

2019 Annual Report  
Veterinary Technology

**Veterinary Technician Option**

Program Outcomes:

1. Upon completion of the Veterinary Technician Option, students 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
  
2. 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 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
7. Internship evaluations

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**Veterinary Technician Option**

**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.
- This procedure has been in place with adequate results since fall of 2014. Our goal is that the technician and assistant option students successfully complete at least 70% of the essential skills.

**AVMA Essential Skill Check off Book**

<b>Cohort</b>	<b>Random Sample Size</b>	<b>Result</b>	<b>Comments</b>
2014-2016	5	70%	3 out of 5 had 70% or more of the tasks and skills signed off
2015-2017	5	80%	4 out of 5 had 70% or more of the tasks and skills signed off
2016-2018	5	70%	3 out of 5 randomly selected students had 70% or more of the tasks and skills signed off
2017-2019	10	60%	6 out of 10 randomly selected graduating students had 70% or more of the tasks and skills signed off
2018-2019	10	70%	7 out of 10 randomly selected graduating students had 70% or more of the tasks and skills signed off

**Classroom 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

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**Exit Exam**

The Exit Exam is one required criteria for the Veterinary Technician Option. To be eligible to take this exam the Vet Tech student must be able to have successfully completed (with the exception of internship) all required credit hours by the end of the semester. The exit exam is administered once a 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%. A maximum of two sections may be repeated during the provided repeat time. Each student must complete all required classes, have a CGPA of 80% and pass the exit exam to graduate with the Veterinary Technician Option.

**Veterinary Technician Exit Exam Pass Rate – Final Assessment**

<b>Graduating year</b>	<b>Number taking</b>	<b>Number Passing</b>	<b>% passing</b>
2015	7	6	86
2016	21	14	67
2017	29	24	83
2018	23	14	61
2019	21	21	100

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**Veterinary Technician Option**

**Veterinary Technician National Exam – required for licensing in Nebraska as well as many other states**

The American Veterinary Medical Association (AVMA) and Committee on Veterinary Technician Education and Activities (CVTEA) require a 50% pass rate to maintain accreditation. Our goal for the three year pass rate is 80%.

**Nebraska College of Technical Agriculture  
Veterinary Technician National Exam Pass Rate by Graduating Class**

Year of graduation	First time test takers	Number passing test first time	Number passing on 2 <sup>nd</sup> attempt	Overall pass rate for the cohort
2019	2	2		100%
2018	4	2		50%
2017	9	8		88%
2016	9	6	1	77%
2015	8	5	2	87.5%
2014	16	11		69%
2013	11	11		100%
2012	7	6		86%
2011	9	6		66%

**Annual Assessment of AVMA Essential Skills**

The AVMA Essential Skills list is reviewed yearly to ensure that all skills and tasks are covered within required classes.

Date of Assessment
May 2016
May 2017
May 2018
May 2019

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**Veterinary Assistant Option**

Veterinary Assistant Program Outcomes

1. Upon successful completion of the Veterinary Assistant Option, students will be able to demonstrate proficiency in motor skills, critical thinking, entrepreneurship, and clinical application skills at the veterinary assistant 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

**Veterinary Assistant Assessment 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**

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- This procedure has been in place with adequate results since fall of 2014. Our goal is that the technician and assistant option students successfully complete at least 70% of the essential skills.

**AVMA Essential Skill Check off Book**

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**Animal Husbandry Option**

Program Outcomes:

1. Students will be able to effectively communicate in oral and written form.
2. Students will be able to gather, assimilate, and process information to reach sound logical conclusions in their chosen career pathway.
3. Students will be able to exhibit required knowledge and skills consistent with their chosen field of study. (Technical Competence)

**Assessment Tools:**

Learning outcomes and assessment done within each class required class

1. 2.00 CGPA
2. Internship evaluations
3. Final Assessment – written test

<b>Animal Husbandry Final Assessment</b>			
Graduation Year	Number taking test	Score range	Mean
2016	1		53%
2017	1		60%
2018	2	49-53%	51%
2019	1	68%	68%

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**Equine Health Care Option**

Program Outcomes:

1. Students will be able to effectively communicate in oral and written form.
2. Students will be able to gather, assimilate, and process information to reach sound logical conclusions in their chosen career pathway.
3. Students will be able to exhibit required knowledge and skills consistent with their chosen field of study. (Technical Competence)

