and population cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7539 Selective Canine Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with the opportunity to participate in the diagnosis and treatment of common diseases and conditions seen in contemporary canine veterinary medicine. Under the direct supervision of board certified canine practitioner, students will be responsible for the management of individual cases and participate in decision making and clinical reasoning regarding their patients. Procedures students may experience include radiology, ultrasonography, endoscopy, clinical pathology, fluid therapy, electrocardiology, dentistry, and surgery. Students will be given responsibility for the management of individual cases and are encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7540 Selective Cardiology Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with the opportunity to learn the presenting signs, historical findings, breed predilections, methods of diagnosis, and medical and surgical interventions for the most commonly seen cardio respiratory conditions. Exposure to diagnostics, including cardiovascular physical examination, electrocardiography, radiography, and echocardiography is expected. Under direct supervision of a veterinary cardiologist, students will ideally be given responsibility for the management of individual cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7541 Selective Dairy Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides students the opportunities to gain experience in dairy health management. Students will become familiar with the common problems of dairy cattle encountered in dairy practice including infectious disease, metabolic disorders and management-related syndromes. The student will gain an understanding of, and will experience the techniques involved with, the epidemiology, diagnosis, treatment, prevention and control of these diseases/disorders in individual animals and cattle populations. Students will be exposed to, and become familiar with, the structure and organization of the dairy industry, common dairy management practices, the predominant housing systems, accepted feed delivery systems, marketing channels and culling practices. Under direct supervision of a dairy practitioner, students will be given responsibility for management of individual animal cases and are encouraged to participate in the management and consultation practices of herd health. Repeatable to a maximum of 8 credits.

**CVM 7542 Selective Dentistry Rotation (4 credits, Graded H/PA/U)**

This rotation provides students the opportunity to develop clinical expertise in diagnosis, management, medical treatment, and surgical techniques commonly utilized in veterinary dentistry. Under the direct supervision of a veterinary dental specialist, students will be engaged in exchange of theoretical knowledge with the specialist via consultations and conversations, diagnosing congenital oral problems, taking and interpreting dental radiographs, working up oral cases, and collaborating with the dentist in client education regarding oral preventive medicine of common oral and dental diseases of domestic animals. Students will be given responsibility for the management of individual cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7543 Selective Dermatology Rotation (4 credits, Graded H/PA/U)**

This rotation enables the student to develop, expand and apply knowledge of dermatology, and provides clinical experience in veterinary dermatology. Students will develop competency in the diagnosis, treatment, and prevention of a range of dermatologic diseases from a variety of pathogenic and etiologic categories. Under direct supervision of a dermatology specialist, students will be given responsibility for the management of individual cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7544 Selective Emergency Medicine & Critical Care Rotation (4 credits, Graded H/PA/U)**

This rotation exposes the student to the high standards of practice in veterinary emergency and critical care. The student will have the opportunity to develop knowledge and skills relating to the diagnosis, management, therapy, prevention and control of animal diseases requiring emergency or critical care management. This rotation provides the opportunity to develop skills required in the emergency and critical care setting. Under the direct supervision of an emergency and critical care veterinarian, students will be given responsibility for case management, development of decision-making processes and clinical reasoning for individual cases. Repeatable to a maximum of 8 credits.

**CVM 7545 Selective Epidemiology Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with practice in the application of epidemiologic principles in the practice of veterinary medicine and/or public health. Students may be involved in planning strategies for disease prevention, disease monitoring and surveillance, analysis of population data, outbreak investigation, observational research or other aspects of clinical epidemiology. Students are encouraged to participate in any decision-making processes and contribute positively in hands-on projects and activities. Repeatable to a maximum of 8 credits.

