

HOLYOKE COMMUNITY COLLEGE  
VETERINARY TECHNOLOGY PROGRAM

# STUDENT HANDBOOK

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## ***HOLYOKE COMMUNITY COLLEGE VETERINARY TECHNOLOGY PROGRAM MISSION STATEMENT***

The mission of the Holyoke Community College Veterinary Technology Program is to train caring individuals to enhance the veterinary medical team. We believe these individuals are the best qualified to not only provide care for animals, but as professionals, to provide the highest quality care animal patients can receive.

## ***HOLYOKE COMMUNITY COLLEGE MISSION STATEMENT***

Holyoke Community College's mission is to serve the Pioneer Valley by providing comprehensive, high-quality educational opportunities that are responsive to community needs and meet the intellectual, esthetic, and practical needs of a diverse student body. The College offers the full range of programs and services appropriate to a community college, as defined by the Massachusetts Board of Higher Education's generic system-wide community college mission statement. In addition, the College will continue to focus upon the following strengths that distinguish Holyoke Community College from other colleges.

Holyoke Community College is committed to career programs responsive to the economic and social needs of the region. A wide range of career-oriented programs, in areas such as Business, Health, and Technology, are designed to prepare students to enter and advance in their chosen field. Through active collaboration with industry, government, and community groups, the College constantly increases the strength, currency and variety of its programs. All areas of study provide a basis for transfer, since all Associate Degree programs include a common core of courses designed to expose students to diverse fields of knowledge.

At Holyoke Community College concern for the success of the individual student is paramount, an institutional quality that is widely recognized in the community and that permeates every program and service. Holyoke Community College's innovative approach to student success is reflected in the culture of the institution, as demonstrated by campus facilities, the wide variety of service delivery methods, and the assortment of services to address the specific needs of individual students and groups of students.

## VETERINARY TECHNICIAN CODE OF ETHICS\*

1. Veterinary technicians shall aid society and animals through providing excellent care and services for animals.
2. Veterinary technicians shall prevent and relieve suffering of animals with competence and compassion.
3. Veterinary technicians shall promote public health by assisting with the control of zoonotic diseases and informing the public about these diseases.
4. Veterinary technicians shall assume accountability for individual professional actions and judgments.
5. Veterinary technicians shall protect confidential information provided by clients unless required by law or to protect public health.
6. Veterinary technicians shall safeguard the public and the profession against individuals deficient in professional competence or ethics.
7. Veterinary technicians shall assist with efforts to ensure conditions of employment consistent with excellent care of animals.
8. Veterinary technicians shall remain competent in veterinary technology through a commitment to lifelong learning.
9. Veterinary technicians shall collaborate with members of the veterinary medical profession in efforts to ensure quality health care services for all animals.
10. Veterinary technicians shall uphold the laws/regulations that apply to the technician's responsibilities as a member of the health care team.
11. Veterinary technicians shall represent their credentials or identify themselves with specialty organizations only if the designation has been awarded or earned.

\* **Source is NAVTA**

### **Veterinary Technicians Oath**

I solemnly dedicate myself to aiding animals and society by providing excellent care and services for animals, by alleviating animal suffering, and promoting public health. I accept my obligations to practice my profession conscientiously and with sensitivity, adhering to the profession's Code of Ethics, and furthering my knowledge and competence through a commitment to lifelong learning

## **STUDENT OBJECTIVES OF THE VETERINARY TECHNOLOGY PROGRAM:**

### FIRST YEAR OBJECTIVES:

- ❖ Introduce students to the field of veterinary medical technology.
- ❖ Provide students with basic knowledge in areas of anatomy, physiology, radiology, clinical pathology, nutrition, and husbandry in preparation for the applied clinical courses.
- ❖ Provide a basic understanding of the functions of a Veterinary Technician as a team member of the veterinary medical team.
- ❖ Develop student's cognitive thinking skills.
- ❖ Prepare students for externships. Upon completion of the first year, students are expected to be familiar with the corresponding essential task list outlined by the American Veterinary Medical Association. The essential task list can be found in this handbook.

### SECOND YEAR OBJECTIVES:

- ❖ Provide students with more advanced veterinary medical skills in clinical pathology, surgery, animal nursing, surgical technology, pharmacology, and veterinary office management.
- ❖ Provide more exposure to a variety of species including large animals, laboratory and exotic animals.
- ❖ Prepare the students to think and act independently.
- ❖ Prepare students for entry into the ever-changing work environment.
- ❖ Upon completion of the second year, students are expected to have completed the essential task list as outlined by the American Veterinary Medical Association.
- ❖ Meet qualifications for taking the national board exam and qualifying as a Certified Veterinary Medical Technician in the State of Massachusetts.

## ULTIMATE OBJECTIVES FOR THE VETERINARY TECHNICIAN

- ❖ Upon completion of the Veterinary Medical Technology Program at HCC, the student will be able to meet the following objectives with the proficiency expected of a Veterinary Technician at the job entry level.
- ❖ Demonstrate knowledge in the care and handling of animals, in the basic principles of normal and abnormal life processes, and in routine laboratory and animal health care procedures.
- ❖ Assist in the practice of veterinary medicine under the direction and supervision of veterinarians.
- ❖ Exhibit knowledge of underlying principles of animal care, normal values, and basic disease processes of the different species.
- ❖ Apply appropriate techniques in performing animal restraint and care.
- ❖ Utilize, operate, and maintain medical instruments, and equipment.
- ❖ Exhibit knowledge of pharmacological substances and maintenance of a pharmacy. Fill, properly calculate, label, and dispense prescription medication.
- ❖ Prepare and assist in surgery, patient monitoring, and demonstrate knowledge of common surgical procedures.
- ❖ Calculate and administer anesthetics. Maintain anesthesia and monitor the recovery of patients.
- ❖ Collect laboratory samples and specimens through venipuncture, fecal collection, cystocentesis, and skin scraping. Use appropriate technique for collection, handling, and identification of specimens.
- ❖ Follow oral and written instructions.
- ❖ Report results and keep accurate records according to established procedures.
- ❖ Learn to deal appropriately with clients.
- ❖ Perform radiographic imaging techniques.
- ❖ Retain composure and efficiency under stress.
- ❖ Demonstrate initiative - when work is done, offer assistance for helping with other tasks.
- ❖ Abide by the ethics of all medical professionals in the matter of confidential information regarding patients and test results.
- ❖ Demonstrate professional attitudes in the area of: appearance and hygiene, attendance, punctuality, telephone technique, acceptance of constructive criticism, and dealing with people.

## **INTRODUCTION TO THE VETERINARY TECHNICIAN PROGRAM**

The Certified Veterinary Technician or Registered Veterinary Nurse is analogous to the Registered Nurse (RN) in the human nursing profession. There are 228 veterinary technician programs in North America, 4 of which are in Massachusetts. The Holyoke Community College Veterinary Technology Program was first developed in 1974 and was first accredited by the AVMA in 1989. Veterinary technicians or veterinary nurses, as defined by the American Veterinary Medical Association, are graduates of programs of veterinary technology. Like human nursing schools, programs of veterinary technology may include four or two years of undergraduate study and may result in either a Bachelor of Science degree or an Associate of Science degree. Holyoke Community College offers a two-year program that results in an Associate of Applied Science degree.

Over the past 3 years (July 1, 2013 - June 30, 2016) HCC had 34 first time candidates take the VTNE with a pass rate of 79%. Fifty-two graduates were eligible to take the exam in this time period.

Veterinary medicine has become radically more sophisticated in the past fifty years. There is an increased need for educated and skilled veterinary technicians to assist the practicing clinician, particularly in specialty and referral centers, and emergency and critical care facilities. Here veterinary technicians perform a wide range of nursing tasks from assisting in surgery to calculating preoperative anesthetic doses. In large specialty hospitals veterinary nurses may become specialists in anesthesiology, transfusion medicine, special imaging, and so on. These veterinary nurse specialists may teach veterinary medical students during their clinical rotations. On average, veterinary technicians earn between \$11.00 and \$15.00 per hour to start, although those who work in zoos and wildlife rehabilitation centers may earn less and those who work for large pharmaceutical companies and research laboratories may earn more.

