

COLLEGE OF VETERINARY MEDICINE

Doctor of Veterinary Medicine Program

ACCREDITATION

Colleges of Veterinary Medicine are 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 was granted Limited Accreditation status by the AVMA-COE in March, 2008.

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 based on 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, 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 degree (DVM) is awarded in recognition of the highest level of professional education in veterinary medicine in the United States. To earn the DVM degree, students must complete four years of professional study subsequent to completion of their undergraduate, pre-professional prerequisites at an accredited college or university. Students who successfully complete 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.nvbme.org/>. Information on obtaining a state license to practice veterinary medicine is available from each state's Veterinary Medical Board. In California, the Veterinary Medical Board is a division of the Department of Consumer Affairs, and is located at 1420 Howe Avenue, Suite 6, Sacramento CA 95825, 916-263-2610 (<http://www.vmb.ca.gov>). After passing state licensing examinations, graduates 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

Western University of Health Sciences College of Veterinary Medicine will graduate veterinarians competent in:

1. providing an accurate, comprehensive patient diagnosis through application of critical thinking (problem solving skills), appropriate use of clinical laboratory testing, and record management.
2. providing comprehensive treatment planning with effective communication, client education and professional collaboration including patient referral when indicated.
3. providing humane and compassionate patient care that includes anesthesia and pain control measures, and attention to obtaining and maintaining optimal patient welfare. Included in this is objectively considering the wishes and expectations of the clients and animal guardians.
4. utilizing basic medicine and surgery skills, supported by life-long self-directed learning and skills acquisition, and effective case management that considers the ethical and moral choices to deliver optimal patient care.
5. the delivery of emergency and intensive care case procedures required to deliver effective case management that considers the ethical and moral choices for optimal patient care.
6. health promotion, disease prevention, biosecurity, zoonotic considerations, and issues pertaining to food and feed practice.
7. the delivery of effective and empathetic client communications and upholding ethical and moral standards of practice.
8. applying evidence provided through research furthering the practice of veterinary medicine.

ADMISSION POLICIES AND PROCEDURES

The College of Veterinary Medicine at Western University accepts applications from all qualified candidates. Usually, more applications are received from qualified candidates than can be admitted. As a result, academic, personal and professional potential, and collaborative ability are considered in accepting students into each year's class. The College of Veterinary Medicine 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.

The College of Veterinary Medicine at Western University 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 710, Washington, DC 20005; Phone (202) 371-9195; VMCAS Student Line: 1-877-VMCAS-40 (1-877-862-2740); FAX: (202)842-0773, e-mail (vmcas@aavmc.org) or via the Internet (<http://www.aavmc.org/vmcas/vmcas.htm>)

Application Requirements

The College of Veterinary Medicine Admissions Committee will consider applicants who have earned a grade of C or above on all prerequisite courses. Grades of "C-" (C minus) in any of the prerequisite courses are not accepted. Applicants also must maintain a minimum overall grade point average of 2.5 or higher in all pre-professional course work taken prior to application and matriculation. Prerequisite courses are subject to revision each year, and for the latest information, prospective students should consult the university web site at <http://www.westernu.edu>. Application procedures and materials are subject to revision each year, and the information below provides only general guidelines. Prospective applicants are directed to the VMCAS web site and the university web site after July 1 of each year to ascertain the application window that will end the following October 1 and the most accurate application requirements.

(1) Prerequisite Courses

- Organic chemistry (including laboratory): 1 course
- Biochemistry: 1 course
- Biological Sciences (including two upper division courses and one upper division laboratory), e.g., biology, zoology, physiology, anatomy, cell biology, botany, embryology, mammalogy, animal science: 3 courses
- Microbiology: 1 course
- Nutrition: 1 course
- Genetics: 1 course
- Statistics: 1 course
- General Physics (including laboratory): 2 courses
- English Composition: 1 course
- Written Communications in Science or Technology: 1 course
- Oral Communication: 1 course
- Psychology or Sociology: 1 course
- Humanities/Social Sciences : 2 courses
- Global Cultural Financial Perspectives: 1 course

Each required course must be no less than one academic quarter/semester in length (minimum of 3 semester or 4 quarter units per course). No remedial courses will be accepted. Honors courses are acceptable and are encouraged when offered by the institution. Prerequisite courses must be completed at a regionally accredited college or university in the U.S. (exceptions will be made on a case-by-case basis). Applicants with foreign course work, who wish to have course work completed outside the U.S. (including Canada) considered, must submit a course-by-course evaluation that has been performed by:

World Education Services

P.O. Box 745, Old Chelsea Station
New York, NY 10113-0745
212.966.6311
www.wes.org

Josef Silny & Associates

7101 SW 102 Avenue
Miami, FL 33173
(305) 273-1616
www.jsilny.com

Educational Credential Evaluators, Inc.

P.O. Box 514070
Milwaukee, WI 53203-3470
414.289.3400
www.ece.org

International Educational Research Foundation, Inc.

P.O. Box 3665
Culver City, CA 90231-3665
310.258.9451
www.ierf.org

For each required course, the applicant must have received a grade of “C” (or its equivalent) or higher to count the course as meeting the admissions requirement. Required science courses specified here (Biochemistry, Biological Sciences, Microbiology, Nutrition, Genetics, and Statistics) must be completed satisfactorily no more than eight calendar years prior to the time the student would matriculate in the Western University-CVM. Applicants with required courses completed more than eight years prior to application may provide for consideration objective criteria that would demonstrate their current knowledge of the subject in question.

