College of Veterinary Medicine

2013/2014 Catalog
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College of Veterinary Medicine
Doctor of Veterinary Medicine Program

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.

Mission Statement
The College of Veterinary Medicine is committed to serving society and animals through the preparation of students for the practice of veterinary medicine, veterinary public health and/or veterinary research in an educational program of self-directed learning, reverence for life, and clinical education through strategic partnerships. Instruction and clinical opportunities are provided in a wide variety of domestic species, including food animal, equine and companion animals. The college sustains a vibrant and diverse faculty by encouraging advancement through personal and professional development and research. This creates an environment of competent, caring, ethical professionals, where cooperative learning, public service, and scholarship can flourish in an arena of excellence.

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 at http://www.nbvm.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, and is located at 2005 Evergreen Street, Suite 2250, Sacramento, CA 95815-3831, (916) 263-2610, http://www.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 accepts applications from all qualified domestic and international candidates. Academic records, personal and professional potential and collaborative ability are considered in accepting students into each class. WesternU-CVM seeks to admit a diverse student population with demonstrated academic competency and commitment to serve the public and animal health care interests of the veterinary profession.

WesternU-CVM participates in the centralized application service of the American Association of Veterinary Medical Colleges (AAVMC). This service, called the Veterinary Medical College Application Service (VMCAS), can be accessed as follows: by mail at AAVMC, 1101 Vermont Avenue, NW Suite 301, Washington, DC 20005-3521; by phone (202) 682-0750; by VMCAS Student Line: (877) VMCAS-40 (877-862-2740); by fax: (202) 682-1122; by e-mail: vmcas@aavmc.org; or via the internet: http://www.aavmc.org/vmcas/vmcas.htm.

Application Requirements

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 university web site at http://prospective.westernu.edu/veterinary/welcome. In order to confirm current application requirements, applicants are directed to consult both the VMCAS and WesternU websites after June 1st of each application year.

Applicants with Foreign Coursework

Applicants who wish to use coursework completed outside the United States, and 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 above services. The official evaluation must be included with the supplemental application packet.

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.
**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 3 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.

**Prerequisite Courses**

<table>
<thead>
<tr>
<th>Prerequisites</th>
<th>Semester Credit Hours</th>
<th>Quarter Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Chemistry with lab*</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Biochemistry or Physiological Chemistry</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Upper Division Biological &amp; Life Sciences with lab*</td>
<td>9 12</td>
<td></td>
</tr>
<tr>
<td>Microbiology</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Physiology</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Genetics or Molecular Biology</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>General Physics with lab*</td>
<td>6 8</td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>English Composition</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Public Speaking or Small Group Communication</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Humanities/Social Sciences/Psychology/Sociology</td>
<td>9 12</td>
<td></td>
</tr>
</tbody>
</table>

- All prerequisites must be completed at a regionally accredited US institution (exceptions will be made on a case-by-case basis).
- All prerequisites must be completed with a grade of “C” or better (a grade of “C-” or lower is not acceptable).
- All prerequisites must be completed by the end of the spring term of the planned year of starting the veterinary professional program, if accepted.
- 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.
- All coursework taken from non-US institutions must be submitted to an approved service for evaluation.
- Required science courses must be satisfactorily completed no more than eight calendar years prior to the time the student would begin matriculation.

*Only courses with a laboratory component are acceptable*
**Standardized Examinations**

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

**Transcripts**

For the class entering fall of 2014, transcripts will not be required until an applicant has been accepted. VMCAS will be collecting and verifying transcripts beginning with the class entering fall of 2014 application cycle.

**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.

**Recommendations**

Three letters of recommendation are required from among the following: previous employers or supervisors of extended volunteer activities or academic personnel responsible for courses taken by the individual.

**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.

**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. Following the interview, the Admissions Committee forwards all acceptable applicants to the Dean. The Dean of the college seeks to establish a diverse student body and has the final authority on admission decisions. Invitations to successful applicants shall originate in the Dean’s office and are signed by the Dean.