Veterinary technicians and veterinary nurses work in a wide range of facilities. Most work in small animal practices, but they may also work in laboratory animal management (biotechnology), zoos, aquariums, wildlife rehabilitation centers and in equine and food animal practices. Below is a list of some of the specific functions of veterinary technicians in small animal practice:

1. Perform intubation and administer inhalant or intravenous anesthesia
2. Perform pre-operative blood work
3. Assist in surgery
4. Monitor and maintain animal on anesthesia
5. Prepare and dispense pharmaceuticals
6. Administer medications IV, IM, PO, etc.
7. Perform dental prophylaxis: scale teeth of animal using an ultra-sonic scaler while simultaneously monitoring the anesthetized patient
8. Perform patient assessments.
9. Perform catheterization by all routes
10. Complete in-house treatment of hospitalized patients
11. Collect and administer all blood products
12. Perform external cardio-pulmonary resuscitation (CPCR)
13. Perform laboratory procedures in hematology, clinical chemistry, urinalysis, parasitology, and microbiology.
14. Record patient information for medical records
15. Communicate with the pet owner regarding treatment regimens, billing, and preventive

medicine.

....and much, much more.

This program provides for the combined studies of college level general education courses and extensive course work in science and animal health theory and practice, and is designed to prepare graduates for careers as registered veterinary technicians in small animal medicine, equine and food animal medicine, and research veterinary medicine.

***ADMISSION TO THE VETERINARY TECHNOLOGY PROGRAM***  
**Guidelines for Application**

Admission to the Holyoke Community College Veterinary Technology Program is on a selective basis. Because of the academic demands of a program that needs to prepare graduates for a state licensing examination and to perform safe nursing care with thoughtful application of veterinary medical theory in clinical situations, applicants must meet certain academic standards for admission. The following is required to apply:

1. Applicants must have completed Biology 107 with a “C” or better and be eligible to take college math by completing or testing out of MTH 095.
2. New students as well as current students should indicate Veterinary Technology on the application form and submit this form to the Admissions Office.
3. Applicants must attend an Information Session to be considered for admission. Several information sessions will be scheduled each semester. Call the Admissions Office for dates.
5. The deadline is February 1 for the following fall semester.
6. One class is admitted per year beginning in the fall.
7. Applicants should be notified of acceptance into the Veterinary Technician Program by April 15.
8. Students interested in this Program should contact the Admissions Office. The phone number is: 413-552-2321. Email: [admissions@hcc.edu](mailto:admissions@hcc.edu)

## CURRICULUM

### VETERINARY TECHNICIAN PROGRAM (X036)

#### A.S. in Veterinary and Animal Science

Trains paraprofessional personnel who will assist veterinarians as technicians or serve in a variety of positions in animal research laboratories, animal shelters, or other facilities where animals are kept. All students must achieve a minimum grade of "C" in all VET prefix courses in order to remain in and graduate from this curriculum.

#### First Semester (First Year)

SUBJECT	SEMESTER HOURS
VET 133- A & P of Domestic Animals I (BIO 107)	4
VET 145- Veterinary Medical Terminology	1
VET 140- Principles of Animal Health Care	1
VET 263- Exotic Pets	2
VET 268- Reproduction in Domestic Animals	2
HST 121 History of Animal Advocacy in the United States 1885-Present or social science elective	3
ENG 101 Language and literature I	3
	<hr/>
	16

#### Second Semester (First Year)

SUBJECT	SEMESTER HOURS
ENG 102- Language and Literature II	3
VET 134- A & P of Domestic Animals II (VET 133)	4
VET 160- Veterinary Laboratory Procedures I (VET 133,145,140) (Co-requisite VET134)	4
VET 265–Veterinary Radiology (VET 133,145,140 co-req VET 134)	2
MTH 130– Math that Matters (MTH 095 "C-" or better or placement)*	3
VET 282 – Externship for Veterinary Technicians I (co-req VET 134,160)	2
	<hr/>
	18

#### Third Semester (Second Year)

SUBJECT	SEMESTER HOURS
VET 165- Veterinary Laboratory Procedures II (VET 134,160)	4
VET 247- Animal Nursing I (VET 134,140,145,160,MTH 130, coreq VET 165)	4
VET 264- Veterinary Pharmacology (MTH 130,VET 134)	4
VET 261- Animal Facilities Management (VET 134,160)	1
Social Science Elective	3
	<hr/>
	16

Fourth Semester (Second Year)

SUBJECT	SEMESTER HOURS
VET 248- Animal Nursing II (VET 247,264)	4
VET 258 – Clinical Competency (VET 134,165, 261, 247)	2
VET 153- Animal Diseases (VET 134)	4
VET 147- Veterinary Practice Management	3
VET 202 – Veterinary Seminar (VET 165,247)	1
VET 283 – Externship for Veterinary Technicians II (co-req VET 153, 248)	3
	<hr/>
	17
	<b><u>TOTAL CREDITS</u></b>
	67

\*The following applies to MTH 130:

If any student in the class achieves at least a 90% on EVERY module (chapter) exam and the final, a grade of A will be awarded. If at any point a student falls below the 90% mark on any one module (chapter) exam, then the final grade in the course will be based on the simple average of all module (chapter) assessments and the final. Regardless of the grade outcome (which is very likely to be less than an "A" if this occurs), that person's name will be provided to the Vet Tech program so that a decision can be made (by Vet Tech faculty) regarding enrollment in Veterinary Pharmacology. An "A" is required in MTH 130 by the Veterinary Technician Program in order to take VET 264, Veterinary Pharmacology.

**ESTIMATED EXPENSES to Complete the Veterinary Technician Program:**

Estimation includes tuition, books, facilities usage fees, and lab fees, and is dependent on residency.

In-State: \$ 15988

Out-of-State: \$30202

## Technical Standard Requirements for Veterinary Medical Technology

Holyoke Community College's Veterinary Technician Program (VTP) has established technical standards in an effort to provide a framework to balance several competing interests:

- (1) the rights of applicants and students;
- (2) the safety of students, their co-workers, and veterinary patients;
- (3) fulfilling the clinical training component of the curriculum;
- (4) successfully completing the American Veterinary Medical Association requirements for accreditation;
- (5) the conditions for licensure or certification of the VTP graduates.

These competing interests and the nature of veterinary educational activities may prevent some prospective students with disabilities and students with disabilities from qualifying for enrollment or continued enrollment and may limit access to the VTP at Holyoke Community College.

The Veterinary Technology Program at Holyoke Community College will make appropriate academic adjustments to facilitate enrollment and participation of qualified individuals with temporary or permanent disabilities.

The technical standards set forth in this document are the minimum standards that allow an individual to perform at the lowest acceptable level in the required activity having the highest, greatest, or most complex requirement for the designated sense, function or characteristic. Applicants and students must be able to satisfy, with or without the use of appropriate auxiliary aids (including prosthetic devices), the following technical standards which relate to physical abilities. If one aid or prosthetic device interferes with a second aid or prosthetic device needed to carry out a single act, then the individual may be restricted in meeting the technical standard.

### I. Body Senses:

#### A. Vision

1. An individual must be able to observe movement at a distance ranging from 30-45 centimeters to 15-20 meters at a discrimination level that permits detection of subtle differences in movement of the limbs in animals. Application: Detect and describe a change in color of hair coat caused by licking or trauma; detect abnormal head posture in a parakeet; monitoring respiratory rate during anesthesia; ability to read anesthesia monitoring equipment.
2. An individual must be able to discriminate shades of black and white patterns in which the band is not more than 0.5 mm in width. Application: Bacterial hemolysis on a blood agar plate; density patterns on a radiograph; ability to see ECG tracing.
3. Depth perception must allow detection of a 0.5 cm elevation which is no more than 1 cm in diameter on a slightly curved surface having a slightly irregular surface. Application: Detection of tissue swelling on the hip on a smooth-haired dog; determining

presence of reaction to skin testing for allergies.

## **B. Hearing**

1. An individual must be able to perceive the natural or amplified human voice without lip reading. Application: Oral communication in a surgery room with all occupants wearing surgical masks.
2. An individual must be able to perceive the origin of sound. Application: Movement of large animals in a pen or corral; monitoring multiple patients in an ICU.

## **C. Proprioception**

1. An individual must be able to determine the position of one hand extended from the body within +/-10 degrees when the arm is extended in any direction, the eyes are closed, and the individual is standing. Application: endotracheal intubation; intravenous injection.
2. An individual must be able to differentiate between four round semisolid objects having diameters of 0.5, 1, 1.5, and 2 cm and judge the shape and consistency of objects when the arm is extended and the eyes are closed. Application: assisting in surgery; lymph node palpation; palpation of trachea to determine proper endotracheal tube size.

## **II. Body function:**

### **A. Speech**

An individual must be able to speak English and be understood by others who cannot see the lips or facial expressions of the individual. Application: Oral communications in a surgery room where all occupants are wearing surgical masks; managing a patient with cardiac arrest.