**Assessment Tools:**

Learning outcomes and assessment done within each class required class

1. 2.00 CGPA
2. Internship evaluations
3. Final Assessment – written test

<b>Equine Health Care Final Assessment</b>			
Graduation Year	Number taking test	Score range	Mean
2017	4	66%-82%	81%
2018	1	81%	81%
2019	1	79%	79%

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**Animal Health Management Option**

Program Outcomes:

1. Students will be able to effectively communicate in oral and written form.
2. Students will be able to gather, assimilate, and process information to reach sound logical conclusions in their chosen career pathway.
3. Students will be able to exhibit required knowledge and skills consistent with their chosen field of study. (Technical Competence)

**Assessment Tools:**

Learning outcomes and assessment done within each class required class

1. 2.00 CGPA
2. Internship evaluations
3. Final Assessment – written test

<b>Animal Health Management Final Assessment</b>			
Graduation Year	Number taking test	Score range	Mean
2017	4	66%-82%	81%
2018	1	81%	81%
2019	0		



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**Retention Report by Cohort for all 5 VT Options**

<b>Fall 2018 Starts</b>	<b>Spring 2019</b>	<b>Summer 2019</b>	<b>Fall 2019</b>	<b>Spring 2020</b>	<b>Graduates 2020</b>
64	55 86% retention  APS – 5 Left campus-4				
<b>Fall 2017 Starts</b>	<b>Spring 2018</b>	<b>Summer 2018</b>	<b>Fall 2018</b>	<b>Spring 2019</b>	<b>Graduates 2019</b>
59	43 73% retention  APS – 9 Left campus -7	30 50% retention  APS – 3 Dismissed - 10	29 49% retention  APS -1	28 47% retention  Left campus - 1	27 46% retention  APS - 1
<b>Fall 2016 Starts</b>	<b>Spring 2017</b>	<b>Summer 2017</b>	<b>Fall 2017</b>	<b>Spring 2018</b>	<b>Graduates 2018</b>
57	47 82% retention  Left campus - 10	29 50% retention  Left campus-10 APS-8	29 50% retention	29 50% retention	29 50% retention

**Improved retention for fall 2019 compared to fall 2018 due to:**

- Adding an Large Animal Instructor who is very committed having the students learning through hands-on training
- More work with animal models increasing confidence level and practice opportunities for the students
- Scheduling multiple labs so each group of students is smaller
- With the additional instructor current faculty have a little more time to devote to student advising
- Through Kevin’s office students are paired up with tutors earlier than in the past
- Overall starting ACT scores a little higher for fall 2018 than fall 2017 or fall 2016

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### **Internship Assessment**

Students complete an internship as part of every Veterinary Technology Option. Most complete the internship during after completing all academic classes. 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.

- 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.
- Students who are on an extended time track for graduation and / or are graduating with an option other than Veterinary Technician often have the poorer feedback from the employers.
- 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, inability to follow directions or 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 interns.

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**Internship Employer Survey Results**

**Veterinary Technician Option**

Scale of 0 to 4 with 4 being the highest

<b>Category – Work Ethic-Professionalism</b>	<b>2019 Tech Spring</b>	<b>2019 Tech Summer</b>	<b>2018 Tech</b>	<b>2017 Tech</b>	<b>2016 Tech</b>
Attendance	4	4	3.9	3.8	3.9
Displays a positive attitude	4	4	3.6	3.7	3.8
Listens attentively and follows directions.	4	3	3.6	3.5	3.4
Uses time effectively-keeps busy-sees things that need done	4	4	3.3	3.2	3.0
Honest	4	4	3.8	3.7	3.7
Completes work carefully, pays attention to details	4	4	3.4	3.6	3.3
Works independently-self-motivated	3	4	3.2	3.1	3.0
Uses problem solving skills	4	4	3.1	3.3	3.2
Speaks clearly to clients and co-workers	3	4	3.1	3.2	3.2
Shares in group discussions & initiates questions	4	4	3.6	3.2	3.5
Communication of ideas, team player, seeks input		4	3.6	3.5	
Courtesy, kindness, respectful, appropriate sense of humor	4	4	3.9	3.7	3.8
Adjusts to new situations	3	4	3.3	3.4	3.4
Professional appearance	4	4	3.9	3.8	3.6
<b>Overall average in the work ethic area</b>	<b>3.6</b>	<b>3.9</b>	<b>3.8</b>	<b>3.7</b>	<b>3.7</b>
Overall all ability with Technical skills	3	3.5	3.4	3.1	3.3
Adaptability to clinic's way	4	4	3.2	3.1	3.0
Pharmacology	3	3.5	3.0	3.1	3.1
History taking and physical examinations	4	4	3.2	3.1	3.1
Lab skills: parasitology, hematology, clinical pathology	3	4	3.2	2.9	3.1
Radiology & Ultrasound	3	4	3.2	3.3	2.8
Animal handling and restraint	3	4	3.4	3.6	3.3
Practice Management	3	3.5	2.4	3.2	2.5
Anatomy	4	4	3.2	2.9	3.1
Anesthesiology	3	3.7	3.4	3.1	3.2
Surgery Prep	4	3.8	3.4	3.2	3.3
Nursing skills	4	3.5	3.2	3.0	3.3
<b>Overall average in technical skills</b>	<b>3.3</b>	<b>3.7</b>	<b>3.1</b>	<b>3.3</b>	<b>3.4</b>
Number of students evaluated	13	3	24	20	16