**Transfers from Other Schools**

WesternU-CVM does not currently accept transfer students from other institutions.

**Registration**

All DVM students are required to register by the registration deadlines specified by the University Registrar. Registration dates are posted at: [http://www.westernu.edu/registrar-online-information](http://www.westernu.edu/registrar-online-information). 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 prior to registration are additional requirements for incoming students. Also, all students must show proof of current health insurance coverage by the deadlines provided by the University Registrar. This coverage must be maintained or in effect throughout the academic year. If there is no proof of current coverage, students will be automatically enrolled in the school sponsored insurance plan.

Attendance at Orientation is mandatory for all incoming first-year students.

**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 6 years from the date of matriculation to the program.

**Computer Technology**

Each WesternU-CVM student is required to have a laptop computer that meets the specifications on the WesternU web site at: http://www.westernu.edu/bin/computing/laptop-requirements-CVM.pdf

A webcam is required. 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.

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. In addition, each student must have access to a printer. 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.

**Tuition and Fees**

By action of the Board of Trustees, DVM tuition and fees for the 2013-2014 academic year (subject to change) are as follows:

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$48,510.00</td>
<td>Annual Tuition (DVM Classes of 2016-2017)</td>
</tr>
<tr>
<td>$47,380.00</td>
<td>Annual Tuition (DVM Classes of 2014-2015)</td>
</tr>
<tr>
<td>$40.00</td>
<td>Student Body Fee (Years 1-2)</td>
</tr>
<tr>
<td>$20.00</td>
<td>Student Body Fee (Years 3-4)</td>
</tr>
</tbody>
</table>

**Other Fees and Expenses**

<table>
<thead>
<tr>
<th>Amount</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$35.00</td>
<td>SCAVMA Annual Membership</td>
</tr>
<tr>
<td>$30.00</td>
<td>Registration Late Fee (per business day)</td>
</tr>
<tr>
<td>$350.00</td>
<td>Graduation Fee</td>
</tr>
<tr>
<td>$470.00</td>
<td>Annual Parking Permit (Auto)</td>
</tr>
<tr>
<td>$25.00</td>
<td>Parking Permit Replacement Fee</td>
</tr>
<tr>
<td>$40.00</td>
<td>Locker Key Replacement Charge</td>
</tr>
<tr>
<td>$10.00</td>
<td>Official Transcript (Each)</td>
</tr>
</tbody>
</table>
$21.00  Rush Transcript, First Class Mail (Each)
$25.00  Rush Transcript, Federal Express (Each)
$10.00  Student ID Replacement Fee
$150.00 Dosimetry Badge Replacement Fee
TBD  Breakage Fee (Replacement Cost)

Estimated Fees and Expenses
$1,500.00  Estimated Costs for Text Books, per year
$100.00  Software Licenses, per year
$650.00  Required Equipment (1st year)
$250.00  Required Equipment (2nd – 4th year)
$15.00  Dissection Kit (1st year)
$1,500.00 - $2,800.00  Required Laptop Computer (including Webcam)
$500.00  Computer Peripherals (Printer, etc.)
$150.00  Estimated 1st and 2nd year Clinical Activity Travel
$750.00 - $1,000.00  Estimated 3rd year Clinical Activity Travel
$1,000.00 - $5,000.00  Estimated 4th year Clinical Activity Travel and Lodging

*Under special circumstances, requests for additional financial aid support may be directed to the Financial Aid office

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. 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.

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 the National Board of Veterinary Medical Examiners website at http://www.nbvme.org. The web site for the California Veterinary Medical Board is http://www.vmb.ca.gov.

Academic Requirements
Continued enrollment, program participation, and graduation are subject to satisfactory completion of all academic requirements and payment of all outstanding debts to the university. Attendance at orientations, White Coat activities, and commencement activities is mandatory for all students.
**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 his/her designee).

**Attendance and Absences**

Attendance requirements are provided in each course syllabus.

For planned absences, students must complete and submit a Student Absence Request 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 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 and approved by the appropriate Year Director. 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.