**CVM 7546 Selective Equine Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with an opportunity to participate in the diagnosis, management and treatment of common diseases and conditions seen in contemporary equine medicine. Equine practice settings may include preventive and general medicine/surgery procedures including radiology, ultrasonography, endoscopy, lameness evaluation, dentistry, and reproductive services. Students may experience the practice of equine medicine and surgery in both ambulatory and in-house settings. Under the direct supervision of an equine practitioner, students will be given guided responsibility for the management of individual cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7547 Selective Exotics Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides practical experience in the diagnosis, treatment and prevention of disease in exotic pets (avian, amphibians, reptiles, rodents, lagomorphs, other small mammals and pet fish). Under direct supervision of an exotics practitioner, students may be given responsibility for the management of individual cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7548 Selective Feline Practice Rotation (4 credits, Graded H/PA/U)**

This rotation, under the supervision of a board certified feline practitioner, helps the student gain familiarity with the most common feline medical and surgical cases, and the commonly associated clinical procedures. The student will be exposed to the ethical, legal, and financial aspects of a feline practice. Students will gain exposure to a variety of diagnostic techniques and modalities including radiology, ultrasonography, endoscopy, clinical pathology, electrocardiology, fluid therapy, dentistry, and surgery. Students will be given responsibility for the management of individual cases and are encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7549 Selective Food Animal Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with an opportunity to participate in the practice of contemporary food animal production medicine. Students will participate in the delivery of health management programs, investigation of health problems, diagnosis and medical or surgical treatment of ill or injured animals and the review and/or implementation of approaches to enhance productivity in farm animals such as dairy cattle, sheep, goats, and swine. Under supervision of a food animal practitioner, students will be given responsibility for management of individual animal cases and are encouraged to participate in the management and consultation practices of herd health. Repeatable to a maximum of 8 credits.

**CVM 7550 Selective General Practice Rotation (4 credits, Graded H/PA/U)**

This rotation will provide students with the opportunity to experience the practice of general veterinary medicine. Practices whose veterinary staff practice high quality medicine, but may not hold additional credentials or discipline experience to qualify as specialists, provide valuable educational experiences in the diagnosis, treatment and prevention of disease in a single or multi-species setting. Under direct supervision of a general practitioner, students will be given responsibility for the management of individual cases and are encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7551 Selective Internal Medicine Rotation (4 credits, Graded H/PA/U)**

In this rotation students participate in the practice of clinical veterinary internal medicine. Students develop a detailed knowledge of the principles and techniques used in internal medicine with emphasis on patient evaluation, diagnosis and treatment of common diseases. Under direct supervision of an internal medicine specialist, students will be given responsibility for the management of individual cases and are encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7552 Selective Global Health Rotation (4 credits, Graded H/PA/U)**

Through this rotation, students will be exposed to new cultures and socio-cultural habits and learn the different roles of animals in the given society, and will become familiar with health issues of global concern. They will be introduced to the trans-boundary diseases that are prevalent in the country they are visiting. Disease control programs in developed and developing countries will be compared as well as the role of internal health organizations in disease, control and prevention at the local and global levels. Disease transmission in poor rural settings and the challenges that poverty, lack of education and socio-cultural and religious beliefs pose to disease control will also be explored. This rotation will take students out of their comfort zones, test their level of tolerance, their level of responsibility in the world, their levels of sensitivity, and give them the opportunity to work with people from different social and cultural backgrounds. Repeatable to a maximum of 8 credits.

**CVM 7553 Selective Laboratory Animal Medicine Rotation (4 credits, Graded H/PA/U)**

This rotation will acquaint the student with the careers available in laboratory animal medicine. The student will learn how to restrain, perform physical examinations, administer medications, collect samples, and anesthetize common laboratory animals. The student will become familiar with diseases of laboratory animals and the correlation of clinical findings with gross and microscopic changes along with normal anatomy. The student will learn about regulations affecting the welfare of laboratory animals and the roles and responsibilities of the laboratory animal veterinarian in this area. This will include understanding the role of the Institutional Animal Care and Use Committee (IACUC) in monitoring the program of animal care in the research facility and in evaluating research protocols. The student may participate in daily rounds, necropsies, surgical and therapeutic procedures. The student may be asked to present a seminar(s) on a selected topic. Repeatable to a maximum of 8 credits.