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**Internship Employer Survey Results**

**Veterinary Assistant Option**

Scale of 0 to 4 with 4 being the highest

<b>Category – Work Ethic-Professionalism</b>	<b>2019 Assistant</b>	<b>2018 Assistant</b>	<b>2017 Assistant</b>
Attendance	3	4.0	3.9
Displays a positive attitude	4	3.3	3.4
Listens attentively and follows directions.	4	3.0	3.5
Uses time effectively-keeps busy-sees things that need done	3	3.3	2.8
Honest	4	3.7	3.6
Completes work carefully, pays attention to details	3	3.0	3.0
Works independently-self-motivated	3	3.0	2.9
Uses problem solving skills	3	3.0	2.9
Speaks clearly to clients and co-workers	3	2.7	3.3
Shares in group discussions & initiates questions	4	2.7	3.1
Communication of ideas, team player, seeks input	4		
Courtesy, kindness, respectful, appropriate sense of humor	4	3.7	3.5
Adjusts to new situations	3	3.0	3.0
Professional appearance	4	3.7	3.6
<b>Overall average in the work ethic area</b>	<b>3.5</b>	<b>3.5</b>	<b>3.3</b>
Overall all ability with Technical skills	3.5	3.3	3.5
Adaptability to clinic's way	4	3.7	
Pharmacology	3	3.0	2.9
History taking and physical examinations	3	3.0	2.6
Lab skills: parasitology, hematology, clinical pathology	3	3.0	3.3
Radiology & Ultrasound	3	2.7	1.9
Animal handling and restraint	3.5	3.0	3.1
Practice Management	3	2.7	2.1
Anatomy	3.5	3.3	2.6
Anesthesiology	3	3.3	2.5
Surgery Prep	4	3.3	3.0
Nursing skills	4	2.7	3.0
<b>Overall average in technical skills</b>	<b>3.4</b>	<b>3.2</b>	<b>3.0</b>
Number of students evaluated	2	3	8

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**Internship Employer Survey Results**

**Animal Husbandry Option**

<b>Category – Work Ethic-Professionalism</b>	<b>2019 Husbandry</b>	<b>2018 Husbandry</b>
Attendance		2
Displays a positive attitude		2
Listens attentively and follows directions.		3
Uses time effectively-keeps busy-sees things that need done		1
Honest		3
Completes work carefully, pays attention to details		2
Works independently-self-motivated		1
Uses problem solving skills		2
Speaks clearly to clients and co-workers		1
Shares in group discussions & initiates questions		2
Communication of ideas, team player, seeks input		2
Courtesy, kindness, respectful, appropriate sense of humor		3
Adjusts to new situations		2
Professional appearance		3
<b>Overall average in the work ethic area</b>		<b>2.2</b>
Overall all ability with Technical skills		2
Adaptability to clinic's way		
Pharmacology		
History taking and physical examinations		
Lab skills: parasitology, hematology, clinical pathology		
Radiology & Ultrasound		
Animal handling and restraint		2
Practice Management		
Anatomy		
Anesthesiology		
Surgery Prep		
Nursing skills		
<b>Overall average in technical skills</b>		<b>2</b>
Number of students evaluated	0	1

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**Internship Employer Survey Results**