(2) 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. **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. 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.

(3) 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 his/her scores to Western University-CVM for consideration in the admissions process.

(4) Animal related experience

The College requires that each applicant has worked in a major animal medical, farm animal production, regulatory animal control, animal entertainment or animal research environment for no less than 500 hours. 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.

(5) Recommendations

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

(6) Optional Application Materials

Within federal guidelines, the applicant may submit and/or the College 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 Western University Student Affairs/Admissions Office assists the College in the preparation, distribution and handling of all admissions-related materials, as well as in application processing. Applications are then forwarded to the College of Veterinary Medicine’s Admissions Committee. This Committee considers each application using uniform criteria, including but not limited to: academic achievement, standardized test performance, animal experience, and letters of reference as well as any other supporting materials. The Admissions Committee recommends applicants for interview, and coordinates the interview process. Following the interview, the Admissions Committee makes recommendations to the Dean on applicant admission to the veterinary curriculum. The Dean of the College seeks to establish diversity in the student body and has the final authority on admission decisions. Invitations to successful applicants shall originate in the Dean’s Office,

signed by the Dean. International applicants (persons who are not U.S. residents) will be considered for admission to the DVM program.

REGISTRATION

First year students are required to register by the registration date specified in the University Calendar by the Registrar. Students in subsequent years must complete registration materials, including financial arrangements, prior to the dates specified in the Academic Calendar. Continued matriculation and graduation are subject to satisfactory completion of all academic requirements and payment of all outstanding debts to the University. The receipt of a final transcript from an undergraduate college and a physical examination with documentation of required immunizations are required of incoming students prior to registration. Also, all students must show proof of current health insurance coverage at the time of registration. This coverage must remain in effect throughout the academic year. If there is no proof of current coverage, a policy provided by the University will be made available. Attendance at Orientation Week is mandatory for all first-year veterinary students.

TUITION AND FEES

By action of the Board of Trustees, the College of Veterinary Medicine tuition for the 2009-2010 academic year (subject to change) is \$40,105. For CVM applicants accepted at Western University, a tuition deposit of \$500 is payable before April 15th of the year in which the student begins matriculation. Upon matriculation, this \$500 is applied toward the total annual tuition. If an applicant fails to register, the tuition deposit is forfeited.

In addition to tuition, students are assessed a \$40 Student Body Fee in years one and two of the curriculum, and a \$20 Student Body Fee in years three and four of the curriculum. This fee supports student government activities and expenditures.

Other Fees and Expenses, Estimated

Graduation Fee (Assessed on candidates for graduation only)	\$200
Late Registration Fee, per day	\$ 30
Recommended Text Books, per year (estimate)	\$1,000
Required equipment, per year (laboratory coats, scrubs, coveralls, boots, stethoscopes, CD's) (estimate)	\$250
Required laptop computer, range	\$1,500 to \$2,000
Western University Parking Permit Fee (annual)	\$400
Lost Identification Badge Fee	\$ 10
Copy of Official Transcript	\$ 6
Rush Transcript (each), First Class Mail	\$ 21
Rush Transcript (each), Federal Express	\$ 25
Copy of Student File Material, per page	\$0.50
Surgical Instrument Deposit (refundable)	\$500

Laptop Computers

Each veterinary student at Western University of Health Sciences is required to have a laptop computer with a CD-ROM drive that meets the specifications on the Western University web site at <http://www.westernu.edu/bin/veterinary/LaptopRequirements.pdf>.

The laptops will be used for e-mail communication with classmates and faculty, for accessing computer- and server-based course information and instructional software, for searching online bibliographic databases and creating electronic bibliographies, and for participating in exercises in third and fourth year courses. 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 or when rotating in off-campus courses; therefore, laptop computers are required instead of desktop models. Students have assigned lockers in which to secure their laptops on campus. More information on required laptops is provided to prospective students at the time of on-campus interviews (February).

Clinical Rotations Expenses

During the third and fourth years of the curriculum, students will rotate through off-campus clinical experiences. Some students may elect to complete some 4th year clinical rotations away from the Southern California area. Any travel, food, housing or other expenses incurred by participating in either 3rd year, 4th year CORE, or Selective Clinical Rotation course activities are the responsibility of the student. In addition, students

are required to return to campus several times during the clinical years for various educational experiences. 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, not by the CVM, and are the responsibility of the student. Western University CVM students may take the North American Veterinary Licensing Examination (NAVLE) during a four-week period in November/December or a two-week period in April of their 4th year. Application procedures and fees are described at <http://www.nbvme.org>. The web site for the California Veterinary Medical Board is <http://www.vmb.ca.gov>.

ACADEMIC REQUIREMENTS

Academic Advisement

Students are assigned a faculty mentor upon entry. The academic mentor-student relationship can become one of the most valuable aspects of veterinary medical education. It provides an opportunity to develop sustained, individual contacts between faculty and students on both academic and personal levels. If the student or the faculty member does not find the relationship helpful, either is free to seek a change. Such changes are arranged through the Associate Dean for Academic Affairs (or his/her designee).