### **B. Coordinated movement.**

1. An individual must be able, when communicating with other individuals by speech, either in person or by telephone, to make legible written notes in English within the margins and space provided on the appropriate forms. Application: Completing medical records and charts; anesthesia records.
2. An individual must be able to hold surgical instruments in one hand and perform fine movements with such instruments. Application: assist in holding of hemostats or other instruments while assisting in surgery; induce and monitor general anesthesia in an animal patient; place intravenous catheters.
3. An individual must be able to hold, manipulate, or tie materials ranging from a cloth patch to a very fine string. Application: Hold and manipulate a surgical sponge; tie a 00 silk suture; endotracheal intubation; intravenous injection; catheterize animals to obtain sample of urine; apply bandages.
4. An individual must be able to move his/her entire body a distance of no less than three meters within two seconds of a signal to do so. Application: Movement from danger while handling animals in confined spaces.

### **C. Physical Stamina.**

An individual must be able to lift objects and/or animals weighing 0-5 pounds constantly; 5-20 pounds frequently; 20-50 pounds occasionally. An individual must be able to lift all of the above to a height of one meter and carry the object or animal for a distance of two meters. Application: Placing a dog on a surgery table; lifting and carrying a bag weighing approximately 35 pounds of food, equipment and supplies from an ambulatory service vehicle to an animal patient in a nearby barn or lot; restrain a small animal patient for a medical procedure; restrain horses and cattle by halter, twitch, nose tongs and other techniques; administer oral medication to ruminants by balling gun or dose syringe.

### **D. Allergy and/or fear**

An individual must be able to have sustained contact with multiple species of animals and the environments in which they are housed and treated. During such contact, the individual must be able to carry out routine medical care on such animals.

1. Students who are allergic to cats, dogs, rabbits, birds, horses, cows, sheep or hay must have written permission from their physician regarding their physical ability to interact safely with the allergens that these present.
2. Students who have a phobia of certain species must acknowledge that they will be required to interact with all species of animals.

## **Off campus clinical experience**

Students in the Vet Tech Program are required to complete externships in the summer semesters between the first and second year and after the second year (VET 282 and VET 283). Transportation to these clinical sites is the responsibility of the student. Although the program does offer transportation to clinical sites for Nursing I, Radiology, Clinical Competency and other classes with field trips, we cannot guarantee all students transportation and therefore, some students may need to provide their own transportation. Malpractice insurance is provided by HCC.

## **STANDARDS FOR WRITTEN ASSIGNMENTS**

The use of APA format is expected for all written assignments.

All papers **must** be typed and printed on standard white unlined paper (8 ½ x 11 inches). Type on one side of the paper only and double space throughout; use a 12-point font.

Leave a margin of 1" on all sides.

Indent paragraphs about 1/2" or five spaces (one tab).

Do not number page one; start numbering pages from page 2. Staple your essay and avoid using plastic binders.

Include your name, course number, and assignment date at the top left-hand corner of the first page or use a title page. Center your title above the text.

Use the APA format when citing sources. Information sheets are available in the Writing Center.

## **ACADEMIC INTEGRITY**

### **Why is academic integrity important?**

The college is an academic community whose mission is to promote learning through the acquisition, preservation, and transmission of knowledge. In order to achieve this goal, the college must create and maintain an atmosphere that promotes honesty and the free exchange of ideas, which is the essence of academic integrity. In this setting, all members of the institution have an obligation to uphold high intellectual and ethical standards which, in turn, help maintain the highest standards of academic excellence.

### **What is your responsibility as a student?**

To establish this positive learning environment, students must recognize that their role in their education is active; as a student, you are responsible for your learning. Specifically, it is your responsibility to protect your own work from inappropriate use by others, and to protect the work of other people by providing proper credit for their ideas. In addition, your behavior must exemplify academic honesty at all times, and you should encourage such behavior in others.

### **What are the most common forms of academic dishonesty?**

Actions constituting violations of academic integrity include, but are not limited to, the following:

**Plagiarism:** the use of another's words, ideas, data, or product without appropriate acknowledgment, such as copying another's work, presenting someone else's opinions and theories as your own, or working jointly on a project and then submitting it as your own. Unintentional plagiarism may occur when students are unaware of the proper methods to use

in crediting sources. Whether intentional or not, plagiarism is a violation of the college's standards of academic integrity; you are responsible for learning and following the rules for proper use of sources.

**Cheating:** the use or attempted use of unauthorized materials, information, or study aids; or an act of deceit by which a student attempts to misrepresent academic skills or knowledge; unauthorized copying from or collaboration with another person.

**Fabrication:** intentional misrepresentation or invention of any information, such as falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.

**Collusion:** assisting another to commit an act of academic dishonesty, such as paying or bribing someone to acquire a test or assignment, taking a test or doing an assignment for someone else, or allowing someone to do these things for your own benefit.

The following websites provide examples of certain types of academic dishonesty, and offer suggestions on how to avoid engaging in academic dishonesty:

This page gives examples of successful and unsuccessful paraphrasing.

[http://papyr.com/hypertextbooks/engl\\_103/samppara.htm](http://papyr.com/hypertextbooks/engl_103/samppara.htm)

This page describes how to quote, paraphrase and acknowledge sources; provides a definition of plagiarism; and defines "common knowledge."

[http://papyr.com/hypertextbooks/engl\\_103/quoting.htm](http://papyr.com/hypertextbooks/engl_103/quoting.htm)

This page is designed to help writers develop strategies for knowing how to avoid accidental plagiarism, with specific suggestions for how and when to document and strategies for helping the writer keep track of material taken from other sources.

[http://owl.english.purdue.edu/handouts/research/r\\_plagiar.html](http://owl.english.purdue.edu/handouts/research/r_plagiar.html)

This page distinguishes between paraphrasing and summarizing and describes when and how to paraphrase and summarize.

<http://www.utoronto.ca/ucwriting/paraphrase.html>

This page discusses plagiarism and provides examples of plagiarism.

[http://www.rio.maricopa.edu/distance\\_learning/tutorials/study/plagiarism.shtml](http://www.rio.maricopa.edu/distance_learning/tutorials/study/plagiarism.shtml)

This page provides information about paraphrasing and plagiarism and the World Wide Web, offers strategies for avoiding plagiarism, and discusses "common knowledge."

<http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml>

### **How has the World Wide Web affected academic integrity?**

As the web becomes an increasingly popular source of information for students, new opportunities have been created for plagiarism and other forms of academic dishonesty. Principles of honesty and the expectation that others will be credited for their work apply to information accessed from the web, just as from other sources. Students need to be especially careful to follow guidelines for academic integrity when using materials whose source is the web.

## How does the college handle accusations that a student has violated standards of academic integrity?

The college's expectations regarding academic integrity is described in more detail in the HCC catalog and Student Handbook

## The Role of the American Veterinary Medical Association (AVMA)

The **AVMA** recognizes veterinary technicians as an integral and valuable component of veterinary medicine in the United States. The AVMA supports and urges the full utilization of veterinary technicians whenever possible in veterinary research, regulatory, and animal health care activities. The practice of veterinary medicine is enhanced through efficient utilization of each member of the veterinary health care team by delegation of tasks and responsibilities to the appropriate level of support staff.

The **AVMA** is the accrediting body for Veterinary Technician schools in North America.

### AVMA NOMENCLATURE

- ❖ “Veterinary Technology” is the science and art of providing professional support service to veterinarians in the practice of their profession.
- ❖ A “Veterinary Technician” is a person who has graduated from a two or three-year, AVMA-accredited program for veterinary technology.
- ❖ A “Veterinary Technologist” is a graduate of a four-year, AVMA-accredited program who holds a baccalaureate degree from such study.
- ❖ “Veterinary Assistant”: The adjectives “animal,” “veterinary,” “ward,” or “hospital” combined with the nouns “attendant,” “caretaker,” or “assistant” are the titles sometimes used for individuals where training, knowledge, and skills are less than those required for identification as a veterinary technician or veterinary technologist. The basic tasks performed by veterinary assistants may include, but are not limited to, feeding, watering, bathing, restraining, transporting, and exercising animals. They may also perform cleaning, clerical/office duties, and other similar entry-level activities.

HOLYOKE COMMUNITY COLLEGE VETERINARY TECHNOLOGY  
RELEASE, HOLD HARMLESS AND INDEMNIFICATION AGREEMENT

1. I understand that working with animals in the Veterinary Technician Program and in the veterinary profession, there are risks of exposure to zoonotic diseases including but not limited to, rabies, tetanus, leptospirosis, tuberculosis, toxoplasmosis, brucellosis, cat scratch disease, salmonellosis, Lyme disease, psittacosis, West Nile virus, intestinal parasites, and fungal disease such as ringworm.
2. I accept the responsibility of understanding precautions necessary to decrease my risk and exposure as I complete my education process in the Veterinary Technology Program.
3. I understand that I could be vaccinated for the diseases for which human vaccines exist, to include but not limited to, rabies and tetanus, with the understanding that I am responsible for the cost of these vaccines. **The Veterinary Technician Program does not require students to be vaccinated against rabies. However, it is strongly advisable to be vaccinated against rabies as it is an endemic disease within Massachusetts and you could be exposed to it while handling animals.**
4. I understand that in the Veterinary Technology profession there exists the possibility of traumatic injury including, but not limited to, bites, kicks, scratches, or possible electrical hazard exposure from equipment. I will not hold the Veterinary Technology Program responsible in the event of such an injury incurred in carrying out functions of my profession.

