SAN DIEGO MESA COLLEGE

ANIMAL HEALTH TECHNOLOGY PROGRAM

Information and Brochure

Job Title
Registered Veterinary Technician

Job Description
The Registered Veterinary Technician is an integral member of the veterinary health care team, enjoying a wide range of job responsibilities. The RVT's responsibilities include: animal handling, restraint and examination, vaccinations, injections, and dispensing of medications, maintenance of clinic and owner records, client education, exposing and developing of radiographs, dental prophylaxis and extractions, application of casts and splints, first aid and emergency procedures, IV catheterization, fluid administration, obtaining blood samples through venipuncture, clinical laboratory testing, identification of internal and external parasites, surgical preparation, assisting, suturing, administration and monitoring anesthetics, preoperative and postoperative care.

Characteristics Required for Success in the Animal Health Technology Program
The successful AHT student:

- is a team player, flexible, mature, and emotionally stable
- is able to withstand strenuous physical activity
- is a lifelong learner
- is highly motivated and dedicated to his/her work
- is able to communicate tactfully with a diverse population of individuals
- is able to carefully follow verbal and written instruction
- possesses some animal experience, previous veterinary experience helpful, but not mandatory
- is able to accept constructive criticism and perform self evaluation activities, which result in personal and professional growth
- possesses reliable transportation

Employment Outlook
Exciting job opportunities are continuing to be numerous due to the diverse growth in the veterinary field, as well as, a shortage of professionally trained technicians. Most Registered Veterinary Technicians are employed in private veterinary hospitals, but graduates may also work in diagnostic laboratories, biomedical research institutions, humane societies, various federal and state agencies, armed forces, zoological parks, wildlife rehabilitation facilities, aquariums, teaching facilities, specialty veterinary practices, large farms or ranches, and pharmaceutical research or sales.

Probable Salary Range for the San Diego Area
Starting Range: $15,000 to $18,000 per year
Experienced: $18,000 to $40,000 per year

Program Director
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Program Prerequisites
Completion of Biology 107 and Chemistry 100/100L, or equivalent, with a grade of "C" or better within the last five (5) years. **Beginning September 1, 2014 an application packet may be submitted and given a priority number with only one of the prerequisites completed, as long as, the other is "in progress". A certificate of "Course Work In Progress" must be included in the application packet.** The "official transcript" showing the second pre-requisite has been passed with a grade of "C" or better must be sent to the Special Admissions Clerk before February 1st of the year of expected attendance.

Admission Requirements

The AHT curriculum is a **full-time**, **two year / six semester program** with the courses arranged in a sequential manner; therefore, each new class (approximately 30 students) begins in the summer session of the academic year. ***Prior to beginning AHT course work, the completion of Biology 107 and Chemistry 100/100L (or equivalent) with a grade of "C" or better is required.*** Due to the demanding nature of the program, it is highly beneficial to complete as many as possible of the general education classes required for the A.S. degree **prior** to admission in the program. Candidates are also required to demonstrate Competency in Reading and Written Expression, as well as, Competency in Mathematics (see the Academic Requirements Section of the current Mesa College Catalog, also available on line.) prior to submission of an application packet.

Degree and License Requirements

After successfully completing the program, the will be awarded an Associate of Science degree in Animal Health Technology from the San Diego Community College District. This degree enables the AHT Program graduate to sit for National Veterinary Technician Exam (NVTE) and the California State Registered Veterinary Technician supplemental examination. Upon successful outcomes of both exams, graduates become a Registered Veterinary Technician with the Department of Consumer Affairs for the State of California. The passing rate for Mesa College graduates has historically been very high, in the 85-95 percentile.

Every candidate applying to take the California board exam must certify that she/he has never been convicted or pled nolo contendere to any violation of any law of any state, the United States, or a foreign country. In addition each candidate must disclose all misdemeanors and felonies: including, but not limited to: civil, welfare, health and safety, vehicle, or penal code conviction(s) and any conviction which has been dismissed. Candidates are required to list any conviction that has been set aside and dismissed under Section 1203.4 of the Penal Code or under any other provision of law.

Accreditation

The Animal Health Technology Program is approved by the California Board of Examiners in Veterinary Medicine, a division of the California Department of Consumer Affairs. San Diego Mesa College is accredited by the Western Association of Schools and Colleges and approved by the California State Department of Education.

Program Information Sessions

Information sessions are scheduled to brief the prospective student about the program, expectations, and selection procedure. Attendance at one of these sessions is **strongly recommended so** please make every effort to attend one of the sessions. Typically, they are on Saturday mornings from 9-11 AM. They are held at the Animal Health Technology Facility (P-300) in Room P-308. The facility is at the corner of Genesee Avenue and Marlesta Drive. Attendance at an Information Session is considered as a form of career exploration. The information dates can be found on the Mesa College Allied Health web page – http://www.sdmesa.edu/allied-health/index.cfm..