Admissions Committee

The Admissions Committee is responsible for managing the college admissions process. The committee works with the personnel in the Western University Office of Student Affairs to coordinate preparation and dissemination of recruitment materials to prospective students and to plan and coordinate file reviews and interviews for applicants each year. The Committee recommends to the Dean the names of students acceptable for admission to the College. At the close of each admissions cycle, members of the Admissions Committee re-examine minimal requirements for admissions and consider recommendations for change that will enhance preparation and quality of applicants to the College.

Scholastic Standing Committee

The Scholastic Standing Committee (SSC) is responsible for oversight of student progress in the curriculum. At the end of each academic semester, the Scholastic Standing Committee reports to the Faculty on scholastic standing of students in the professional curriculum and makes recommendation to the Faculty on scholastic standing issues and policy.

Attendance and Absences

Attendance is required at all scheduled instructional periods, including PBL group meetings with facilitators, scheduled educational laboratories and experiences, and all clinical courses/rotations. Absence from instructional periods for any reason does not relieve the student from responsibility for the material covered during these periods. Students are required to be present for all scheduled examinations and cannot begin an examination more than 15 minutes after the scheduled starting time without permission from an Associate Dean or his/her designee. For a student to be allowed to take any examination at other than the scheduled time, approval must be received from the appropriate Phase Director or his/her designee.

Absence from an examination due to unforeseen circumstances, including illness, should be reported to the Course Leader, Phase Director, and the Office of the Associate Dean for Academic Affairs by telephone as soon as possible prior to or after the exam has been administered (909-469-5590). A written explanation of the absence (including documentation on physician letterhead in the case of illness) must be provided to the Associate Dean for Academic Affairs as soon as reasonably possible and no later than the next day the student is on campus. If a student misses an examination, the Associate Dean for Academic Affairs, in consultation with the Phase Director(s) and/or Course Leader, will determine whether the absence is excused or unexcused. 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 at the discretion of the Course Leader. If the absence is unexcused, a score of zero will be recorded for that examination.

Examinations

Examination schedules will be provided at the beginning of every course. Typically, an examination week is scheduled after every eight (8) weeks during the curriculum for the first three years of the curriculum (the college administration may change this schedule at its discretion). Students are required to be present for all scheduled examinations. In addition, unannounced examinations may occur during any portion of the curriculum.

Policy on Academic Dishonesty

Honesty and integrity are among the most valued traits of a veterinarian, and each student is expected to assume personal responsibility for honesty and integrity. Academic dishonesty 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.

The CVM Faculty has adopted an Honor Code that guides students and defines expectations with regard to matters of professional behavior. Students who observe suspected academic dishonesty need only identify the issue of concern and present what evidence they have for that concern. They are to report this to the examination proctor, a faculty member, or a college administrator rather than attempt a personal intervention. Persons making verbal allegation may later be required to submit a written report to the Dean or his/her designee. Failure to promptly report issues of concern as soon as reasonably possible (preferably in less than 24 hours) is considered behavior inconsistent with expected professional behavior and a serious ethical lapse.

Please see the **General Academic Policies and Procedures** section in the front portion of the Catalog for more information regarding matters of student conduct in general. The Dean may investigate the allegation and summarily make a decision on the matter or, if deemed appropriate, convene an Honor Court to investigate the allegation. The student suspected of dishonesty may provide evidence or witness testimony to the Honor Court. If a preponderance of the evidence presented to the Honor Court indicates that a violation of the Honor code has likely occurred, recommendations to the Dean may include, but are not limited to:

1. dismissal from the academic program,
2. suspension from the program for a designated period of time,
3. academic probation, the period to be recommended by the Honor Court, and/or
4. make-up examination.

While an alleged violation is being investigated by the university, the status of the students involved in the case will remain unchanged pending the outcome of the investigation. After receipt of the recommendation from the Honor Court to the Dean, the disposition of the incident will be conveyed to the involved student(s) by the Dean, in writing.

Grading Policies

Official grades are turned in to the Registrar by the Office of the Dean of the College of Veterinary Medicine, at which time the online student records system, BanWeb, is updated. Grades may be viewed and unofficial transcripts are available on the BanWeb student records system throughout the academic year. For more information on how to access the BanWeb student records system, visit the Registrar's website at <http://www.westernu.edu/registrar>.

The College of Veterinary Medicine uses letter grades A through U and CR/NCR (credit/no credit) grades. Credit/No Credit courses are those designated by the faculty as required for promotion, but not assigned letter grades. The student must satisfy course requirements as defined by the course syllabus to receive credit. Course syllabi and instructor remarks at the beginning of each course inform students of academic accomplishment required for each grade.

Letter grades are reported according to the following values:

A (4.0)	Excellent
B (3.0)	Good
C (2.0)	Satisfactory
D (1.0)	Unsatisfactory
U (0.0)	Fail
CR/NCR (0)	Credit/No Credit
H (4.0)	Honors (4 th year rotations only)
PA (3.0)	Pass (4 th year rotations only)
Au (0)	Audit
I (0)	Incomplete

W (0) Withdrawal

If a student does not complete an “I” grade within the following semester of receiving the “I” grade, the “I” will be defaulted back to the grade earned based upon the coursework that had already been completed at the time the “I” grade was awarded.

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

Recording of Grades and Grade Change

No grade will be changed unless the instructor certifies in writing to the Associate Dean for Academic Affairs and the Registrar that an error in computing or recording the grade occurred. For on-campus courses, students have a maximum of two weeks from the time examination results are electronically posted to bring any errors, irregularities in grading, or exam item/question challenges to the attention of the Course Leader. All recorded grades remain on the official transcript unless a clerical error is discovered.