**Holyoke Community College  
Veterinary Technology Program**

**POLICY ON PREGNANCY:**

The potential for human injury always exists in the practice of veterinary medicine and in the training of veterinary technician students. It increases whenever a person is pregnant. The greatest hazards are accidents which can occur while working with animals and which result in injury to the student or to the unborn child. Exposure to toxic drugs, infectious agents, inhalation anesthetics, radiation, and other agents presents additional hazards.

The Holyoke Community College Veterinary Technician Program consciously strives to provide equal opportunity for all students who are academically qualified and to ensure that all students are accommodated. Students must remember that the Veterinary Technician Program has requirements that a pregnant student may not be able to meet. It is the responsibility of the pregnant student to initiate any request they feel would enhance the learning experience. Students must be aware that they carry the responsibility of arranging these academic accommodations.

Pregnant students **should**:

1. Inform the Coordinator of the Veterinary Technician Program of a pregnancy as early as possible in order that steps may be taken to provide reasonable accommodation if required.
2. Contact a physician immediately and receive recommendations for a plan to minimize exposure to the hazards possibly associated with the student's work and study.
3. Provide a signed statement from the physician which defines permitted limits of exposure to possible hazards during pregnancy.

It is strongly recommended that pregnant students discuss the following risks with their physician:

4. Exposure to anesthetic gases;
5. Exposure to teratogens including cytotoxic compounds, chemical agents, sterilizing agents, cleaning agents, preserving agents and fixing agents;
6. Exposure to hormones (e.g., prostaglandins and progesterones);
7. Exposure to ionizing radiation and other sources of radioactive materials;
8. Exposure to zoonotic diseases including, but not limited to, leptospirosis, salmonellosis, toxoplasmosis, brucellosis, cat scratch disease, fungal diseases, psittacosis, rabies, Lyme disease, tuberculosis, West Nile virus;
9. **Traumatic injury including, but not limited to, bites, kicks, scratches, possible electrical hazard exposure from equipment.**

Right and Responsibilities:

1. It is recognized that pregnant students have rights. The responsibility for decisions concerning their condition and behavior will be based on a physician's assessment of circumstances.

2. Students should expect due consideration from everyone associated with them during pregnancy.
3. Pregnant students are expected to complete each and every requirement of the veterinary technician curriculum.
4. If the risks in completing the requirements of the program are great, then the pregnant student must develop an alternate, equivalent plan or schedule in consultation with faculty that can be implemented and by which the risks are deemed assumable by the students and the attending physician or may take a pregnancy leave.
5. A faculty member may refuse to allow a pregnant student to be actively involved in any activity whenever the potential for accidents or exposure to hazards is considered too high. In this case, in conjunction with faculty, an alternate plan should be developed and submitted to the Coordinator.
6. If the student chooses to leave the program during her pregnancy, she will be eligible for reinstatement into the program upon completion of her pregnancy leave. The student must re-enroll in the courses from which she dropped due to her pregnancy leave.

If the student chooses to continue in the program they are assuming responsibility for certain medical risks. Some of these risks and areas of concern include, but are not limited to:

Anesthetics (gas inhalation and xylazine through skin absorption)  
Handling of certain drugs and chemicals, some of which include:  
Chloramphenicols  
Prostaglandins  
Hormones (estrogens)  
Insecticides  
Disinfectants (student should follow protocol for handling all disinfectants, insecticides, chemicals, and drugs)  
Heavy lifting  
Exposure to radiological procedures  
Handling of cat feces or litter boxes  
Working large animal head catch  
Minimal exposure/contact with large animals

## **GRADE POLICY FOR CONTINUATION IN AND READMITTANCE TO THE VETERINARY TECHNICIAN PROGRAM**

The Veterinary Technician Program requires that all students obtain a “C” or better in **every** VET designated course. A student receiving below a “C” in **any** VET course **will be dropped** from the Veterinary Technician option. That student may petition the Veterinary Technician Program for reinstatement.

Students should be aware that the dissection of animal cadavers is **required** to complete certain courses that are **required** to graduate from the Veterinary Technician Program. Also, all students **required** to work with large animal, small animal, and laboratory animal species in order to graduate from the Veterinary Technician Program.

### **REQUIREMENTS FOR CONTINUATION IN THE VETERINARY TECHNOLOGY PROGRAM:**

Continued enrollment in the Veterinary Technology curriculum is dependent upon satisfactory completion of the following:

1. All academic requirements specified by the college for continuation in the college.
2. A grade of “C” or above in each Veterinary Technology course. A student receiving below a “C” in **any** VET course **will be dropped** from the Veterinary Technician option. That student may petition the Veterinary Technician Program for reinstatement. (see below)
3. If a student attempts any VET course and does not complete the course with a C or better (receiving a D- to C-, W or AW), they may petition for reinstatement and be allowed to take the course again one time only for up to a total of 2 courses within the Veterinary Technician Program curriculum. If the student attempts any VET course more than once and does not complete the course with a C or better, they will be dropped from the program with no chance of re-admittance.
4. If a student receives an F in any VET course, they will be dropped from the program with **no** chance of re-admittance.
5. A student must complete all clinical objectives in each Veterinary Technology course to receive a passing grade for the course.
6. A student must abide by all the rules and regulations of Holyoke Community College, the Holyoke Community College Veterinary Technology Program, and the cooperating off site clinical facilities this program utilizes.
7. A student must exhibit professional, ethical, and correct legal behavior.

8. A student must exhibit behaviors that enhance the health and safety of patients. Failure in these criteria may result in expulsion from the program regardless of academic standing.
9. A student must be enrolled in Vet Tech course(s) each semester to remain in the Vet Tech Program.

If a student is not eligible to continue in the Veterinary Technology curriculum, the student may continue to enroll in other general education courses of the college if they meet the academic requirements of the college.

Students who have not met requirements of the Veterinary Medical Technology program will be dropped from the program.

A student may apply for reinstatement after withdrawing from Veterinary Medical Technology Program or having become ineligible to continue in the program. This request must be made in writing to the Chair of the Veterinary Technology Program. Readmission in the appropriate term is dependent on the availability of class space, compliance with the readmission policy, and approval by the readmissions committee. Readmission is not guaranteed.

HOLYOKE COMMUNITY COLLEGE  
RELEASE AND WAIVER OF LIABILITY FOR  
PARTICIPATION IN THE VETERINARY TECHNICIAN PROGRAM

I understand and agree that I have voluntarily chosen to participate as a student in the Veterinary Technician Program at Holyoke Community College (the "College"). In consideration of being allowed to participate in this program, I agree to maintain health and personal injury insurance as required by the College's student policies. Furthermore, I recognize and acknowledge that I am not entitled to sick pay, industrial accident leave, workers' compensation, health insurance, reimbursement for the costs of any injuries sustained while participating in the Veterinary Technician Program or to any other fringe benefits from the College as a result of my participation in the Veterinary Technician Program.

I understand that to graduate from the Veterinary Technician Program I must participate in courses that require the completion of essential tasks per mandate of the AVMA, which accredits the Veterinary Technician Program.

I also understand the dangers and hazards inherent in participating in the Veterinary Technician Program and further understand that neither the College nor its Board of Trustees, and their employees and agents, shall be liable to me for any injury or harm that I may suffer or cause while participating in the Veterinary Technician Program.

I recognize, understand and agree that I am fully responsible for the costs of any injury and agree to hold the College harmless from any claim based upon any injury or harm to me and/or to others incurred during my participation in the Veterinary Technician Program. I further agree to hold harmless the Commonwealth of Massachusetts, the Higher Education Coordinating Council, the College, its Board of Trustees, and their employees and agents from and against all claims, suits and actions arising from any act or omission by me while participating in the Veterinary Technician Program.

**Holyoke Community College**  
**Veterinary Technology Program**  
Notice of Controlled Substances Act Implications on Future Employment

According to Title 21 of the Code of Federal Regulations, Section 1301.76, a holder of a Drug Enforcement Administration (“DEA”) permit may not employ, as an agent or as an employee with access to controlled substances, any person who has been convicted of a felony relating to controlled substances, has had an application for registration with the DEA denied, had a DEA registration revoked or has surrendered a DEA registration for cause. DEA permit holders include various employers such as hospitals, health care institutions, nursing homes, physicians, veterinarians, dentists and pharmacies.