**Academic and Professional Misconduct Policies**

All students are expected to assume personal responsibility for honesty and integrity in the professional and academic environment. Academic misconduct includes, but is not limited to, cheating, plagiarism, using unauthorized resources during examination(s), and signing another person’s name to an attendance or examination document. Professional misconduct includes, but is not limited to, inappropriate communication, unacceptable behavior, inappropriate attire, and intentional disregard for the university, college, and/or clinical site policies and procedures.

The college enforces and expects student compliance with the Standards of Academic and Professional Conduct, as contained in the Overview section of the WesternU Catalog. Students should also be familiar with the General Academic Policies and Procedures section in the WesternU Catalog. The Associate Dean for Academic Affairs will investigate any allegation and make a recommendation on
the matter or, if deemed appropriate, refer the allegation to the Honor Court for further investigation. Sanctions for a violation of the Honor Code may include one or more of the following:

- Dismissal from the academic program;
- Suspension from the program for a designated period of time;
- Academic probation; and
- Other appropriate actions.

While an alleged violation is being investigated by the college, the status of the students involved in the case will remain unchanged. After consideration of the recommendation from the Associate Dean for Academic Affairs, the Dean will inform the student(s) in writing of any resultant sanctions.

**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 2.0 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 2.0 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 certain courses of the CVM curriculum 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 requirement for that discipline.

For students deficient in four or more of the above listed disciplines, the College believes that if a student will not be able to successfully demonstrate proficiency in these disciplines by July 15th, these students will be referred to the Scholastic Standing Committee (SSC)/Student Performance Committee (SPC). A student that is unable to successfully meet the minimum requirements for their identified deficient discipline(s) by July 15th following completion of Year 2 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 repeat 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 (see University
Academic Policies section). The maximum time allowed for the completion of all requirements for the DVM degree is six (6) academic years.

**Graduation**

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

a. Is not on probation or suspension and has completed all prescribed academic and clinical requirements with a cumulative grade point average of above 2.00 and has no outstanding grade of “I,” “NCR,” or “U”.

b. Has demonstrated no serious deficiencies in ethical, professional, or personal conduct, as defined in University Catalog, “General Academic Policies and Procedures” section, which would make it inappropriate to award the degree of Doctor of Veterinary Medicine.

c. Has complied with all the legal and financial requirements of the University as stated in the University Catalog.

d. 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, such as a prior military commitment.

Students may participate in commencement activities provided they will complete all requirements of the program by December 31st 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 completion date.

**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.

**Probation or Academic Suspension**

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

- Inadequate academic progress, as defined above in the section on Satisfactory Progress and Promotion;

- A pattern of unexcused absences from scheduled curricular activities;

- Ethical, professional or personal misconduct as defined in the WesternU-CVM Honor Code or WesternU Catalog;
• A semester GPA of less than 2.00; and/or

• 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.

Students will remain on academic probation for at least one semester following placement on academic probation, but no longer than two successive semesters. 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 will be dismissed from the program.

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 advisor 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 SSC, 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 remediate by repeating 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 remediate by repeating 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 grade(s) for the course(s) will be included in the student’s GPA calculation.

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, including clinical rotations, and having a semester GPA below 2.00;

3. Failing to successfully 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 College Honor Code or WesternU Catalog.

**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 rematriculation. Failure to achieve these requirements will result in permanent dismissal from the program. All readmitted students will be placed on academic probation for the remainder of 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.

**Evaluation and Grading**

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

**Grading Scale, Years 1-3**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Equivalent</th>
<th>GPA Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4.00</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3.00</td>
</tr>
<tr>
<td>C</td>
<td>Adequate</td>
<td>2.00</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory/Fail</td>
<td>0.00</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>N/A</td>
</tr>
<tr>
<td>NCR</td>
<td>No Credit</td>
<td>N/A</td>
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**Grading Scale, Year 4**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Equivalent</th>
<th>GPA Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>H</td>
<td>Honors</td>
<td>4.00</td>
</tr>
<tr>
<td>PA</td>
<td>Pass</td>
<td>3.00</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory/Fail</td>
<td>0.00</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>N/A</td>
</tr>
<tr>
<td>NCR</td>
<td>No Credit</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Administrative Grades**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Equivalent</th>
<th>GPA Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>AU</td>
<td>Audit</td>
<td>N/A</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>N/A</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawal</td>
<td>N/A</td>
</tr>
<tr>
<td>M</td>
<td>Missing</td>
<td>N/A</td>
</tr>
</tbody>
</table>
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, personal injury, etc.). 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.