No grade will be changed after one month from the time the grade is recorded in the Office of the Registrar. Within the above-designated time, grade changes for clinical rotations will be considered only under the following circumstances:

1. when the Associate Dean for Academic Affairs receives a signed written statement from the clinical preceptor specifying that a clerical error has been made regarding a grade, and that the purpose of the change is to correct that clerical error; or
2. when the clinical site preceptor to whom the student was assigned submits a signed written request to have the grade changed. The request must include justification for making the change.

All grade changes must have the approval of the Associate Dean for Academic Affairs. Student on clinical rotations should make every effort to discuss his/her evaluation(s) with the assigned clinical preceptor prior to leaving the clinical rotation.

Satisfactory Progress

Students must maintain a semester and cumulative grade point average of C (2.0) on a yearly basis during all four years of the curriculum to be considered making satisfactory academic and professional progress. All “I” grades must be successfully completed, and “D”, “U”, or “NCR” grades in any course must be satisfactorily remediated to a grade of “C”, “CR”, or “PA” prior to promotion or graduation. If a student leaves a clinical rotation before it is finished without the permission of the Associate Dean for Academic Affairs, or is asked to leave a rotation by the Clinical Preceptor, a grade of “U” for that rotation will be assigned.

Promotion

Promotion is defined as academic and professional progression from one academic year to the next. The Scholastic Standing Committee will recommend students to the Dean for promotion. A student will not be recommended for progression from one academic year to the next with an outstanding grade of “I”, “D”, “U”, or “NCR” in a required course, a semester GPA less than 2.0 for two consecutive semesters, or a cumulative GPA less than 2.0 at the end of the academic year. When considering a student for promotion, ethical, professional, and personal conduct will be taken into consideration (see **University Academic Policies** section). A student will be promoted provided that all academic, legal, and financial requirements of the University, as stated in the University Catalog, have been satisfied. The maximum time allowed for the completion of all academic requirements for the DVM degree is six (6) academic years.

Academic Probation

Students may be placed on Academic Probation by the Faculty following recommendation by the Scholastic Standing Committee for any of the following reasons:

1. inadequate academic progress, including but not limited to earning in any required courses or rotations a grade less than “C” (2.0), “PA” or a grade of “NCR” (0),
2. a semester GPA of less than 2.0,
3. a pattern of unexcused absences from scheduled learning activities, or
4. deficient ethical, professional, or personal conduct as defined in the University Catalog.

First-, second- and third-year students who are on probation must meet with their faculty mentor to monitor progress at least once a month. Fourth-year students who are on probation must contact their faculty mentor

once a month. It is the student's responsibility to contact the faculty mentor to arrange these meetings or contacts. Students on academic probation must bring their cumulative GPA to greater than a C (2.0) average and/or satisfactorily remediate deficient coursework within two semesters of the imposition of academic probation, after which they may be removed from probation. If they do not meet these goals, they will be dismissed from the veterinary medicine curriculum. Students on academic probation are not permitted to hold leadership positions in co-curricular activities associated with the University and/or with professional associations.

If a student receives an "I", "D", "U", or "NCR" while on academic probation in a required course, regardless of the student's GPA, the student may be dismissed.

Remediation

The educational objectives that underlie remedial teaching and evaluation are the same as the educational objectives that underlie regular courses in the curriculum. The academic progress of students who fail to meet the standards of a course, or who fail to attain a semester GPA of 2.0 or greater for any semester, or who have a cumulative GPA of less than 2.0 at the end of an academic year, will be reviewed by the Scholastic Standing Committee. Where deemed appropriate, this Committee, after consultation with the Course Leader, Phase Director, and/or Associate Dean for Academic Affairs, may recommend one or more of the following remedial strategies:

1. the taking, and passing, of a comprehensive examination,
2. completion of special projects or studies in the deficient area(s),
3. repeating of the course or clinical rotation, or
4. repeating of the academic year.

The grade(s) achieved in remediation of a course grade of "D," "U," or "NCR" will be the grade(s) recorded on the student's transcript, except that the highest grade a student may earn by options 1 or 2 (above) is a "C" or "CR". The grade achieved by remediation will be recorded on the transcript with a notation identifying the original grade. Grades earned during remediation of a course or clinical rotation will be critically reviewed by the Scholastic Standing Committee.

Decisions regarding remediation and withdrawal will be made by the Dean of the College of Veterinary Medicine, based upon the recommendation of the Scholastic Standing Committee. The Committee will base its recommendation on the student's academic record and other considerations after consultation with the student's faculty mentor, Course Leader, Phase Director, and/or Associate Dean for Academic Affairs, and the student involved, as appropriate.

A student who is required to remediate a course grade of "D", "U", or "NCR" must be notified in writing by the Dean of the College of Veterinary Medicine at least 15 working days prior to the remediation date, or within 15 working days after the close of the academic year in which the student is presently enrolled, whichever comes first. Notification must either be sent by certified mail or hand-delivered to the student and must be acknowledged with the signatures of the Dean of the College of Veterinary Medicine or his/her designee and the student.