**CVM 7554 Selective Neurology Rotation (4 credits, Graded H/PA/U)**

This rotation will help the student develop expertise in the examination, diagnosis and management of disorders of the nervous system. Under direct supervision of veterinary neurologist, students will be given guided responsibility for the management of individual cases and are encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7555 Selective Nutrition Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with opportunities to increase their knowledge in the application of nutrition to maintain and improve animal health. Students will develop an understanding of nutritional requirements of domestic animals and methods used to evaluate the rations/diets delivered to these animals. The student will be able to determine if deficiencies or excesses exist and will gain experience in adjusting the nutritional plan to correct for those imbalances. The student will gain the knowledge necessary to make pertinent and valid recommendations concerning the nutritional plan to be developed for and utilized in the face of disease or for normal animals as they progress through the differing stages of their life, production and reproduction cycles. The student will gain knowledge of the characteristics of common feedstuffs used in the formulation of animal diets. Diagnosis, treatment, and prevention of common nutritional-based diseases in major veterinary species will also be addressed. Additionally, students may gain experience in HACCP and other regulatory procedures used to ensure safe production of animal feedstuffs. Repeatable to a maximum of 8 credits.

**CVM 7556 Selective Oncology Rotation (4 credits, Graded H/PA/U)**

This rotation provides experience in the diagnosis and treatment of cancer in domestic animals. Specific topics generally include cancer management strategies such as diagnostic techniques, treatment options, ethical considerations and client communication skills. Under direct supervision of a veterinary oncologist, students will be given responsibility for the management of individual cases and are encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7557 Selective Ophthalmology Rotation (4 credits, Graded H/PA/U)**

This rotation provides the student exposure to diagnostic ophthalmology. Students learn how to perform a complete ocular examination, apply ophthalmic diagnostic tests, use specialized equipment and apply basic technical skills necessary for ophthalmic treatments. The student will be exposed to various ophthalmic surgeries, including both intra-ocular and extra-ocular procedures. Under direct supervision of a veterinary ophthalmologist, students will be given responsibility for the medical management of individual cases and are encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7558 Selective Poultry Medicine Rotation (4 credits, Graded H/PA/U)**

This rotation provides students the opportunity to develop their clinical knowledge and skills relative to the health care and management of poultry species, including the diagnosis and treatment of common diseases. Under direct supervision of a poultry veterinarian, students should gain an understanding of poultry production medicine and the management of individual and population cases. Students will be involved in the clinical reasoning and decision-making processes for these cases and should be able to incorporate preventive medicine knowledge with economic strategies as it impacts animal welfare, farm productivity, environmental health, disease control and biosecurity, and food safety. Repeatable to a maximum of 8 credits.

**CVM 7559 Selective Public Health Rotation (4 credits, Graded H/PA/U)**

This rotation offers students an in depth exposure to those aspects of veterinary science that have a direct impact on the physical, social and mental well-being of humans. Students will work with Public Health Veterinarians in venues which will allow them to apply their knowledge of the core domains of veterinary public health. These venues include private sector, governmental agencies or academic institutions which have a strong veterinary public health component, regardless of whether that institution's primary focus is human or animal health. Repeatable to a maximum of 8 credits.

**CVM 7560 Selective Public Policy Rotation (4 credits, Graded H/PA/U)**

This course is a supervised and evaluated public policy rotation available at faculty-approved governmental affairs programs, industry trade associations, professional groups or associations, non-profit organizations, governmental bodies or agencies, or businesses/corporations. Supervised by a public policy professional, students will be introduced to, and participate in, the public policy process as it impacts the veterinary profession and/or the role and welfare of animals in society. This will include the identification of public policy problems, the setting of policy agendas, analysis of the public policy process and cycle and to the issues related to the delivery, implementation and evaluation of public policies. Repeatable to a maximum of 8 credits.

**CVM 7561 Selective Radiation Oncology Rotation (4 credits, Graded H/PA/U)**

This is designed to provide a clinical experience for the students in treatment of spontaneous tumors in dogs and cats by the use of external beam radiation therapy, in vivo radioisotope therapy and isotope seed implants. The students will be under the supervision of radiation oncologists. The students will gain experience in management, treatment, medical decision-making and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7562 Selective Diagnostic Imaging Rotation (4 credits, Graded H/PA/U)**

This rotation is intended to develop the student's interpretation skills in diagnostic imaging. Students will develop skills in systematic film evaluation of the appendicular skeleton, abdomen, thorax, spine, and skull and provide differential considerations of the radiographic findings. Depending on caseload, students will use radiographic, CT, ultrasonographic, echocardiographic, and nuclear medicine imaging techniques to evaluate animal patients. Repeatable to a maximum of 8 credits.