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. For more information on how to access the BanWeb student record system, visit the Registrar’s website at [http://www.westernu.edu/registrar-about](http://www.westernu.edu/registrar-about). 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 business days after the appeal notification.

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.

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 Year Director or the faculty advisor. If the problem is not resolved at the faculty advisor/course director 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 faculty member, the first step in the issue/dispute resolution process is discussion with the faculty member. If the matter is not satisfactorily resolved at that level, then the matter should be referred to the Department Chair, Dean, and Provost/COO, in that order. The final arbiter is the Board of Trustees.

When an incident arises involving a staff member, the dispute resolution process begins with the Department Chair, 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.
Curriculum Organization

Year 1

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVM 5000</td>
<td>Veterinary Basic and Medical Sciences – PBL Module I</td>
<td>8.00</td>
</tr>
<tr>
<td>CVM 5020</td>
<td>Veterinary Basic and Medical Sciences – PBL Module II</td>
<td>8.00</td>
</tr>
<tr>
<td>CVM 5030</td>
<td>Molecular and Cellular Biology I</td>
<td>1.00</td>
</tr>
<tr>
<td>CVM 5040</td>
<td>Veterinary Issues I</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 5060</td>
<td>Veterinary Clinical Sciences and Skills I</td>
<td>2.00</td>
</tr>
<tr>
<td>IPE 5000</td>
<td>Patient Centered Cases I</td>
<td>1.00</td>
</tr>
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</table>

Semester Total: **22.00**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CVM 5100</td>
<td>Veterinary Basic and Medical Sciences – PBL Module III</td>
<td>8.00</td>
</tr>
<tr>
<td>CVM 5120</td>
<td>Veterinary Basic and Medical Sciences – PBL Module IV</td>
<td>8.00</td>
</tr>
<tr>
<td>CVM 5130</td>
<td>Molecular and Cellular Biology II</td>
<td>1.00</td>
</tr>
<tr>
<td>CVM 5140</td>
<td>Veterinary Issues II</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 5160</td>
<td>Veterinary Clinical Sciences and Skills II</td>
<td>2.00</td>
</tr>
<tr>
<td>IPE 5100</td>
<td>Patient Center Cases II</td>
<td>1.00</td>
</tr>
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Semester Total: **22.00**

Year 1 Total: **44.00**

Year 2

<table>
<thead>
<tr>
<th>Course</th>
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<th>Credit Hours</th>
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<tbody>
<tr>
<td>CVM 6000</td>
<td>Veterinary Basic and Medical Sciences – PBL Module V</td>
<td>8.00</td>
</tr>
<tr>
<td>CVM 6020</td>
<td>Veterinary Basic and Medical Sciences – PBL Module VI</td>
<td>8.00</td>
</tr>
<tr>
<td>CVM 6030</td>
<td>Molecular and Cellular Biology III</td>
<td>1.00</td>
</tr>
<tr>
<td>CVM 6040</td>
<td>Veterinary Issues III</td>
<td>2.00</td>
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<tr>
<td>CVM 6060</td>
<td>Veterinary Clinical Sciences and Skills III</td>
<td>2.00</td>
</tr>
<tr>
<td>IPE 6000</td>
<td>Team Training in Healthcare I</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Semester Total: **22.00**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVM 6100</td>
<td>Veterinary Basic and Medical Sciences – PBL Module VII</td>
<td>8.00</td>
</tr>
<tr>
<td>CVM 6120</td>
<td>Veterinary Basic and Medical Sciences – PBL Module VIII</td>
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</tr>
<tr>
<td>CVM 6130</td>
<td>Molecular and Cellular Biology IV</td>
<td>1.00</td>
</tr>
<tr>
<td>CVM 6140</td>
<td>Veterinary Issues IV</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 6160</td>
<td>Veterinary Clinical Sciences and Skills IV</td>
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</tr>
<tr>
<td>IPE 6100</td>
<td>Team Training in Healthcare II</td>
<td>1.00</td>
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</table>