Holyoke Community College does not perform a criminal background check on applicants to its programs, and therefore, the College does not possess the means to screen students who may work for DEA permit holders in the future. However, it is becoming a common practice of health care employers, particularly those that are DEA permit holders, to perform criminal background checks on prospective employees. Since you are entering a career in which you may be employed by a DEA permit holder and have access to controlled substances, this information is being provided, so that if you have a felony conviction relating to controlled substances, have had a DEA registration application denied, have had a DEA registration revoked, or have surrendered a DEA registration for cause, you are aware of the negative consequences your past may have on your future employment potential.

This document does not require you to notify the College of any past history you may or may not have regarding controlled substances. However, if you do have a past felony conviction relating to controlled substances or one of the other aforementioned problems, you may want to consider a different career choice and change your college program accordingly.

HOLYOKE COMMUNITY COLLEGE  
VETERINARY TECHNICIAN PROGRAM  
**STATEMENT OF UNDERSTANDING OF HEALTH INSURANCE REQUIREMENT**

Students enrolled in the Veterinary Technician Program at Holyoke Community College are required to maintain an active health insurance policy at all times. This applies to both full-time and part-time students. Proof of insurance will be required at the beginning of each semester. It is the student’s responsibility to provide proof of insurance. Failure to do so may result in exclusion from classes.

## **RULES FOR HANDLING ANIMALS**

Working with animals under all different types of situations is an essential part of the vocation of the veterinary technician. Many animals, both large and small, may react negatively for a variety of reasons. They may be frightened, injured, in pain, startled, or simply temperamental, to name a few. While you must learn to work with these animals, it is our goal that you do so safely. Therefore; you should adhere to the following rules:

- 1) All animals used in the Veterinary Technician Program (dogs, cats, birds, rodents, horses, cattle, sheep, pigs, goats, etc.) should be approached with the same caution that you should use when approaching animals in a veterinary practice.
- 2) You should be aware that even apparently friendly animals may react negatively by biting, scratching, kicking, etc. This is particularly true if they are startled or if you touch sensitive area (paws, ears, mouth, etc.).
- 3) Always be sure that an animal is adequately restrained before performing any procedure. If you are in doubt as to what type of restraint is necessary, ask your instructor or the veterinary technician.
- 4) Never try to manually break up two animals that are fighting.
- 5) If you are afraid to work with an animal, discuss your feelings with your instructor.
- 6) You should be aware that, despite taking precautions, you may be injured by an animal. If you should become injured, you should report your injury immediately to either Mitch Pysznik (HCC nurse) in FR 101 (Ext. 2401) or Campus Security in E Building (Ext. 2400).
- 7) Any animal that shows aggressive tendencies will be removed from the program. Please report any signs of aggressive behavior to your instructor, the program director or the program veterinary technician.

## **VETERINARY TECHNOLOGY STUDENT ESSENTIAL AND RECOMMENDED SKILLS LIST**

The Essential and Recommended Skills List (Skills List) is a resource for veterinary technology programs to utilize for curriculum development and instruction as well as an accreditation monitoring tool for CVTEA. The Skills List represents the complex role of the veterinary technician and encourages instruction in motor, critical thinking and clinical application skills at the entry veterinary technician level. A veterinary technician student, having completed the curriculum, will have gained the prerequisite knowledge and perspective to enable him/her to carry out the following decision making abilities. The program must provide documentation of standard criteria for evaluating each student's completion of every essential skill. These criteria must be consistent with standards that reflect contemporary veterinary medicine. Although the Skills List will serve as a foundation on which to build each program's curriculum, Veterinary Technology instructors are encouraged to expand the list with additional skills representing current trends in veterinary medicine including each observable step necessary for completion of skill.

**Required tasks are denoted by an asterisk (\*).**

***Italicized text denotes hands-on (psychomotor) skills; all other text denotes didactic (knowledge-based) skills.***

**The term "demonstrate" along with a didactic (knowledge-based) skill means that the instructor is free to determine the best method(s) for the student to demonstrate mastery or understanding of that particular skill to the instructor.**

**The term "demonstrate" is not synonymous with "hands-on".**

**Skills indicated by the designation [GROUP] may be performed by a group of program students. The appropriate size of the group will be determined by the task being performed taking into account humane treatment of the subject animal. Each member of the group must play an active role in the completion of the task.**

**Students are expected to physically perform skills that are *italicized*. Skill assessment is expected to be performed on live animals.**

### **1. OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS, and COMMUNICATION**

#### **Management**

**Skill:** Participate in facility management utilizing traditional and electronic media and appropriate veterinary medical terminology and abbreviations.

#### **Tasks:**

- Schedule appointments, admit, discharge and triage according to client, patient and facility needs through phone and in-person contact\*
  - Recognize and respond to veterinary medical emergencies\*
- Create and maintain individual client records, vaccination certificates, and other appropriate forms\*:
  - develop computer skills\*
  - be able to utilize veterinary practice management software\*
  - be familiar with veterinary on-line services\* (e.g. laboratory submissions, client financing plans, continuing education, discussion groups)
- Perform basic filing of medical records, radiographs, lab reports, etc.\*
- Create and maintain all appropriate facility records and logs in compliance with regulatory guidelines (e.g., radiography, surgery, anesthesia, laboratory, controlled substance)\*
- Manage inventory control\*
- Recognize roles of appropriate regulatory agencies\*
- Maintain appropriate disposal protocols for hazardous materials\*
- Establish and maintain appropriate sanitation and infection control protocols for a veterinary facility, including patient and laboratory area\*
- Handle daily client-based financial transactions\*

**Decision-making abilities:** Taking into account the characteristics of the facility, patients and clients, the veterinary technician will effectively contribute to the professional and efficient operation of the facility in order to provide maximum benefits to clients, patients, and the facility.

#### **Communication**

**Skill:** Communicate in a professional manner in all formats - written, oral, non-verbal, and electronic.

#### **Tasks:**

- Demonstrate an understanding of interpersonal skills and team dynamics\*
- Utilize appropriate interpersonal and public relations skills\*
- Demonstrate telephone etiquette\* (e.g. through role playing, educational resources, etc.)
- Recognize the legality of the veterinary-client-patient relationship\*
- Develop and provide client education in a clear and accurate manner at a level the client understands (i.e., oral and written form, including educational handouts)\*
- Apply crisis intervention/grief management skills with clients\*

**Decision-making abilities:** Taking into account the patient, client, staff and circumstances, the veterinary technician will effectively and accurately acquire and convey information utilizing an appropriate communication mode.

#### **Laws and Ethics**

**Skill:** Follow and uphold applicable laws and the veterinary technology profession's ethical codes to provide high quality care to patients.

#### **Tasks:**

- Understand and observe legal boundaries of veterinary health care team members\*
- Interact professionally with clients and fellow staff members\*
- Demonstrate a commitment to high quality patient care\*
- Respect and protect the confidentiality of client and patient information\*

**Decision-making abilities:** Given knowledge of legal limitations and applicable ethical standards, the veterinary technician will carry out her/his duties within appropriate legal boundaries and maintain high ethical standards to provide high quality service to clients, patients, employers and the veterinary profession.

## **2. PHARMACY and PHARMACOLOGY**

### **Administration**

**Skill:** Safely and effectively administer prescribed drugs to patients.

#### **Tasks:**

- Read and follow veterinarian's pharmacy orders\*
- Recognize groups of drugs, their mechanisms, and clinically relevant side effects\*
- Recognize the safe and effective manner in which vaccines must be administered; recognize and explain common side effects\*
- Accurately perform appropriate calculations; use weights and measures correctly\*
- Safely and effectively administer drugs by common parenteral and enteral routes; explain appropriate routes and methods and when used\*
- Monitor therapeutic responses\*
- Demonstrate the ability to accurately record medical information\*
- Demonstrate understanding of controlled substance regulations\*
- Demonstrate compliance with all federal regulatory guidelines for drug purchase, storage, administration, withdrawal, dispensing, disposal, and inventory control (e.g., biologics and therapeutic agents, pesticides, and hazardous wastes)\*

**Decision-making abilities:** Given the characteristics of the patient, the instructions of the veterinarian and the medication to be used, the veterinary technician will calculate the correct amount of medication in the prescribed form and administer it by the prescribed route to maximize therapeutic benefits and minimize the potential for adverse effects. The veterinary technician shall also be able to differentiate between abnormal and normal responses to medication.