**CVM 7563 Selective Regulatory Medicine Rotation (4 credits, Graded H/PA/U)**

This rotation will provide students with opportunities to experience the role of veterinarians in regulatory practice. Regulatory practice includes implementation, assessment, and analysis of the results of mandatory animal health protocols. Protocols may include state, federal, or international disease surveillance, monitoring, and control measures. Students may also experience activities related to compliance with import and export regulations, enforcement of quarantine orders, and investigation of reportable disease incidence or outbreaks. Students will be supervised by veterinarians employed as a State or Federal Veterinary Medical Officer or similar positions. Repeatable to a maximum of 8 credits.

**CVM 7564 Selective Research Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with a research experience. The student will learn principles of experimental design and good laboratory practices. Early in the rotation, the student will develop a specific hypothesis and design a protocol to test the hypothesis. The student will maintain a laboratory notebook, documenting the procedures and assays that are performed on a daily basis, as well as, define and explain the scientific questions that each assay is addressing and the underlying mechanisms by which the assays operate. Depending upon the rotation site, the student may participate in laboratory meetings, seminars, and/or journal clubs. At the end of the rotation, the student will prepare a one page summary of their research project, which will be written in abstract form that contains both a title and an author(s) section, with the body of the abstract addressing the background, objectives, methods, results, and conclusions of the project. Additionally, a four to five -page technical summary of the research project will be prepared. This document should be written in manuscript format, including an abstract (same as above), introduction, methods, results, and conclusions/discussion sections. Repeatable to a maximum of 8 credits.

**CVM 7565 Selective Rural Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides an opportunity for students to experience the practice of veterinary medicine in the unique culture of rural America. Students will experience high quality veterinary medicine, often times in a mixed animal practice setting, where the veterinarians serve a vital role in sustaining animal health and economic viability of the local community. Under direct supervision of a rural veterinarian, students will ideally be given responsibility for the management of both individual animal and population health cases and encouraged to participate in the decision-making process and clinical reasoning. Students are expected to participate in after hours and emergency calls with their preceptor. Repeatable to a maximum of 8 credits.

**CVM 7566 Selective Shelter Medicine Rotation (4 credits, Graded H/PA/U)**

In this rotation students participate in medical assessment of, and providing veterinary medical care to, shelter housed animals. Topics such as infectious disease surveillance, prevention and control of infectious diseases, temperament testing and participation in discussions, evaluations, and demonstrations of behavioral assessments of shelter animals are included. Under the direction of a shelter veterinarian(s), students will examine, develop diagnostic and treatment plans for shelter animals utilizing triage and consider financial limitations associated with the facility. Students will evaluate small animals pre-operatively, and will participate in surgical sterilization, and monitor post-operative recovery. Repeatable to a maximum of 8 credits.

**CVM 7567 Selective Sports Performance/Rehabilitation Medicine Rotation (4 credits, Graded H/PA/U)**

This rotation provides educational experiences for the student to develop clinical competencies in the field of sports medicine. Sports medicine is an interdisciplinary program incorporating specialists in lameness, orthopedics, cardiopulmonary disease, neurology, integrative therapies and endocrine diseases with an advance array of imaging equipment. During the rotation the student will be exposed to the basic knowledge content of sports medicine as it relates to primary care medicine, understanding the role of exercise physiology, injury prevention, injury management, and rehabilitation of common exercise and sports related acute and chronic injuries. Repeatable to a maximum of 8 credits.

**CVM 7568 Selective Small Ruminant Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides opportunities to participate in the diagnosis, treatment, prevention and control of common diseases in small ruminants. The student will develop competence in health management and meat and fiber production topics at both the individual animal and herd level. Students will develop an understanding of the economics of modern small ruminant production medicine and their influence on marketing strategies and health management decisions. Under direct supervision of a small ruminant practitioner, students will ideally be given responsibility for the management of individual and population cases and encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7569 Selective Surgery Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with an opportunity to participate in the diagnosis and treatment of common surgical diseases. In this rotation students will be provided an opportunity to apply surgical theory, continue to develop surgical skills, techniques and principles mastered in the third year surgery course. Students are expected to participate in and (under supervision) perform routine general practice surgery as well as assisting with the complex surgical cases. Under direct supervision the students will be responsible for the management and decision-making process of individual cases. Repeatable to a maximum of 8 credits.