Dismissal from the Program

The Faculty of the College of Veterinary Medicine may require withdrawal of a student from the veterinary curriculum for failure to meet standards of scholarship, attendance, or conduct. The Scholastic Standing Committee may recommend dismissal of a student for failing to meet standards of scholarship for:

1. earning a cumulative GPA of less than 2.0 at the end of the academic year,
2. failing more than one required course in the curriculum, including clinical rotations,
3. failing to successfully remediate any required course as determined by the Scholastic Standing Committee, and/or
4. receiving a "D", "U", or "NCR" while on academic probation in a required course, regardless of the student's GPA.

In addition, the Honor Court may recommend dismissal in matters regarding student misconduct (see **General University Academic Policies** section of this catalog for more information).

Readmission

Students dismissed from the program for inadequate academic progress may apply to the Scholastic Standing Committee for reinstatement. Students dismissed for the second time, or second-, third- or fourth-year students who have attained semester GPA's of less than 2.0 in more than 40 percent of the semesters enrolled.

All students readmitted after being dismissed will be subject to all curricular requirements in effect at the date of re-matriculation. Exceptions to these requirements may be granted by the Dean after consultation with the Associate Dean for Academic Affairs and/or appropriate members of the faculty. Failure to achieve these requirements will result in permanent dismissal from the program. All readmitted students will be placed on academic probation for the entire professional curriculum, and may be dismissed at any time due to unsatisfactory performance.

Graduation

A student will be recommended for the degree Doctor of Veterinary Medicine at Western University provided he/she:

1. has completed all required courses in the four year curriculum with a cumulative GPA greater than or equal to 2.0,
2. has no outstanding grade of “I”, “D”, or “U”, or a grade of “NCR” in any required or elective Credit/No Credit course,
3. has demonstrated appropriate ethical, professional, and personal conduct, as defined in the University Catalog, “General Academic Policies and Procedures” section, and
4. has complied with all the legal and financial requirements of the University as stated in the University Catalog and has paid all required fees.

Unless special permission has been granted by the President of the University, all students must participate in person in the commencement program at which the degree is conferred. If the President grants special permission to be excused from graduation, the graduate may be required to present himself or herself at a later date to the Dean of the College of Veterinary Medicine to receive the diploma and take the Veterinarian's Oath.

CURRICULUM

Through the comparison of animal species, veterinary medicine uniquely bridges medicine, agriculture, and biology. The professional degree curriculum emphasizes the acquisition and development of skills, values, and attitudes as well as the acquisition of a core of veterinary knowledge. The curriculum and educational process is designed to initiate and promote lifelong learning in each professional degree candidate while instilling an appreciation of the breadth and scope of the profession’s broad, diverse responsibilities and opportunities. It provides ample opportunities for each student to: 1) gain an understanding of the underlying basis of health and disease in a broad range of domestic species; 2) acquire fundamental clinical skills in a variety of species; and 3) develop the values, attitudes, and behaviors necessary to responsibly address the health and well-being of animals and the interests of individual clients as well as society.

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 Curriculum Committee, the faculty, the Dean of the College of Veterinary Medicine, and the Provost/COO.

**REQUIRED PROFESSIONAL CURRICULUM OF WESTERN UNIVERSITY OF HEALTH SCIENCES
COLLEGE OF VETERINARY MEDICINE DVM DEGREE**

Year 1	1st		Year 1	2nd	
Courses	Semester	Credits	Courses	Semester	Credits
CVM 5000	Vet Basic/Med Sci	8	CVM 5100	Vet Basic/Med Sci	8
CVM 5020	Vet Basic/Med Sci	8	CVM 5120	Vet Basic/Med Sci	8
CVM 5030	Molecular/Cellular Bio	1	CVM 5130	Molecular/Cellular Bio	1
CVM 5040	Veterinary Issues	2	CVM 5140	Veterinary Issues	2
CVM 5060	Vet Clin Sci/Skills I	<u>2</u>	CVM 5160	Vet Clin Sci/Skills II	2
			IPE 5100	Patient Cent. Cases I	<u>1</u>
Total: 21			Total: 22		

Year 2	3rd		Year 2	4th	
Courses	Semester	Credits	Courses	Semester	Credits
CVM 6000	Vet Basic/Med Sci	8	CVM 6100	Vet Basic/Med Sci	8
CVM 6020	Vet Basic/Med Sci	8	CVM 6120	Vet Basic/Med Sci	8
CVM 6030	Molecular/Cellular Bio	1	CVM 6130	Molecular/Cellular Bio	1
CVM 6040	Veterinary Issues	2	CVM 6140	Veterinary Issues	2
CVM 6060	Vet Clin Sci/Skills III	2	CVM 6160	Vet Clin Sci/Skills IV	2
IPE 6000*	Patient Cent. Cases II	<u>1</u>	IPE 6100*	Patient Cent. Cases III	<u>1</u>
Total: 22			Total: 22		

Year 3		5th and 6th Semesters	Credits
Courses			
CVM 7000		Introduction to Practice Management	1
CVM 7010		Small Animal Mixed Practice I	2
CVM 7011		Small Animal Mixed Practice II/Shelter Medicine	2
CVN 7012		Small Animal Mixed Practice III	2
CVM 7013		Small Animal Mixed Practice IV	2
CVM 7020-7021		Livestock Mixed Practice (2)	4
CVM 7025		Population Health and Production	2
CVM 7030-7031		Equine Practice (2)	4
CVM 7035		Surgery	2
CVM 7040		Diagnostic Laboratory and Pathology	2
CVM 7045		Laboratory Animal and Research	2
CVM 7050		Zoo Animal and Wildlife	2
CVM 7055		Veterinary and Environmental Public Health	2
CVM 7060		Food and Feed Safety	2
CVM 7065		USDA Accreditation, Foreign Animal Diseases, and International Veterinary Medicine	2
CVM 7090		Junior Student Presentation	1
Total:			34