### **Dispensing**

**Skill:** Accurately dispense and explain prescribed drugs to clients.

#### **Tasks:**

- Given a drug order, properly prepare medications for dispensing, including performing accurate calculations\*
- Demonstrate compliance with regulations governing prescription drugs versus over-the-counter drugs\*
- Demonstrate understanding of regulations governing maintenance of controlled substances log book\*
- Demonstrate compliance with all federal regulatory guidelines for drug purchase, storage, administration, withdrawal, dispensing, disposal, and inventory control (e.g., biologics and therapeutic agents, pesticides, and hazardous wastes)\*
- Relay drug information to clients (e.g., handling, storage, administration, side-effects, drug interactions, safety, reasons for use of drug)\*

**Decision-making abilities:** Given the characteristics of the patient, the instructions of the veterinarian and the medication to be used, the veterinary technician will (1) accurately calculate and dispense the correct form and dose of medication and (2) communicate necessary client information in order to maximize safety, compliance with prescribed therapy and successful treatment of the patient. The veterinary technician should also be proficient at performing inventory control procedures.

## **3. NURSING**

### **Patient assessment**

**Skill:** Demonstrate and perform patient assessment techniques in a variety of animal species.

#### **Tasks:**

- Recognize common domestic animal species and breeds\*
- Describe and use common animal identification methods\*
- Demonstrate effective and appropriate humane restraint techniques for various animal species:
  - *properly restrain dogs and cats for procedures\**
  - *encage and remove small animals from cages\**
  - *apply dog muzzle safely\**

- *apply Elizabethan collar\**
- *use restraint pole and other restraint aids\*[GROUP]*
- *halter, tie, and lead horses\**
- *restrain pocket pets and exotics*
- *restrain cattle and horses\**
  - *apply twitch (horses)\*[GROUP]*
  - *apply bovine tail restraint\**
  - *apply bovine halter\**
- *restrain sheep and pigs*
- *load large animals*
- *safely operate cattle chute\*[GROUP]*
- **Obtain a thorough patient history\***
- **Demonstrate the ability to obtain objective patient data:**
  - *temperature (dog, cat, horse, cow)\**
  - *pulse (dog, cat, horse, cow)\**
  - *respiration (dog, cat, horse, cow)\**
  - *auscultate heart/lungs\* (dog, cat, horse, cow)*
  - *assess hydration status*
- **Properly collect diagnostic specimens for analysis (ex: urine, blood, feces, specimens for cytology)\***
  - **Perform venipuncture:**
    - *cephalic (dog, cat)\**
    - *jugular (dog, cat, horse, ruminant)\**
    - *saphenous (dog, cat)\**
    - *sublingual (dog)*
    - *ear (pig)*
    - *coccygeal (cow)*
    - *anterior vena cava (pig)*
  - **Collect urine sample:**
    - *catheterize male dog\*[GROUP]*
    - *catheterize female dog*
    - *catheterize female cat*
    - *catheterize male cat*
    - *collect voided urine sample (small animal)\**
    - *perform cystocentesis (small animal)\*[GROUP]*
    - *catheterize large animal*
- **Prepare diagnostic specimens for shipment\***

**Decision-making abilities:** Given the characteristics of the patient, the veterinary technician will safely and efficiently obtain subjective and objective patient data that will allow accurate evaluation of the patient's physical status with minimum stress and maximum safety.

#### **Patient care**

**Skill:** Understand and demonstrate husbandry, nutrition, therapeutic and dentistry techniques appropriate to various animal species.

#### **Tasks: Husbandry**

- **Grooming:**
  - **Demonstrate understanding of therapeutic bathing, basic grooming, and dipping of small animals\***
  - *trim nails (dog, cat)\**
  - *trim hooves (ruminant, horse)*
  - *apply equine tail and leg wraps\**
  - *express canine anal sacs\**
  - *clean and medicate ears (dog, cat)\**
  - *clean sheath (horse)*
- *Perform microchip scanning and implantation*
- *Environmental conditions: implement sanitation procedures for animal holding and housing areas\**
- **Demonstrate understanding of permanent identification\***
- **Demonstrate understanding of breeding/reproduction techniques\***
- **Demonstrate understanding of care of orphan animals**
- **Demonstrate understanding of nursing care of newborns\***

**Decision-making abilities:** Given the characteristics of the patient, the veterinary technician will implement appropriate husbandry techniques to enhance wellness and reduce risk of disease, injury and stress.

#### **Tasks: Nutrition**

- **Understand life stage energy and nutrient requirements of well animals (dog, cat, horse, cow)\***

- Identify common grains and forages
- Understand key nutritional factors in disease conditions\*
  - be familiar with therapeutic foods\*
- Understand current developments in nutritional supplements and additives including benefits and potential toxicities\*
- Understand and identify substances that when ingested result in toxicity:
  - identify common poisonous plants\*
  - be familiar with substances (organic and inorganic) that cause toxicity\*
- Develop and communicate hospital nutrition protocols\*

**Decision-making abilities:** Given the characteristics of the patient, the veterinary technician will understand appropriate and inappropriate dietary components for various life stages and therapeutic regimens (e.g., therapeutic foods) in order to promote optimal health, enhance recovery and manage chronic disease conditions. The veterinary technician will also explain nutritional recommendations to clients and reinforce owner compliance.

### Tasks: Therapeutics

- *Administer parenteral medications:*
  - *subcutaneous (dog, cat, ruminant)\**
  - *intramuscular (dog, cat, horse)\**
  - *intra dermal (ruminant, dog)*
  - *intramammary (mastitis therapy only) (ruminant)*
  - *intravenous (dog, cat, ruminant, equine)\**
- *Administer enteral medications:*
  - *balling gun (ruminant)\**
  - *dose syringe (ruminant, horse)\**
  - *gastric intubation (small animal)\*[GROUP]*
  - *hand pilling (dog, cat)\**
  - *gastric lavage (dog)*
  - *dose syringe (pig)*
  - *oral speculum and stomach tube (ruminant)*
  - *nasogastric intubation (small animal, horse)*
- *Administer topical medications (including ophthalmic)\**
- *Perform ocular diagnostic tests (including tonometry, fluorescein staining and Schirmer tear test)\**
- *Administer enemas\*[GROUP]*
- *Collect/evaluate skin scrapings\**
- *Fluid therapy:*
  - *administer subcutaneous fluids\**
  - *place intravenous catheters (cephalic\*, saphenous\*, jugular)*
  - *maintain and care for catheters\**
  - *determine/maintain fluid infusion rate\**
  - *monitor patient hydration status\**
  - *develop familiarity with fluid delivery systems\**
- *Apply and remove bandages and splints\**
- *Remove casts*
- *Develop understanding of wound management and abscess care\**
- *Perform physical therapy:*
  - *hydrotherapy*
  - *post-operative*
  - *orthopedic*
  - *neurological*
  - *explain care of recumbent patient\**
- *Perform critical care:*
  - *maintain chest, tracheostomy, esophagostomy tubes*
  - *collect and crossmatch blood for transfusion\*[GROUP]*
  - *blood typing*
  - *perform blood transfusions (autotransfusions may be considered)*
- *Apply established emergency protocols (simulation acceptable):*
  - *maintain emergency medical supplies/crash cart\**
  - *perform first aid and cardiopulmonary resuscitation\**
  - *use resuscitation bag\**
  - *apply emergency splints and bandages\**

**Decision-making abilities:** Given the directions of the veterinarian and the characteristics of the patient, the veterinary technician will carry out appropriate therapeutic techniques in order to achieve maximum health benefits for the patient.

### Tasks: Dentistry

- Perform routine dental prophylaxis (manual and machine)\*
- Understand client education regarding home care\*
- Float teeth
- Clip teeth

**Decision-making abilities:** Given the characteristics of the patient, the veterinary technician will recognize a patient's dental health status and perform techniques, as prescribed by a veterinarian, appropriate to the species and its condition in order to promote and maintain dental health.

## 4. ANESTHESIA

### Patient management

**Skill:** Safely and effectively manage and maintain patients in all phases of anesthesia.

### Tasks:

- Calculate dosages of appropriate anesthetic-related drugs\*
- Administer anesthetic-related drugs (injection, endotracheal tube, mask)\*
- Place endotracheal tubes in patients\*
- Utilize clinical signs and appropriate equipment to monitor patient status during anesthetic procedures\* (e.g., esophageal stethoscope, blood pressure monitor, capnometer, electrocardiogram, pulse oximeter)\*
- Evaluate patient and implement pain management protocols as directed\*
- Recognize and respond appropriately to patients in compromised states\*
- Perform appropriate resuscitation procedures as needed (e.g., calculate and administer appropriate anesthetic antagonists and emergency drugs as directed)\*
- Complete controlled substance log\* (does not need to be official controlled substance log; mock logs may be utilized)

**Decision-making abilities:** Given the characteristics of the anesthetized patient and the procedure being performed, the veterinary technician will work with the veterinarian to:

1. Assess the patient's risk status and determine appropriate anesthetic and perianesthetic protocols to provide effective pain management and maximum anesthetic safety and effectiveness.
2. Choose and utilize appropriate techniques and equipment to accurately and effectively monitor the patient's ongoing status before, during and after anesthesia to provide for adequate anesthesia, analgesia and a safe recovery.