**CVM 7570 Selective Swine Practice Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with an opportunity to participate in the diagnosis and treatment of common diseases and conditions seen in contemporary swine production medicine. Preventive medicine strategies will be emphasized through the production record analysis and routine herd health visits. Students will also become familiar with the Pork Quality Assurance (PQA) program and the veterinarians role in ensuring food quality and safety and promoting swine health and welfare. Under direct supervision of a swine practitioner, students will be provided with opportunities to develop & demonstrate entry-level competencies in clinical swine medicine & health management techniques. Repeatable to a maximum of 8 credits.

**CVM 7571 Selective Theriogenology Rotation (4 credits, Graded H/PA/U)**

In this rotation students learn the physiology and pathology of male and female reproductive systems. Students will explore the clinical practice of veterinary obstetrics, genital diseases, and reproductive diagnostic techniques used in domestic animals. Breeding soundness evaluation of male and female patients, semen collection, evaluation, preservation and artificial insemination will be discussed or performed under supervision of a theriogenologist. Embryo collection, evaluation, micromanipulation, preservation and transfer may also be available. Trans-abdominal, vaginal, and rectal examination of the reproductive tract will be performed using manual and ultrasound techniques. Students will also learn expectations for fertility on a herd and individual basis, measuring fertility, monitoring fertility and fertility control schemes. Repeatable to a maximum of 8 credits.

**CVM 7572 Selective Toxicology Rotation (4 credits, Graded H/PA/U)**

This rotation provides students with an opportunity to participate in the diagnosis and clinical management of poisoned patients. In this rotation students will appreciate the clinical approach to patients, who have been exposed to toxins, acutely and chronically, from a variety of sources including iatrogenic, environmental, and nutritional. In small animal cases, students will learn to approach the diagnosis and treatment of poisoned patients in a systematic and holistic manner. In large animal cases, students will learn to consider not only the health of the patient, but the implication of secondary exposures to other species, including humans, when poisoned animals and their food products enter either animal or human food products. Additionally, students may have the opportunities to learn about regulatory toxicology issues as they relate to environmental health, biosecurity, bioterrorism, and food and drug safety. Repeatable to a maximum of 8 credits.

**CVM 7573 Selective Wildlife and Conservation Medicine Rotation (4 credits, Graded H/PA/U)**

This rotation is designed to provide a clinical experience focused on the health, management, and conservation of wildlife species, including diagnosis and treatment of common diseases and the pathology associated with them. Under direct supervision of a wildlife veterinarian, the student may participate in capture procedures, necropsies, surgical, diagnostic and therapeutic procedures. Students will be given responsibility for the management of individual and/or population cases and are encouraged to participate in the decision-making process and clinical reasoning. Repeatable to a maximum of 8 credits.

**CVM 7574 Selective Zoological Medicine Rotation (4 credits, Graded H/PA/U)**

This rotation will acquaint the student with the careers in Zoo Animal Medicine. The student will be exposed to clinical techniques, including restraint, physical examinations, administering medications, collecting samples, anesthesia, and diagnostic imaging of a variety of zoo animals. The student will become familiar with preventive medicine, quarantine procedures, nutrition and husbandry of zoo animals. The student will learn about regulations affecting the care and welfare of zoo animals as well as the roles and responsibilities of the zoo veterinarian in this area. Under direct supervision of the zoo veterinarian, the student may participate in daily rounds, necropsies, surgical and therapeutic procedures. The student may be asked to present a seminar on a selected topic. Repeatable to a maximum of 8 credits.

**CVM 8090 Independent Study (1-8 credits, CR/NCR)**

Supervised student-centered learning experience in a clinical, administrative or research setting. Repeatable to a maximum of 8 credits. Year 4 students are limited to a total of 8 combined credits for concurrent enrollment in CVM 8090 and CVM 8095. Prior permission of the Dean's Office is required in order to repeat this course. Credit awarded for this course does not count toward the total number of credit hours required for the DVM degree.