Year 4		7th and 8th Semester	Credits
Courses			
CVM 7510 or CVM 7515		Core Internal Medicine or Core Food Animal Medicine	4
CVM 7520		Core Surgery	4
CVM 7530-7599		Selective Clinical Rotations (6)	24
CVM 8090		Independent Study	(1-8)
CVM 8999		Independent Research (Thesis) option	(4)
Total:			32 / (40)

SUMMARY

Year	Credits	Instruction	Exams	Other
YEAR I	42	32 wks	4 wks	1 wk orientation
YEAR II	42	32 wks	4 wks	-----
YEAR III	34	33 wks	4 wks	-----

YEAR IV

32 (40)32 wks2 wks -----**Totals****150 (158)****129 weeks****14 weeks**

*For students beginning the DVM Program in 2009.

COURSE DESCRIPTIONS**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 using simulated/virtual patients with specific diseases provides the context for learning. Students are randomly assigned to groups of 6 to 8 students with a faculty facilitator. Facilitators guide the students through the PBL process. Student 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 that the PBL cases are organized within. Each module is 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)

These courses (continuing as CVM 5130, CVM 6030, and CVM 6130) provide correlative lectures and 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, and their influence on organ, organism and population levels.

CVM 5040 Veterinary Issues I (2 credits)

This course introduces the student to significant issues facing the veterinary profession, which may include issues on public policy, biomedical ethics, legislation affecting animals or the veterinary profession, animal welfare, public health, and veterinary career opportunities. The format includes invited lectures, 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 Clinical Skills I (2 credits, CR/NCR)

This course provides learning activities that lead to functional competence in basic veterinary clinical skills and common clinical procedures used in veterinary medicine. The course series CVM 5060, 5160, 6060, and 6160 will be administered concurrently with the PBL courses during the first four semesters of the DVM curriculum, and activities will be pertinent to the PBL problem in session, when appropriate. Various instructional arenas will be employed to accomplish these required skills: these include, but are not limited to, the Multidisciplinary Classroom; Hill's Wellness Center and Banfield, the Pet Hospital (enrolled wellness care); the Veterinary Ambulatory Community Service (VACS) vehicle; Cal Poly University- Pomona Animal Units; and various ambulatory experiences.

CVM 5100 Veterinary Basic and Medical Sciences - PBL Module III (8 credits)

Continuation of CVM 5000 and 5020.

CVM 5120 Veterinary Basic and Medical Sciences – PBL Module IV (8 credits)

Taken concurrently with CVM 5100, focusing on other veterinary problems.

CVM 5130 Molecular and Cellular Biology II (1 credit)

Continuation of CVM 5030.

CVM 5140 Veterinary Issues II (2 credits)

Continuation of CVM 5040.

CVM 5160 Veterinary Clinical Sciences and Clinical Skills II (2 credits, CR/NCR)

Continuation of DVM 5060.

IPE 5100 Patient Centered Cases I– An Interprofessional Approach (1 credit)

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.

CVM 6000 Veterinary Basic and Medical Sciences – PBL Module V (8 credits)

Continuation of CVM 5100 and 5120.

CVM 6020 Veterinary Basic and Medical Sciences – PBL Module VI (8 credits)

Taken concurrently with CVM 6000, focusing on other veterinary problems.

CVM 6030 Molecular and Cellular Biology III (1 credit)

Continuation of CVM 5130.

CVM 6040 Veterinary Issues III (2 credits)

Continuation of CVM 5140.

CVM 6060 Veterinary Clinical Sciences and Clinical Skills III (2 credits, CR/NCR)

Continuation of DVM 5160.

CVM 6090 Directed Studies (1 to 12 credits, CR/NCR)

Students are assigned to this course by the Dean or Associate Dean for Academic Affairs to augment identified topics/disciplines in Phase I of the DVM curriculum. The course may serve to establish qualification for further progress in the curriculum for the DVM degree. Students may be required to repeat more than one offering of this course. The Course Director will create a syllabus tailored to individual participants as necessary to augment specific topics/disciplines. For each specific topic/discipline, the student will be provided with written instructions, prescribed learning activities, and explanation of methods and standards for evaluation of student performance. Credits earned in the course do not count toward the total credits required for graduation. The course may be repeated. Prerequisite: Permission of Dean or Associate Dean for Academic Affairs.

IPE 6000 Patient Centered Cases – An Interprofessional Approach II (1 credit)

Continuation of IPE 5100.

CVM 6100 Veterinary Basic and Medical Sciences – PBL Module VII (8 credits)

Continuation of CVM 6000 and 6020.

CVM 6120 Veterinary Basic and Medical Sciences – PBL Module VIII (8 credits)

Taken concurrently with CVM 6100, focusing on other veterinary problems.

CVM 6130 Molecular and Cellular Biology IV (1 credit)

Continuation of CVM 6030.

CVM 6140 Veterinary Issues IV (2 credits)

Continuation of CVM 6040.

CVM 6160 Veterinary Clinical Sciences and Clinical Skills IV (2 credits, CR/NCR)

Not open for students with credit for DVM 5050. Continuation of DVM 6060.