### Equipment/facility management

**Skill:** Safely and effectively select, utilize and maintain anesthetic delivery and monitoring instruments and equipment.

### Tasks:

- Maintain and operate anesthetic delivery and monitoring equipment:
  - pulse oximeter\*
  - capnometer\*
  - esophageal stethoscope\*
  - electrocardiograph (e.g., recognize abnormal rhythms/audible sounds, properly apply leads)\*
  - anesthetic machines, including rebreathing systems, non-rebreathing systems and masks\*
  - endotracheal tubes\*
  - resuscitation bag\*
  - scavenging systems\*
  - oxygen sources\*
  - blood pressure monitoring devices\*
  - laryngoscopes\*
  - ventilator
  - defibrillator
  - temperature monitoring device\* (e.g. thermometer, etc.)

### Decision-making abilities:

1. Given the characteristics of the anesthetic instruments and equipment being used, the veterinary technician will recognize and respond appropriately to equipment malfunctions or inappropriate equipment setup to ensure proper function and provide maximum benefit to ensure safety of the patient and staff.
2. Given the requirements of the anesthetic protocol, the veterinary technician will select, evaluate and adjust equipment to ensure proper function and provide maximum benefit to ensure safety of the patient and staff.

## 5. SURGICAL NURSING

It is essential that technicians have knowledge of routine surgical procedures and related equipment, including surgeries in these categories:

- ovariectomy - dog and cat\*
- cesarean section - all common species\*
- orthopedic procedures\*

- orchiectomy - all common species\*
- tail docking\*
- onychectomy - dog and cat\*
- laparotomies - all common species\*
- dystocias in common species\*
- dehorning - cattle and goats\*
- prolapsed organs - common types, species, and incidence\*

Students must have participated in surgeries in these categories:

- ovari hysterectomy - dog\*, cat\*
- orchiectomy - dog\*, cat\* and other common species

### **Patient management**

**Skill:** Understand and integrate all aspects of patient management for common surgical procedures in a variety of animal species.

#### **Task:**

- Properly identify patients and surgical procedures\*

**Decision-making abilities:** Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will use medical records and patient identification methods to assure that the patient and scheduled procedures are correct.

#### **Task:**

- Patient assessment
  - organize medical records/consent forms\*
  - review pre-operative evaluation\*
  - evaluate current patient status\*
  - organize and implement anesthesia\*

**Decision-making abilities:** Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will obtain the patient's vital signs, note any specific physical abnormalities, ensure pre-surgical tests have been completed and report the patient assessment to the veterinarian.

#### **Task:**

- *Palpate the urinary bladder and express it if needed\**
- *Prepare surgical site using appropriate aseptic techniques\**

**Decision-making abilities:** Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will identify the appropriate area of hair to be removed and select appropriate methods to reduce microbial flora on the skin in the area of surgical site in order to decrease the chance of surgical wound contamination.

#### **Task:**

- *Position patient for common procedures\**

**Decision-making abilities:** Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will position the patient appropriately to provide maximum convenience for the surgeon and maximum safety and benefit for the patient.

#### **Task:**

- Provide surgical assistance:
  - *demonstrate proper operating room conduct and asepsis\**
  - *assist with care of exposed tissues and organs\**
  - *properly handle and pass instruments and supplies\**
  - operate and maintain suction and cautery machines\*
  - understand the principles of operation and maintenance of fiber optic equipment\*
  - *record and maintain operative/surgical records\**
  - *perform basic suturing techniques*

**Decision-making abilities:** Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will understand and utilize appropriate aseptic techniques to assist operative personnel in order to provide maximum safety and benefit to the patient.

#### **Task:**

- Coordinate pain management with the anesthesia/surgical team\*

**Decision-making abilities:** Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will assure that anesthetic and post-operative pain management protocols are appropriate to provide maximum safety and benefit to the patient.

#### **Task:**

- Provide post-operative care:
  - pain management\*
  - fluid therapy\*
  - adequate nutrition\*
  - wound management\*

- bandaging\*
- discharge instructions\*
- *suture removal*\*

**Decision-making abilities:** Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will understand and administer the appropriate methods of post-operative care to assure maximum safety and benefit to the patient.

**Procedural management**

**Skill:** Understand and provide the appropriate instruments, supplies and environment to maintain asepsis during surgical procedures.

**Tasks:**

- *Prepare surgical instruments and supplies\**
- *Prepare gowns, masks, gloves, and drapes\**
- *Operate and maintain autoclaves\**
- *Sterilize instruments and supplies using appropriate methods\**
- *Perform pre-surgical set-up\**
- Identify and know proper use for instruments\*
- Identify common suture materials, types, and sizes\*
- *Provide operating room sanitation and care\**
- Maintain proper operating room conduct and asepsis\*
- *Perform post-surgical clean-up (e.g., equipment, instruments, room, proper disposal of hazardous medical waste)\**

**Decision-making abilities:** Given the characteristics of the patient and the surgical procedure to be performed, the veterinary technician will properly select, wrap and sterilize appropriate instruments and supplies and prepare and maintain the surgical environment to ensure maximum safety and benefit to the patient.

**6. LABORATORY PROCEDURES**

**Specimen management**

**Skill:** Demonstrate knowledge of proper handling, packaging and storage of specimens for laboratory analysis to ensure safety of patients, clients, and staff.

**Tasks:**

- *Select and maintain laboratory equipment\**
- *Implement quality control measures\*[GROUP]*
- Understand how to ensure safety of patients, clients, and staff in the collection and handling of samples\*
- *Prepare, label, package, and store specimens for laboratory analysis\**

**Decision-making abilities:**

1. Given the characteristics of the patient and the requested analysis, the veterinary technician will properly prepare, handle and submit appropriate samples for diagnostic analysis in order to ensure maximum accuracy of results.
2. Given the characteristics of laboratory instruments and equipment, the veterinary technician will determine proper maintenance and quality control procedures necessary to ensure accurate results.

**Specimen analysis**

**Skill:** Properly perform analysis of laboratory specimens.

**Tasks:**

- *Perform urinalysis:*
  - *determine physical properties (e.g., color, clarity, specific gravity)\**
  - *test chemical properties\**
  - *examine and identify sediment\**
- *Perform CBC to include:*
  - *hemoglobin\**
  - *packed cell volume\**
  - *total protein\**
  - *white cell count\**
  - *red cell count\**
- *Perform microscopic exam of blood film:*
  - *prepare film and stain using a variety of techniques\**
  - *perform leukocyte differential – normal vs abnormal\**
  - *evaluate erythrocyte morphology – normal vs abnormal\**
  - *estimate platelet numbers\**
  - *calculate absolute values\**
  - *correct white blood cell counts for nucleated cells\**
- Calculate hematologic indices\*
- *Coagulation tests – perform one of the following\*:[GROUP]*
  - *buccal mucosal bleeding time*

- *activated clotting time (ACT)*
- *prothrombin time (PT)*
- *partial thromboplastin time (PTT)*
- *fibrinogen assay*
- *Perform blood chemistry tests (BUN, glucose, common enzymes)\**
- *Perform serologic test (ELISA, slide/card agglutinations)\**
- **Identify blood parasites:**
  - *Dirofilaria sp/Acanthocheilonema sp (formerly Dipetalonema sp)\**
  - *Hemotropic Mycoplasma sp (Hemoplasmas)\* (formerly Haemobartonella sp and Eperythrozoon sp)*
  - *Anaplasma sp*
  - *Babesia sp*
  - *Trypanosoma sp*
  - *Eperythrozoon sp*
  - *Ehrlichia sp*
- **Perform parasitologic procedures for external parasites and identify:**
  - *mites\**
  - *lice\**
  - *ticks\**
  - *fleas\**
  - *flies\**
- *Perform diagnostics procedures for parasites:*
  - *Antigen kit\*, direct\*, filter, Knotts\* [GROUP]*
  - *flotation solution preparation*
  - *fecal flotations\**
  - *fecal sedimentation\**
  - *direct smears\**
  - *centrifugation with flotation\**
  - *adhesive tape retrieval of pinworm ova*
  - *perform fecal egg count using McMaster method*
- **Identify common parasitic forms:**
  - *nematodes\**
  - *trematodes\**
  - *cestodes\**
  - *protozoa\**
- **Perform coprologic tests**
- *Perform microbiologic procedures/evaluations:*
  - *collect representative samples\**
  - *culture bacteria and perform sensitivity tests\**
  - *identify common animal pathogens using commercially available media and reagents\*[GROUP]*
  - *collect milk samples and conduct mastitis testing (e.g., CMT, bacterial culture)\*[GROUP]*
  - *perform common biochemical tests\*[GROUP]*
  - *perform staining procedures\**
  - *culture and identify common dermatophytes\**
- *Perform cytologic evaluation*
  - *assist in collecting, preparing and evaluating transudate, exudate and cytologic specimens (joint, cerebrospinal, airway, body cavity)*
  - *perform fine needle tissue aspirates and impression smear preparation (differentiate benign vs. malignant)*
  - *prepare and stain bone marrow specimens*
  - *collect, prepare, and evaluate ear cytology\**
  - *collect, prepare, and evaluate canine vaginal smears\*[GROUP]*
  - *evaluate semen*
  - *understand timing and types of pregnancy testing*
  - *assist with artificial insemination*
- **Perform necropsy procedures:**
  - *perform a postmortem examination or dissection on non-preserved animal\*[GROUP]*
  - *collect samples, store and ship according to laboratory protocols\*[GROUP]*
  - *explain how to handle rabies suspects and samples safely\**
  - *handle disposal of dead animals*
  - *perform humane euthanasia procedures*