Semester Total: **22.00**

Year 2 Total: **44.00**
### Year 3

#### Year 3, Fall/Spring Semester, DVM 2015

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CVM 7000</td>
<td>Financial and Practice Management</td>
<td>1.00</td>
</tr>
<tr>
<td>CVM 7010</td>
<td>Small Animal Practice I</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7011</td>
<td>Small Animal Practice II</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7012</td>
<td>Small Animal Practice III</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7013</td>
<td>Small Animal Practice IV</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7020</td>
<td>Livestock Practice I – Dairy</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7021</td>
<td>Livestock Practice II – Meat and Fiber</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7025</td>
<td>Population Health and Production</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7030</td>
<td>Equine Practice I</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7031</td>
<td>Equine Practice II</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7035</td>
<td>Surgery/Anesthesia</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7040</td>
<td>Diagnostic Laboratory &amp; Pathology</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7045</td>
<td>Laboratory Animal &amp; Research</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7050</td>
<td>Zoo Animal &amp; Wildlife</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7055</td>
<td>Veterinary Public Health</td>
<td>2.00</td>
</tr>
<tr>
<td>CVM 7060</td>
<td>Food &amp; Feed Safety</td>
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<tr>
<td>CVM 7065</td>
<td>Global Animal Health</td>
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<tr>
<td>CVM 7090</td>
<td>Third Year Student Presentations</td>
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**Year 3 Total:** 34.00

### Year 4

#### Year 4, Fall/Spring Semester, DVM 2014

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>CVM 7510</td>
<td>Core Veterinary Internal Medicine Rotation OR</td>
<td>4.00</td>
</tr>
<tr>
<td>CVM 7515</td>
<td>Core Food Animal Medicine Rotation</td>
<td></td>
</tr>
<tr>
<td>CVM 7520</td>
<td>Core Surgery</td>
<td>4.00</td>
</tr>
<tr>
<td>CVM 7530 - CVM 7599</td>
<td>Selective Clinical Rotations (6)</td>
<td>24.00</td>
</tr>
</tbody>
</table>

**Year 4 Total:** 32.00
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 - PBL Module 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, biochemistry, 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. There are eight modules based on a body-systems approach to the integration of the basic medical sciences. Correlative laboratories and learning activities are provided to enhance the learning experience.

CVM 5020 Veterinary Basic and Medical Sciences – PBL Module II (8 credits)

Taken concurrently with CVM 5000, focusing on other veterinary problems.

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 - PBL Module III (8 credits)

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

CVM 5120 Veterinary Basic and Medical Sciences - PBL Module 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 - PBL Module V (8 credits)
Continuation of CVM 5100 and 5120. Prerequisite: successful completion of all prior required courses.

CVM 6020 Veterinary Basic and Medical Sciences - PBL Module 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 - PBL Module VII (8 credits)
Continuation of CVM 6000 and 6020. Prerequisite: successful completion of all prior required courses.

