# Assessment of Student Learning in the Veterinary Technology Division

## Veterinary Technician Option – Program Outcomes

- 1. Upon completion of the Veterinary Technician Option, student s will be able to demonstrate proficiency in the essential skill and tasks outlined by the American Veterinary Medical Association. The list represents the complex role of the veterinary technician and encourages instruction in motor skills, critical thinking, entrepreneurship, and clinical application at the veterinary technician entry level in the following areas:
  - Office and Hospital Procedures
  - Pharmacy and Pharmacology
  - Nursing Skills
  - Anesthesia
  - Radiology
  - Surgical Prep and Nursing
  - Parasitology, Hematology and Clinical Pathology
  - Animal Husbandry, Handling, Behavior and Restraint
  - Anatomy and Physiology
- Upon completion of the Veterinary Technician Option, students will be able to demonstrate the academic background needed to pass the Veterinary Technician National Exam. (VTNE)

## Assessment of Veterinary Technician Option program outcomes includes the following tools:

- 1. AVMA Essential Skill Book for applied skills
- 2. Learning outcomes and assessments are done within all classes.
- 3. Exit Exam
- 4. 3.0 CGPA
- 5. Internship evaluations
- 6. Pass rate on Veterinary Technician National Exam

## <u>Veterinary Assistant Option – Program Outcomes</u>

- 1. Upon successful completion of the Veterinary Assistant Option, student s will be able to demonstrate proficiency in motor skills, critical thinking, entrepreneurship, and clinical application skills at the veterinary <u>assistant</u> entry level.
- 2. Upon successful completion of the Veterinary Assistant Option, students will be able to demonstrate entry level proficiency in the skills and tasks in the following areas:
  - Office and Hospital Procedures
  - Pharmacy and Pharmacology
  - Nursing Skills
  - Anesthesia
  - Radiology
  - Surgical Prep and Nursing
  - Parasitology, Hematology and Clinical Pathology
  - Animal Husbandry, Handling, Behavior and Restraint
  - Anatomy and Physiology

Assessment of Veterinary Assistant Option program outcomes includes the following tools:

- 1. AVMA Essential Skill Book for applied skills
- 2. Learning outcomes and assessment done within each class containing essential skills
- 3. 2.00 CGPA
- 4. Internship evaluations

## **AVMA Essential Skill Check off Book**

- The AVMA Essential Skill Check off Book is updated each semester as classes are completed and LOA are analyzed. The book is then reprinted and provided to all incoming students fall semester. The tracking of individual student completion of all AVMA skills and tasks is a high priority item for maintaining AVMA accreditation of the Veterinary Technician Option.
- In the past hands-on skills were tracked within each individual class but not all in one place for each individual student.
- The 2016 graduating class will be the first to use the book in its entirety. Our goal is that the technician option students successfully complete at least 80% of the essential skills.

#### **Class room learning outcomes**

- LOA are done for all classes. Tracking, details of the results and changes done to improve classes can all be found on the common/Veterinary Technology/Assessment. These are discussed in a general manner during division meetings, one-on-one and during the annual division meeting where all curriculum, essential skills and learning outcomes are reviewed and updated as needed.
- Class learning outcomes are based on the course description and the AVMA essential skills taught in the class. The outline reflects the learning outcomes
- Based on 2015 LOA and the Veterinary Technician National Exam pass rates, some specific plans to improve learning in 2016 include
  - o Help students prepare flash cards to better learn drug names and actions
  - o Offer more homework problems requiring calculations and critical thinking.
  - Add an additional homework assignment addressing labeling and dispensing concepts.
  - Reinforce that memorization and handling of instruments is necessary to learn these new instruments. Future tests will be comprehensive and items from previous tests will appear on the next.
  - Consider unit tests instead of monthly tests so that fewer topics are covered on one test.
  - Continue reading assignments and homework to reinforce what is discussed in class.
  - Encourage the importance of attendance. It is difficult to help students not in class.
  - Obtain a special stain made specifically for sperm cell evaluation
  - Provide additional handouts to further explain fundamental clinical pathology laboratory methods
  - o Provide additional materials and supplies for students to use in the construction of their "zoo" habitat project.
  - Use large instead of small snakes so that adequate blood samples can be obtained.
  - o Increase the variety of exercises used in the dog training class to maintain and increase canine and human interest.
  - Increase utilization of the blackboard system for posting supplemental material and study quizzes.

#### **Exit Exam - Veterinary Technician Option Assessment**

The Exit Exam is one required criteria for the Veterinary Technician Option. At the end of the student's last spring semester, the Veterinary Technology Exit Exam is offered. To be eligible to take this exam the Vet Tech student must be able to have successfully completed (with the exception of internship) the 80 required credit hours by the end of the semester. The exit exam is administered the last week in April each year.

The entire comprehensive examination must be passed with an average grade of 70% or better and each section must be passed with a minimum grade of 60% or better. A maximum of two sections may be repeated during the provided repeat time. Each student must complete the required 80 credit hours of classes, have a CGPA of 80% and pass the exit exam to graduate with

the Veterinary Technician Option. Each written section is 50-100 questions in length. Tests are taken during designated times. Retake schedule will be posted by ID number by 1:00 PM on the repeat test day.