**CVM 8095 Research Thesis (2-8 credits, CR/NCR)**

The goal of this course is to improve the scholarly writing and scientific presentation skills of students. These skills are especially relevant to students considering further clinical (internship or residency) or research (MS or PhD) training after graduation. This course is applicable to students who have previously completed a research rotation (CVM 7564), independent study (8090) or been engaged in scholarly activities during their clinical rotations or during summer programs. The course is designed to allow final preparation of the scholarly writing (article submitted for publication or thesis), preparation of an abstract, and public defense. Students may elect to enroll in this course during Years 2, 3 or 4, and must complete the course prior to graduation. Repeatable to a maximum of 8 credits. Year 4 students are limited to a total of 8 combined credits for concurrent enrollment in CVM 8090 and/or CVM 8095. Prior permission of the Dean's Office is required to repeat this course. Credit awarded for this course does not count toward the total number of credit hours required for the DVM degree.

**IPE 5000 Patient Centered Cases I – An Interprofessional Approach (1 credit, CR/NCR)**

This course is a required university seminar for all first year health professional students. This course prepares students to practice health care services through a team approach. Working in small interprofessional teams, students will explore cases representing conditions across the life span. The cases will integrate elements common to all professionals such as ethical, behavioral, social and psychological issues. This course is a graduate requirement for all health professional programs.

**IPE 5100 Patient Centered Cases II - An Interprofessional Approach (1 credit, CR/NCR)**

This course is a required university seminar for all first year health professional students. This course prepares students to practice health care services through a team approach. Working in small interprofessional teams, students will explore cases representing conditions across the life span. The cases will integrate elements common to all professionals such as ethical, behavioral, social and psychological issues. This course is a graduate requirement for all health professional programs.

**IPE 6000 Team Training in Healthcare I (1 credit, CR/NCR))**

IPE 6000 will continue to build upon the knowledge from the IPE 5000 series, but will expand upon that knowledge and require the student to learn and apply advanced tools and strategies that are crucial to develop a collaborative healthcare team. The majority of the course is independent study with students engaging in a large-scale tabletop activity where they apply team tools necessary to solve a healthcare dilemma.

**IPE 6100 Team Training in Healthcare (1 credit, CR/NCR)**

Continuation of IPE 6000.

## Academic Calendar

| <b>Fall 2015</b>   |  |
|--------------------|--|
| June 8, 2015       | Fall Classes Begin (Year 4)                |
| July 3, 2015       | Independence Day Observed – No Classes*    |
| August 3, 2015     | Fall Classes Begin (Year 3)                |
| August 3-7, 2015   | Orientation/Welcome Week (Year 1)          |
| August 8, 2015     | Convocation/White Coat Ceremonies (Year 1) |
| August 10, 2015    | Fall Classes Begin (Years 1-2)             |
| September 7, 2015  | Labor Day – No Classes*                    |
| October 12, 2015   | Columbus Day – No Classes*                 |
| November 1, 2015   | Fall Classes End (Year 4)                  |
| November 25, 2015  | Thanksgiving Recess Begins @ 5:00 p.m.*    |
| November 30, 2015  | Fall Classes Resume                        |
| December 18, 2015  | Fall Classes End (Years 1-3)               |
| December 21, 2015  | Winter Recess Begins (Years 1-4)           |
| <b>Spring 2016</b> |  |
| November 2, 2015   | Spring Classes Begin (Year 4)              |
| January 4, 2016    | Spring Classes Begin (Years 1-3)           |
| January 18, 2016   | Martin Luther King Day – No Classes*       |
| February 15, 2016  | President’s Day – No Classes*              |
| March 21, 2016     | Spring Break Begins (Years 1-2)            |
| March 28, 2016     | Spring Classes Resume (Years 1-2)          |
| May 18-20, 2016    | Commencement                               |
| May 20, 2016       | Spring Classes End (Years 1-4)             |

*\* Year 3 and 4 students observe their preceptor’s hours, which may include working on federal holidays.*

## Veterinarian's Oath

Being admitted to the profession of veterinary medicine, I solemnly swear to use my scientific knowledge and skills for the benefit of society through the protection of animal health and welfare, the prevention and relief of animal suffering, the conservation of animal resources, the promotion of public health, and the advancement of medical knowledge.

I will practice my profession conscientiously, with dignity, and in keeping with the principles of veterinary medical ethics.

I accept as a lifelong obligation the continual improvement of my professional knowledge and competence.

*Approved by the House of Delegates, 1954; Revision approved by the House of Delegates, 1969; Revision approved by the Executive Board of the American Veterinary Medical Association in 1999, 2010.*