CVM 6120 Veterinary Basic and Medical Sciences - PBL Module 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 Banfield, The Pet Hospital 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 WesternU faculty and will include student derived off-campus field trips. On-campus activities will involve in depth discussions of population health and production topics including, but not limited to: biosecurity, preventive medicine programs, disease monitoring and surveillance, disease eradication and/or control in a population, evaluation and application of diagnostic tests in a herd, production record analysis as a diagnostic tool, management related health issues in populations, disease dynamics in a population, disease outbreak investigation, cost/benefit analysis of disease interventions, and timely topics or current events impacting population health and production. Each student will prepare a defensible proposal for a preventive medicine or herd health program in an animal population of their choice. These populations could include a livestock herd or flock, a stable, a kennel, a cattery, an animal shelter, a pet store, a zoo, an aquarium, etc. Students will present their proposals in written format to faculty for critical evaluation.
**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 Banfield Veterinary Clinical Center on the campus of Western University of Health Sciences, 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, biomethodology (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 and wildlife medicine and surgery through participation in the daily activities of the veterinary staff. 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 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, Zoo ethics, and if time is available, the students will have an introduction to the management of zoos and the conservation efforts of zoos. 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 Animal 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 in 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 Animals Diseases, International Veterinary Medicine 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. The role of USDA in international activities and other national and international animal and public health organizations, including United Nations (UN) organizations such as Food and Agriculture Organization (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 review their professional, legal and ethical responsibilities after becoming an accredited veterinarian.

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 diagnosis, management and treatment of diseases. Students submit SOAPs and participate in weekly rounds-type activities with faculty and classmates also 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 7520 Core Surgery 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.

CVM 7530 Selective Alternative 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 Ancillary Diag. in Medicine & 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. Under direct supervision of an aquatic animal medicine veterinarian, 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 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 and poultry. 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 and/or house call veterinary practices. 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 in companion animals in clinical settings. 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. Rotations associated with shelters or rescue agencies will have opportunities to become familiar with behavioral evaluations and treatment of animals in such facilities. 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 & Feline 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 and feline veterinary medicine. Under the direct supervision of board certified canine and feline 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, electrocardiology, 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 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 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 Radiology 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 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, gynecology, and semenology 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 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, 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 restrain, 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 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.
Honors and Awards

Awards are presented annually at WesternU-CVM’s Honors Day ceremony, which generally takes place in March or April, and Fourth Year Awards ceremony in May.
### Academic Calendar

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

#### Fall 2013

- **Monday, June 3, 2013**
  - Fall Semester Classes Begin (Year 4)

- **Thursday, July 4, 2013**
  - Independence Day – No Classes*

- **August 5 – August 9, 2013**
  - Orientation Week (Year 1, Mandatory)
  - Fall Semester Classes Begin (Year 3)

- **Thursday, August 8, 2013**
  - Orientation (Year 2, Mandatory)

- **Saturday, August 10, 2013**
  - Convocation/White Coat Ceremony (Year 1 Mandatory)

- **Monday, August 12, 2013**
  - Fall Semester Classes Begin (Years 1 and 2)

- **Monday, September 2, 2013**
  - Labor Day – No Classes*

- **Monday, October 14, 2013**
  - Columbus Day – No Classes*

- **Wednesday, November 27, 2013**
  - Thanksgiving Recess Begins @ 5:00 p.m.*

- **Monday, December 2, 2013**
  - Classes Resume

- **Friday, December 20, 2013**
  - End of Fall Semester Classes (Years 1-4)

- **Monday, December 23, 2013**
  - Winter Recess Begins (Years 1-4)

#### Spring 2014

- **Monday, January 6, 2014**
  - Spring Semester Classes Begin (Years 1-4)

- **Monday, January 20, 2014**
  - Martin Luther King Day – No Classes*

- **Monday, February 17, 2014**
  - President’s Day – No Classes*

- **Monday, March 10, 2014**
  - Spring Break Begins (Year 3)

- **Monday, March 17, 2014**
  - Spring Break Begins (Years 1-2)
  - Spring Semester Classes Resume (Year 3)

- **Monday, March 24, 2014**
  - Spring Semester Classes Resume (Years 1-2)

- **Wednesday, May 14, 2014**
  - End of Spring Semester Classes (Year 4)

- **Wednesday-Friday, May 14-16, 2014**
  - Commencement

- **Friday, May 16, 2014**
  - End of Spring Semester Classes (Year 3)

- **Friday, May 23, 2014**
  - End of Spring Semester Classes (Years 1-2)
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.