#### **Decision-making abilities:**

1. Given the characteristics of the patient, the specimen submitted and the results of the analysis, the veterinary

- technician will be able to recognize accurate vs. erroneous results in order to provide maximum diagnostic benefit.
- Given the laboratory specimen collected and characteristics of the patient, the veterinary technician will determine appropriate methodology and carry out analytical procedures necessary to provide accurate and precise diagnostic information.
  - Having determined the accuracy of analytical results, the veterinary technician will work with the veterinarian to determine if a need exists for additional laboratory tests that will provide useful diagnostic information.

## 7. IMAGING

**Skill:** Safely and effectively produce diagnostic radiographic and non-radiographic images.

**Tasks:**

- *Implement and observe recommended radiation safety measures\**
- Implement radiographic quality control measures\*
- Develop and properly utilize radiographic technique charts\*[GROUP]
- *Position dogs\*, cats\*, horses\*, and birds to create diagnostic radiographic images*
- Demonstrate an understanding of the modifications of diagnostic imaging techniques as they apply to mice, rats, guinea pigs, lizards, and amphibians\*
- *Utilize radiographic equipment to properly radiograph live animals (fixed and portable)\**
- *Create diagnostic dental radiographic images\**
- *Appropriately label, file, and store images\**
- *Complete radiographic logs, reports, files and records\**
- *Perform radiographic contrast studies — perform one of the following\*:[GROUP]*
  - *GI Series*
  - *Pneumocystogram*
  - *Intravenous pyelogram*
  - *Other*
- *Perform on a sedated canine radiographic techniques utilized in screening for canine hip dysplasia\*[GROUP]*
- Demonstrate proper maintenance of radiographic equipment, including recognition of faulty equipment operation\*
- *Use and care of ultrasonography equipment*
- *Use and care of endoscopic equipment*

**Decision-making abilities:**

- Given the characteristic of the patient and the radiographic study that has been requested, the veterinary technician will properly (1) prepare radiographic and darkroom equipment, (2) measure and position animals using topographic landmarks, (3) choose an appropriate radiographic technique to minimize the need for repeat exposures (4) produce the latent image, (5) process the exposed film, (6) analyze the final radiograph for quality in order to provide maximum diagnostic benefit.
- Given a radiograph, the veterinary technician will be able to determine if the image is of diagnostic quality. If the image is not diagnostic, the veterinary technician will be able to offer options to correct deficiencies in order to provide maximum diagnostic benefit and minimize personnel radiation exposure from unnecessary repeat exposures.
- Given knowledge of the health risks associated with radiographic procedures and effective safety procedures, the veterinary technician will exercise professional judgment to minimize risks to personnel and patients during radiographic procedures to ensure safety.
- Given the characteristics of the patient and the non-radiographic imaging study that has been requested, the veterinary technician will properly (1) prepare the imaging site and equipment and (2) position patients appropriately for the study being conducted.

## 8. LABORATORY ANIMAL PROCEDURES

**Skill:** Safely and effectively handle common laboratory animals used in animal research.

**Tasks:** Mice, rats, and rabbits

- *Recognize and restrain (mouse, rat, rabbit)\**
- *Determine sex and understand reproduction (mouse, rat, rabbit)\**
- Perform and/or supervise basic care procedures:
  - *handling (mouse, rat, rabbit)\**
  - *nutritional needs/diet\**
  - *provide food, water, and enrichment in a species-appropriate manner (mouse, rat, rabbit)\**
  - *trim nails*
  - *identification\**
- *Perform methods of injection:*
  - *subcutaneous (mouse, rat, rabbit)\**
  - *intramuscular (rabbit)*
  - *intra dermal (rabbit)*
  - *intraperitoneal (mouse\*) [GROUP]*

- *intravenous*
- *Collect blood samples*
  - *Retro-orbital (mice, rats) [GROUP]*
  - *Intravenous (rat [GROUP], rabbit)\**
- *Perform oral dosing (mouse, rat)\* [GROUP]*
- Have working knowledge of anesthetic and recovery procedures\*
- Identify and describe clinical signs of common diseases\*
- *Perform necropsy and collect specimens*
- *Clean and medicate ears (rabbit)*
- *Anesthetize mouse, rat, and rabbit*

**Tasks: Non-human primates**

- Understand restraint of non-human primates
- Demonstrate knowledge of zoonotic diseases and modes of transmission

**Decision-making abilities:** The veterinary technician will be familiar with the basic principles of animal research and understand the utilization of laboratory animals in animal research. The veterinary technician will also have knowledge of federal, state, and local animal welfare regulations.

## 9. AVIAN, EXOTIC & SMALL MAMMALS PROCEDURES

**Skill:** Understand the approach to providing safe and effective care for birds, reptiles, amphibians, guinea pigs, hamsters, gerbils, and ferrets.

**Tasks:**

- *Recognize, understand, and perform restraint techniques of birds\*, reptiles, amphibians, and ferrets*
- Understand unique husbandry issues for each species (birds, reptiles, amphibians, guinea pigs, hamsters, gerbils, and ferrets) and provide client education\*:
  - nutritional needs/diet
  - watering
  - caging (temperature, humidity, light)
  - aquarium care
  - understand reproduction
  - basic grooming (beak, wing, and nail clipping)
  - appropriate transportation methods
- *Demonstrate the ability to obtain objective data: birds\*, reptiles, amphibians, and ferrets*
- *Perform nail trim (bird\*, exotic, small mammal)*
- *Perform injections using appropriate sites*
  - *subcutaneous*
  - *intramuscular*
  - *intra-dermal*
  - *intra-peritoneal*
  - *intravenous*
- *Perform oral dosing*
- Administer drugs or medicaments using appropriate sites and routes
- Understand appropriate sites for intravenous catheter placement
- Understand tube feeding in birds
- Perform laboratory procedures
- *Anesthetize birds and exotic animals*
- Recognize normal and abnormal behavior patterns
- Explain inadvisability of keeping wildlife as pets
- *Collect blood samples*

**Decision-making abilities:** Given the unique requirements of these species, the veterinary technician will safely obtain subjective and objective data that will allow evaluation of the patient. The veterinary technician will be able to: 1) identify husbandry issues, 2) discern appropriate from inappropriate nutritional support, and 3) recognize normal from abnormal behavior patterns.

**STUDENT HANDBOOK ACKNOWLEDGEMENT FORM**

**I HAVE READ THE HOLYOKE COMMUNITY COLLEGE VETERINARY TECHNOLOGY HANDBOOK AND AGREE TO CONFORM AND ADHERE TO ALL THE STATEMENTS CONTAINED WITHIN. FURTHERMORE, I AGREE TO CONSCIENTIOUSLY GUARD ALL THE PROFESSIONAL ETHICS OF THE VETERINARY MEDICAL FIELD AND AGREE TO PROTECT AND ENHANCE THE SAFETY AND HEALTH OF ALL PATIENTS IN MY CARE.**

**SIGNATURE** \_\_\_\_\_

**PRINT NAME** \_\_\_\_\_

**DATE** \_\_\_\_\_

**THIS SIGNED FORM TO BE TURNED IN TO THE PROGRAM CHAIR BEFORE THE FIRST DAY OF CLASSES.  
NO SIGNED FORM = DISMISSAL FROM THE VETERINARY TECHNICIAN PROGRAM.**