IPE 6100 Patient Centered Cases – An Interprofessional Approach III (1 credit)

Continuation of IPE 6000.

CVM 7000 Introduction to 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 Mixed 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. One of these four Small Animal Mixed Practice (CVM 7010, CVM 7011, or CVM 1012) rotations is an emergency medicine practice.

CVM 7011 Small Animal Mixed Practice II/Shelter Medicine (2 credits)

Supervised clinical education in the academic and practical aspects of shelter medicine. Students are responsible 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 shelters. Animals deemed acceptable surgical risks are provided to the surgery course for surgical sterilization or other surgery as indicated. Animals requiring additional medical management will be treated accordingly. Students are exposed to the principles of shelter management, animal control issues, and small animal population medicine. Trips to local shelters may be included when available.

CVM 7012 Small Animal Mixed Practice III (2 credits)

Continuation of CVM 7011.

CVM 7013 Small Animal Mixed Practice IV (2 credits)

Continuation of CVM 7012.

CVM 7020 Livestock Mixed Practice I (2 credits)

Supervised clinical education with ambulatory veterinarians operating high quality practices emphasizing current individual animal as well as herd-health preventive programs. Clients include local livestock production units. 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. Individual animal surgery, theriogenology and medicine are included. Students are exposed to a range of livestock production systems to learn the economics of modern animal agribusiness. Interacting with the practitioner allows the students to become familiar with the business aspects of livestock-based practices.

CVM 7021 Livestock Mixed Practice II (2 credits)

Continuation of CVM 7020.

CVM 7025 Population Health & Production (2 credits)

This course includes activities that involve field trips and 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 complete preventive medicine or herd health program in an animal population of his/her 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 proposal in written and/or oral format to their peers and 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 third year course provides supervised clinical education in small animal surgery and anesthesia. Students are responsible for anesthesia and surgical procedures such as sterilization of, peri-operative care of, and client education for adopted and client-owned animals. Students receive, examine, diagnose and treat adoptable patients from local shelters. 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)

Supervised clinical instruction occurs in laboratory animal facilities at government, university, or private research organizations. Students are active participants in the diagnostic and therapeutic management of laboratory animal patients, and perform physical diagnosis and actively manage or participate in diagnostic problem-oriented decision making. They observe and review routine programs of laboratory animal health care, surgery, biosecurity, and sanitation with board-certified laboratory animal veterinarians. Students analyze the role of veterinarians, and regulatory and ethical issues relating to the use of animals in biomedical research.

CVM 7050 Zoo Animal & Wildlife (2 credits)

Supervised clinical instruction in regional zoos in the diagnosis, treatment, and control of zoological animal diseases. Students are active participants in the diagnostic and therapeutic management of patients, and, as such, actively manage or participate in diagnostic and therapeutic problem-oriented decision making. Issues relating to the conservation of wildlife, including non-consumptive uses and environmental toxicology, are also discussed. All students are given a practical problem for research and required to make an oral presentation to peers and faculty.

CVM 7055 Veterinary Public Health and Human-Animal Interactions (2 credits)

In this course, students will visit public health programs in Los Angeles and San Bernardino Counties to become familiar with the activities and responsibilities of local public health veterinarians, environmental health specialists, and ecologists. Students will also meet regularly to address topics in public health, including disease surveillance, diagnosis, control and prevention of zoonotic and vector-borne diseases; risk assessment; and outbreak investigation. Other topics to be discussed include animal-associated occupational health risks, dog bite injuries, and the role of veterinarians in disaster and bioterrorism preparedness. Activities will also include group discussions and written assignments. Each student will select a presentation topic in veterinary public health. They will integrate their experience in the public health setting with available surveillance data and review of the literature to prepare an overview of their chosen topic. This overview will address any controversies and/or proposed solutions as they relate to their chosen topic. Findings will be delivered in an oral presentation to a community group at the end of the course.

CVM 7060 Food & Feed Safety (2 credits)

The primary goal of this course is to provide students with the basic knowledge regarding the role of veterinary medicine in the production of safe foods (including 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. Chemical and microbial aspects of safety and principles of cleaning, disinfection, sterilization and radiation will be included. The role of Hazard Analysis Critical Control Points (HACCP) will be reviewed. Visits to selected slaughter plants (livestock and poultry), dairy plants, rendering and commercial animal feed plants will be made and/or supplemented by audiovisuals. Relevant federal and state legislation will be discussed. All students will participate in solving problems involving feed/food/water-borne disease investigations and also individual animal slaughter dispositions in relation to specific pathological, infectious, toxicological, and chemical residue problems.

CVM 7065 USDA Accreditation, Foreign Animal Diseases & International Veterinary Medicine (2 credits)

Students meet with representatives from 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 accredited. These include reportable diseases, animal movements, import/export, quarantine, and program diseases such as tuberculosis and brucellosis. Practical demonstrations of tuberculin and other testing procedures are carried out. USDA and other veterinarians with expertise in the clinical and laboratory diagnosis of foreign animal diseases (FAD) provide lectures and demonstrations. A simulated outbreak exercise of a FAD in California is conducted. The role of USDA in international activities including UN organizations such as FAO and WHO, as well as OIE will be discussed. Finally, veterinarians and other health professionals with experience in livestock and health projects in developing countries describe opportunities for graduates in both short and long-term assignments.