Topic	Written	Practical
Anatomy	X	Combined
Diseases of Veterinary Medicine	X	Practical
Terminology	X	
Pharmacology	X	
Anesthesiology	X	X
Parasitology	X	Combined
Hematology	X	Practical
Clinical Pathology	X	
Facility Mgt	X	Combined
Fur & Feather	X	Practical
Animal Care	X	
Intro to Animal Science & Production Animals	X	Combined
Animal Mgt & Large Animal Techniques	X	Practical
Nursing I and Nursing II	X	Combined
		Practical
Radiology I & II	X	Combined
		Practical
Surgery Prep	X	X

## **Repeat Exit Exam**

To be eligible to sit for the Exit Exam following year, the student must put together and complete a written "plan for success". This plan should be based on subject areas the student is weak in and includes but is not limited to the following:

Six months of additional work experience in a veterinary clinic (minimum of 20 hours per week) and successful completion of 6 credit hours of Vet Tech classes either on-campus or via internet. or

Three months of additional work experience in a veterinary clinic (minimum of 20 hours per week) and successful completion of 12 credit hours of Vet Tech classes either on-campus or via internet.

#### **Exit Exam Pass Rate**

Year	2015	2014	2013	2012	2011	2010	2009
Pass rate	100%	86%	72%	77%	91%	80%	69%

#### **Internship Assessment**

Students complete a 12-week internship as part of every Veterinary Technology Option. Most complete the internship during their second summer after completing all course work. The student must prepare goals and objectives for internship, track progress with essential skills and complete weekly progress notes.

Based on interviews done during internship visits and over the phone as well as student and employer evaluations several themes emerge.

- The 2014 class had 5 technician graduates who took 3+ years to complete the program with these same 5 performing internship between semesters rather than last semester.
- Students who do internship between semesters often return with some of the lower employer evaluations but mature during the internship and return as stronger and more motivated students.
- The ability of the student to perform entry level skills is taken for granted and rarely do the students disappoint.
- When there is a problem it is nearly ALWAYS work ethic. More specifically absenteeism and lack of communication. This is less of an issue with students completing a degree in two years and more of an issue with those needing an extended period of time to complete their degree.
- Overall ratings continue to be strong for all interns.

# **Internship Employer Survey Results**

Scale of 0 to 4 with 4 being the highest

Category – Work Ethic	2015 Tech	2015 Husbandry Equine	2014 Tech	2014 Assistant Husbandry Non Grads
Attendance (shows up on time, stays until job is done).	4	3.5	3.8	3.6
Displays a positive attitude	4	3.5	3.7	3.7
Listens attentively and follows directions.	3.6	3	3.8	3.5
Uses time effectively-keeps busy-sees things that need done	3.7	3	3.5	3.3
Honest	3.9	3	3.7	4
Completes work carefully, pays attention to details	3.7	4	3.6	3.5
Works independently-self-motivated	3.9	3.5	3.4	3
Uses problem solving skills	3.7	3	3.4	3.5
Speaks clearly to clients and co-workers	3.9	3	3.5	3.5
Shares in group discussions & initiates questions	3.9	3	3.5	3.
Seeks input from others	4	3	3.8	4
Communication of ideas	3.6	3	3.7	3.5
Courtesy, kindness, respectful, appropriate sense of humor	4	4	3.8	3.8
Adjusts to new situations	3.6	3	3.7	3.6
Team player - cooperates & communicates	4	3.5	3.8	3

Professional appearance	4	4	4	4
Overall average in the work ethic area	3.79	3.31	3.69	3.53
Category - Technical Knowledge and Skills				
Overall all ability with hands on skills	3.6	3.4	3.5	3.7
Pharmacology	3.7	3.6	3.5	3.4
History taking and physical examinations	3.4	3.4	3.4	3.4
Lab skills: parasitology, hematology, clinical	3.6	3	3.5	3
pathology				
Radiology & Ultrasound	3.7	3	3.7	3
Animal handling and restraint	3.7	3.5	3.5	3.4
Practice Management	3.6	4	3.5	4
Anatomy	3.7	3.5	3.5	3
Anesthesiology	3.3	3	3.2	3
Surgery Prep	3.6	3.2	3.6	3.3
Nursing skills	3.7	3.8	3.4	3.4
Overall average in the technical skill area	3.6	3.4	3.5	3.32
Number of students evaluated	7	5	18	11

# **Veterinary Technician National Exam Pass Rate** -New graduates, first time test takers

Year	2015	2014	2013
Pass rate	58%	80%	92%

#### **Veterinary Technician National Exam Three Year Pass Rate**

VTNE (Veterinary Technician National Exam 3 year pass rate	July 1, 2012 - June 30, 2015
Number of eligible first-time candidates	39
Number of first-time candidates that have taken the VTNE	37
Three-year VTNE pass percentage	78.3%

Our goal for the three year pass rate is 80%. The primary problem area has been identified as the length of time between when the graduates have completed the academic classes and when they are able to sit for the exam which is now 6 months. Beginning in 2014 candidates could no longer take the test while on internship. This is being addressed for the 2017 graduating class. By shortening internship they will graduate in May instead of August which qualifies them to take the NVTE during the July-Aug test window instead of the current Nov-Dec test window.

# **Overall Program Outcome Summary**

For the most part, students are meeting the program outcomes in the degree option they are pursuing and acquire essential knowledge and skills for them to be productive in the animal health industry. Some students learn better through hands-on activities and struggle with the more academic paper pencil part of learning. Math, reading skills, lack of scientific background and attendance are handicaps for some.