**Equine Health Option**

Category – Work Ethic-Professionalism	2019 Equine Health	2017 Equine Health
Attendance	4	3.3
Displays a positive attitude	4	3.5
Listens attentively and follows directions.	3.5	3.3
Uses time effectively-keeps busy-sees things that need done	3.5	2.5
Honest	4	3.3
Completes work carefully, pays attention to details	3.5	2.8
Works independently-self-motivated	3.5	2.3
Uses problem solving skills	3.5	2.8
Speaks clearly to clients and co-workers	3.5	2.5
Shares in group discussions & initiates questions	4	3.0
Communication of ideas, team player, seeks input	4	2.8
Courtesy, kindness, respectful, appropriate sense of humor	4	3.3
Adjusts to new situations	4	3.0
Professional appearance	4	3.3
<b>Overall average in the work ethic area</b>	<b>3.5</b>	<b>2.5</b>
Overall all ability with Technical skills	3.5	2.5
Adaptability to clinic's way	4	
Pharmacology	3	
History taking and physical examinations	4	
Lab skills: parasitology, hematology, clinical pathology	3	
Radiology & Ultrasound	3	
Animal handling and restraint	4	4
Practice Management	3	
Anatomy	4	
Anesthesiology		
Surgery Prep		
Nursing skills	3	
<b>Overall average in technical skills</b>	<b>3.4</b>	<b>3.2</b>
Number of students evaluated	1	4

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**Internship Employer Survey Results**

**Animal Health Management Option**

<b>Category – Work Ethic-Professionalism</b>	<b>2019 Mgt</b>	<b>2018 Mgt</b>
Attendance		3
Displays a positive attitude		3
Listens attentively and follows directions.		3
Uses time effectively-keeps busy-sees things that need done		4
Honest		4
Completes work carefully, pays attention to details		3
Works independently-self-motivated		3
Uses problem solving skills		2
Speaks clearly to clients and co-workers		3
Shares in group discussions & initiates questions		3
Communication of ideas, team player, seeks input		2
Courtesy, kindness, respectful, appropriate sense of humor		3
Adjusts to new situations		2
Professional appearance		3
<b>Overall average in the work ethic area</b>		<b>2.2</b>
Overall all ability with Technical skills		2
Adaptability to clinic's way		
Pharmacology		
History taking and physical examinations		
Lab skills: parasitology, hematology, clinical pathology		
Radiology & Ultrasound		
Animal handling and restraint		2
Practice Management		
Anatomy		
Anesthesiology		
Surgery Prep		
Nursing skills		
<b>Overall average in technical skills</b>		<b>3</b>
Number of students evaluated	0	1

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### **Veterinary Technology - Program Level Assessment**

Program level assessment is based primarily on class learning outcomes. In addition student evaluations, internship evaluations and instructor inputs are considered. Specific plans for improvement are also derived from the Technician Educators Conference attended by 1 or 2 faculty members each year that it is offered with the most recent being attended summer of 2019.

### **Overall Program Outcome Summary**

Specific plans to improve learning in 2020

- Move Intro to Laboratory Science to a first semester class so that the students can begin their course flow of clinical pathology classes sooner – completed
- Increase credit hours for Intro to Laboratory Science so that the class can meet the general education science requirement.
- Move Parasitology out of summer and replace with a college core class. This will get students started on the Clinical Pathology Classes one semester sooner which will allow for a better flow of classes. It will also reduce the length of day for the students in the summer because of fewer classes with labs.
- Reduce credit hours required for the Associate of Applied Science Degrees down to 71
- Limit the number of credit hours a student can take during the regular semester to 18
- Restructure Learning Communities class to include additional study skills and lessons as well as addressing additional areas of overall deficiency that seem to affect many students. This was done in 2108 but is going to be done again for 2019 because Learning Communities and Career Strategies classes are being combined.
- Implement higher expectations of the students in areas of attendance, knowledge level, reliability, problem solving, professional attire and honesty. Successful but a continuous goal.
- Adding a Large Animal Instructor who is very committed having the students learning through hands-on training – This goal has been achieved with the addition of an Academic year instructor who has a strong background the large animal area.
- More work with animal models to increase confidence level and practice opportunities for the students – this has been met with limited student enthusiasm
- Scheduling multiple labs so each group of students is smaller
- With the additional instructor current faculty will have a little more time to devote to student advising
- Through Kevin's office students pair up with tutors earlier than in the past
- Through advising and scheduling strongly encourage students with ACT of less than 18 to take the developmental Reading and Writing Course and to pursue a degree over a 3 year period of time.

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.



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**Program Level Assessment**

**Addressing Student suggestions and concerns**

- Students will not in the future be asked to help with any grounds work unless it is as a paid position
- Three cats were adopted out into homes
- Two dogs were adopted out into homes
- Facility Management updates implemented for the summer 2019 session
  - o The grading rubric has been restructured to more closely reflect typical class grading scales.
  - o Students now have more flexible scheduling for the days they work and the weekends they have off.