CVM 7090 Third Year Student Presentation (1 credit)

Each student is required to make an oral presentation with a written report of a case, series of cases, or a herd/flock problem with which they have been involved during Phase I and/or Phase II of the curriculum. The approach to presentation follows the dictums of 'Evidence-Based Medicine,' defined as "the conscientious, explicit and judicious use of current, best-evidence in making decisions with regard to either the care of individual animals or a group of animals." For example, the accuracy and precision of diagnostic tests, power of prognostic markers and the efficacy and safety of therapeutic or preventive regimens will be investigated. Students, in preparing their case presentations, carry out a thorough literature search and evaluate the strengths of relevant published materials as it may apply to their case(s). Presentations, both oral and written, are evaluated by faculty using formal criteria, and students are encouraged to be both critical and analytical in their reports.

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 for students with credit for CVM 7515.

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

This required 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 for students with credit for 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)

The 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 Diagnostics in Medicine and Pathology Rotation (4 credits, Graded H/PA/U)

The 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, electrocardiography, radiography, and echocardiography is expected. Under direct supervision of a veterinary cardiologist, students will ideally be given responsibility for the management of individual cases and

encouraged to participate in the decision making process and clinical reasoning. Repeatable to a maximum of 8 credits.

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

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

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

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

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

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

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

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

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

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

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

This rotation provides students with an opportunity to participate in the diagnosis, management and treatment of common diseases and conditions seen in contemporary equine medicine. Equine practice settings may include preventive and general medicine/surgery procedures including radiology, ultrasonography, endoscopy, lameness evaluation, dentistry, and reproductive services. Students may experience the practice of equine medicine and surgery in both ambulatory and in-house settings. Under the direct supervision of an

equine practitioner, students will be given guided responsibility for the management of individual cases and encouraged to participate in the decision making process and clinical reasoning. Repeatable to a maximum of 8 credits.

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

This rotation provides practical experience in the diagnosis, treatment and prevention of disease in exotic pets (avian, amphibians, reptiles, rodents, lagomorphs, other small mammals and pet fish). Under direct supervision of an exotics practitioner, students 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 International Veterinary Medicine Rotation (4 credits, Graded H/PA/U)

This rotation is intended to expose the students to animal health and public health issues outside of the USA. The students will become familiar with health issues of global concerns. They will be introduced to trans-boundary diseases that are prevalent in countries and the role of international health organizations in disease control and prevention at the local, national and global levels. Through this rotation students will be exposed to new cultures and socio-cultural habits and learn the different roles of animals in non-U.S. societies. Students will understand disease transmission in poor rural settings and the associated challenges to disease control, such as poverty, lack of education and socio-cultural beliefs. The student will learn to appreciate the various roles that veterinarians play in poor rural communities, beyond the practice of veterinary medicine. Students will work directly under the supervision of veterinarians and/or physicians in the field, in the hospital, in the

University, or in international/national health organizations. When possible, students will be involved in research projects and produce a report at the end of the rotation. 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 a 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 economical 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)

Supervised student-centered learning experience in a clinical, administrative or research setting. Repeatable to a maximum of 8 credits. Prior permission of the Dean's Office is required in order to repeat this course.

CVM 8999 Independent Research with Thesis (Optional) (4 credits)

Students are encouraged to conduct scholarly research and submit a thesis during their four-year curriculum. The thesis should explore an original question relating to the basic sciences, a clinical problem, or a public or environmental health issue involving veterinary medicine. Students are supervised by faculty members from the CVM or jointly by faculty from other institutions. Students who successfully complete a thesis will be acknowledged at graduation, and their achievements recorded in their permanent academic records.

HONORS AND AWARDS

The following awards are presented annually at the University's Honors Day ceremony in April:

- The President's Society Award
- Allan H. Hart/IDEXX Scholarship
- Dean's Award
- Initiation into the Society of Phi Zeta, the Honorary Society of Veterinary Medicine, 3rd year and 4th year students
- The Hill's Buddy Award from (Hill's Pet Nutrition), 4th year student
- The Norden-Pfizer Award for Distinguished Teaching (Faculty)
- The Pfizer Award for Research (Faculty)
- The Pfizer-Small Animal Clinical Proficiency Award
- The Stella and R. Ashley Robinson Prize
- Simmons & Associates Business Aptitude Award
- Winston Award

ACADEMIC CALENDAR

Fall, 2009

Monday, Aug. 3, 2009
Orientation Week Begins (required)
Fall Semester Tuition Due (1st & 2nd years)

Saturday, Aug. 8, 2009
Convocation

Monday, Aug. 10, 2009
Classes begin

Monday, Sept. 7, 2009
Labor Day (no classes)

Monday, Oct. 12, 2009
Columbus Day (no classes)

Wednesday, Nov. 25, 2009
Thanksgiving Recess (noon)

Monday, Nov. 30, 2009
Classes resume

Fri., Dec. 18, 2009
Last day of Fall Semester classes

Spring, 2010

Monday, Jan. 4, 2010
Classes begin

Monday, Jan. 18, 2010
Martin Luther King Day (no classes)

Monday, Feb. 15, 2010
President's Day (no classes)

Monday, Mar. 22 – Friday, Mar. 26, 2010
Spring Break

Friday, May 14, 2010
Last day of Spring semester classes

Friday, May 14, 2010
Commencement

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, the 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.

Adopted by the American Veterinary Medical Association in November, 1999