Special Admissions Clerk for AHT

Cathy Sullivan is the Special Admissions Clerk for all of the Allied Health Programs, including Animal Health Technology. She can be reached at cmsulliv@sdccd.edu.

Fees and Expenses

Tuition costs are based on class credit hours and residency status. Certain exemptions may apply. Consult the current college catalog for fee structure. Due to the special nature of the AHT program, you should anticipate costs for medical books, professional attire, stethoscopes, coveralls, rubber boots, and miscellaneous supplies (in addition to registration fees). Expenses are typically higher the first semester, and decrease over the course of your training. These supplementary expenses average approximately $500-$600 per semester (double that the first semester). Each entering student must provide proof of current tetanus toxoid vaccination (within 10 years) and tuberculosis test results (test administered within 30 days prior to the first day of the semester).

ANIMAL HEALTH TECHNOLOGY — TWO YEAR PROGRAM

Course			Hours	Units
Summer – First Year				
ANHL	**155**	Introduction to Animal Health Tech	3.5 lect	3.5
ANHL	**115**	Veterinary Office Procedures	2 lect	2
Fall – First Year				
ANHL	**100A**	Animal Care & Management	4.5 lab	1.5
ANHL	**125**	Clinical Laboratory Techniques	3 lect	3
ANHL	**155L**	Introduction to Animal Health Tech(lab)	6 lab	2
ANHL	**145**	Veterinary Anatomy and Physiology	3 lect	3
ANHL	**145L**	Veterinary Anatomy and Physiology Lab	3 lab	1
Spring – First Year				
ANHL	**100B**	Animal Care & Management	4.5 lab	1.5
ANHL	**125L**	Clinical Techniques Laboratory	6 lab	2
ANHL	**140**	Veterinary Microbiology and Immunology	2 lect	2
ANHL	**205**	Diseases of Domestic Animals	3 lect	3
Summer – Second Year				
ANHL	**135**	Veterinary Pharmacology	2 lect	2
ANHL	**270**	Veterinary Work Experience	**	4
Fall – Second Year				
ANHL	**225**	Animal Nursing Techniques & Anesthesiology	3 lect	3
ANHL	**227**	Veterinary Surgical and Nursing Procedures Lab	3 lab	1
ANHL	**260**	Laboratory Animal Medicine	2 lect	2
Spring Semester – Second Year				
ANHL	**215**	Veterinary Radiography	3 lect	3
ANHL	**215L**	Veterinary Radiography Laboratory	3 lab	1
ANHL	**229**	Advanced Surgical Nursing Procedures Lab	3 lab	1
ANHL	**260L**	Laboratory Animal Medicine Lab	1.5 lab	0.5

** 60 hours for each unit

ANHL 100A: ANIMAL CARE AND MANAGEMENT
This course is not open to students with previous credit for ANHL 100. This introductory course provides Animal Health Technology students with practical experience in the basic husbandry of many animal species. Students learn and practice "essential" tasks as required by the American Veterinary Medical Association and the Registered Veterinary Technician Exam Committee Knowledge, Skills and Abilities Tasks List. These tasks include methods of housing or caging, nutrition and feeding, sanitation and hygiene in an animal setting, and handling and restraint of the various species. Students are actively involved in the daily care of the program's resident animals. Student teams are assigned to a rotation schedule so that every student works with every animal during the semester. Applicable veterinary medical and animal husbandry terminology is included.

ANHL 100B: ADVANCED ANIMAL CARE AND MANAGEMENT
This course is not open to students with previous credit for ANHL 100. This course provides Animal Health Technology students with significant responsibility for resident animal care and advanced techniques in the general husbandry of many animal species. Students learn and practice "essential" tasks as required by the American Veterinary Medical Association and the Registered Veterinary Technician Exam Committee Knowledge, Skills and Abilities Tasks List. These tasks include advanced methods of housing or caging, nutrition and feeding, sanitation and hygiene in an animal setting, and handling and restraint of the various species. Students are actively involved in the daily care of the program's resident animals. Students supervise teams assigned to a rotation schedule. Applicable veterinary medical and animal husbandry terminology is included.

ANHL 115: VETERINARY OFFICE PROCEDURES
This course is for students enrolled in the Animal Health Technology Program. This veterinary office procedures course is designed to introduce the Animal Health Technology student to the development and facilitation of client care, staff management, financial guidelines, patient management and record keeping in a veterinary setting. Topics include: client and staff communication, veterinary medical ethics, veterinary logs and legalities, computer usage, financial management, and purchasing and inventory management in relationship to a veterinary establishment. Resume writing and job interviewing skills are also covered. Appropriate veterinary terminology is included.

ANHL 125: VETERINARY CLINICAL PATHOLOGY
This course provides Animal Health Technology students with an introduction to the clinical examination of blood, urine, feces, dermal, and other commonly analyzed samples found in the veterinary field. Topics include: the safe and proper collection of diverse samples, the safe and proper handling of samples, the various methods of sample analysis, and the significance of normal and abnormal results. The identification, life cycle, and clinical importance of ectoparasites, endoparasites, and fungal parasites are discussed. Appropriate stains, reagents, and terminology are included.

ANHL 125L: VETERINARY CLINICAL PATHOLOGY LABORATORY
This clinical pathology laboratory course is designed to provide Animal Health Technology students with the opportunity to practice the principles and procedures of clinical pathology. Techniques for the safe and proper collection, handling, and storage of blood, urine, fecal, and skin samples in various species are introduced and practiced by the student. Students perform analytical tests appropriate for each sample type and evaluate the results. Safe operation and proper maintenance of laboratory equipment commonly used in the veterinary field is stressed. Appropriate veterinary medical terminology is presented.

ANHL 135: VETERINARY PHARMACOLOGY
This course is for Animal Health Technology students. The course provides the student with an introduction to the actions and uses of pharmacological agents: drug classifications, modes of action, indications and contradictions, routes of administration, and mechanisms of elimination. Dispensing and pharmacy management as well as the laws regulating controlled substances are covered. Students are expected to correctly solve medical math problems and calculate drug doses.

ANHL 140: VETERINARY MICROBIOLOGY AND IMMUNOLOGY
This course covers the fundamentals of veterinary microbiology and immunology. This includes the taxonomy, structure, physiology, reproduction, growth, and diversity of micro-organisms of importance in the veterinary field. Also covered are the basic techniques for culturing, staining, identifying, and controlling the various micro-organisms found in this field. Appropriate veterinary terminology is included. This course is for students enrolled in the Animal Health Technology program.

ANHL 145: VETERINARY ANATOMY AND PHYSIOLOGY
This lecture course is designed to introduce the Animal Health Technology student to the comparative normal anatomy and physiology of selected domestic animal species. The eleven anatomical systems are covered and material presented ranges from the microscopic cellular level to the level of the full organism. Relevant application of structure and function to the clinical medical situations is addressed. Appropriate veterinary medical terminology is included with each system.

ANHL 145L: VETERINARY ANATOMY AND PHYSIOLOGY LABORATORY
This veterinary anatomy and physiology laboratory course is designed to provide the Animal Health Technology student with the opportunity to investigate and study the principles of normal anatomy and physiology presented in the coresponding lecture course. Techniques for the safe and proper dissection are introduced and practiced by the student during the extensive animal dissection. All eleven anatomical systems are studied through actual dissection or models. Relevant application of structure and function to the clinical medical situations is addressed. Appropriate medical terminology is included with each system. Animal dissection is carried out by each student.

ANHL 155: INTRODUCTION TO ANIMAL HEALTH TECHNOLOGY
This is introductory lecture course is for the Animal Health Technology student. It defines the role of the Animal Health Technician in private veterinary practice, research institutions, regulatory agencies and zoos. Topics covered include basic animal care and management, feeding, species identifications, behavior, handling skills, animal restraint, sanitation, personal hygiene, medicating, zoonotic disease risk factors, animal nursing skills, instruments and equipment, and identification of domestic animal breeds. Appropriate veterinary terminology is included.

ANHL 155L: INTRODUCTION TO ANIMAL HEALTH TECH LABORATORY
This introductory course is for students in the Animal Health Technology Program. It utilizes demonstrations, laboratory exercises, group activities, and lectures to illustrate the fundamentals of Animal Health Technology. Course work fulfills the student's need to learn and practice "essential" and "recommended" tasks from the American Veterinary Medical Association's Knowledge, Skills, and Abilities Task List. These tasks include animal restraint and handling skills, medicating techniques, breed and species identification, basic animal nursing skills, surgical equipment and veterinary medical equipment identification, basic nutrition, terminology, sanitation/sterilization, and personal hygiene, medicating, zoonotic disease risk factors, animal nursing skills, instruments and equipment, and identification of domestic animal breeds. Appropriate veterinary terminology is included.

ANHL 205: DISEASES OF DOMESTIC ANIMALS
This course provides Animal Health Technology students with an introduction to infectious and non-infectious diseases and conditions of domestic animals. Material covered includes the etiology, pathogenesis, pathophysiology, and clinical signs of each disease. This course also details disease or condition-specific nursing care, treatments or diagnostic test methods.

ANHL 215: VETERINARY RADIOGRAPHY
This course introduces the Animal Health Technician student to the use of radiography and the Registered Veterinary Technician's role in radiography in the veterinary medical fields. Topics include radiation, x-ray beam production, intensifying screens, cassettes, grid usage, latent and visible image formation, film processing, and alternative imaging methods. Protocols for commonly used radiographic studies and introductory radiographic film interpretation are included. Special emphasis is placed on radiation safety for the patient and handler and radiographic terminology. Also included is the proper use and maintenance of all veterinary radiographic and processing equipment and machines.

ANHL 215L: VETERINARY RADIOGRAPHY LABORATORY
This course is designed to provide the Animal Health Technology students with the opportunity to practice the concepts of radiology. The students utilize established veterinary positioning and technical protocols. They expose and process radiographs to develop a technique chart for commonly used veterinary radiographic studies, including contrast studies. The students also practice radiographic film evaluation techniques, radiation log production, and radiographic equipment maintenance. Darkroom procedures and practices that prevent artifacts are employed including equipment maintenance. An introduction to performing an ultrasound abdominal exam is provided including handling and maintenance of the machinery. Procedures and protocols for radiation safety of patient, handler, and equipment are stressed.

ANHL 225: ANIMAL NURSING TECHNIQUES AND ANESTHESIOLOGY
This lecture course is designed to introduce the Animal Health Technology student to veterinary anesthesia, surgical and medical nursing techniques, dental hygiene, emergency first aid, and correct legal documentation. Emphasis is placed on the appropriate use of veterinary medical terminology to explain techniques of intravenous and inhalation anesthesia, surgical asepsis, instrument sterilization, patient monitoring, and pre operative, operative, post operative and after care nursing. Additional topics include fluid therapy, bandaging/splints/casts, and commonly performed medical procedures. Appropriate pharmacological agents are discussed throughout the course with emphasis on classification, dosage, method of action, method of administration, dispensing procedures and pharmacy management.

ANHL 227: VETERINARY SURGICAL AND NURSING PROCEDURES LABORATORY
This surgical nursing and anesthesia laboratory course provides Animal Health Technology students with the opportunity to practice the principles and procedures of surgical nursing and anesthesia. Topics include surgical asepsis, instrument sterilization, patient monitoring, surgical and medical nursing, dental prophylaxis, emergency first aid, bandages, splints, casts, catheters, suturing patterns, collection and analysis of clinical pathology samples, blood transfusion therapy and cardio-pulmonary resuscitation. Students calculate anesthetic doses, fluid drip rates, and post-operative medication doses and practice safe operation and proper maintenance of anesthetic machines, anesthetic-surgical monitoring equipment, crash carts, and laboratory equipment commonly used in the veterinary field.

ANHL 229: ADVANCE SURGICAL NURSING PROCEDURES LABORATORY
This lab course is designed to introduce the Animal Health Technology student to practical application of veterinary anesthesia, surgical and medical nursing techniques, dental hygiene, emergency first aid, and correct legal documentation. Techniques of intravenous and inhalation anesthesia, surgical asepsis, pre-operative, operative, post-operative, after care nursing and patient monitoring are performed by assisting the veterinarian. Instrument sterilization, fluid therapy, bandaging/splints/casts, and commonly performed medical treatments and procedures are practiced by each student. Appropriate pharmacological agents are discussed, and utilized including classification, dosage, method of action, method of administration, calculation, dispensing procedures and pharmacy management. Appropriate veterinary medical terminology is applied.

ANHL 260: LABORATORY ANIMAL MEDICINE
This lecture course is designed for the Animal Health Technology student. The course covers the use of animals in biomedical research with an emphasis on common laboratory species, animal welfare legislation and the philosophy of laboratory animal management. The course includes handling, restraint, husbandry, care and observation of laboratory species. Methods and procedures involved in laboratory animal breeding, injections, anesthesia, sample collection, medicating, nutrition, euthanasia and necropsy are also covered. Appropriate terminology is included.

ANHL 260L: LABORATORY ANIMAL MEDICINE LABORATORY
This course is designed to provide the Animal Health Technology student with the opportunity to practice the procedures and techniques of safe and proper animal restraint, anesthesia, injection techniques, and sample collection. Students also perform tattooing, ear notching and other procedures commonly utilized in the research setting. Students are required to perform a necropsy following established guidelines. Appropriate veterinary and research terminology is included.

ANHL 270 VETERINARY WORK EXPERICENCE
This course is for Animal Health Technology (AHT) students to acquire on-the-job training within a veterinary facility. All AHT students must complete a minimum of 240 hours of on-the-job training in a San Diego Community College district approved veterinary facility in order to graduate. The combined maximum credit for all work experience course work from all disciplines may not exceed 16 units.