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Learning Objectives

01

Analyze how a VTNE-aligned curriculum, scaffolded coursework, and structured active learning strategies contribute to student competency, knowledge retention, and VTNE pass rates

02

Evaluate the role of immersive simulation labs and required clinical experience in developing critical thinking, technical proficiency, and confidence in anesthesia and surgical nursing

03

Develop strategies for leveraging **real-time student feedback, individualized, study support, and structured remediation plans** to improve **student performance, retention, and program outcomes**

Program Background

SECTION 1





First new program in VA in over 40 years

New Program Challenges:

- Lack of curriculum
- Lack of instructors
- Accreditation hurdles

Additional Challenges

 Lack of infrastructure to support clinical skill acquisition



TCC BY THE NUMBERS



Accreditation

2020 Initial Accreditation **2025 Full Accreditation**

3 Year VTNE Pass Rate

91%

Retention Rate

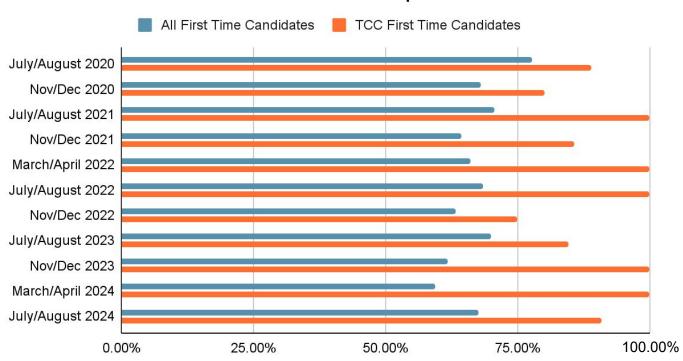
90% of students graduate on-time

Student VTNE Success

Open Admission Policy:

- Minimal prerequisites
- No GPA weighting in admissions

Pass/Fail Rates Report

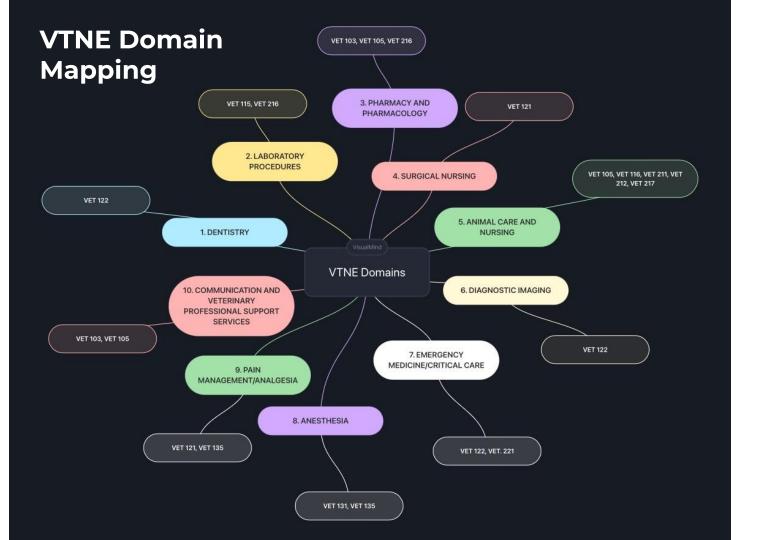


Core Educational Model: Curriculum, Simulation, Clinical Experience

SECTION 2







Scaffolding Progression: Course Mapping

VET 121 & 135 - Anesthesia, Analgesia, & Surgical Assisting - Using Medical Math on Live Patients

VET 216 - Pharmacology - Using Medical Math on Written Case Reports

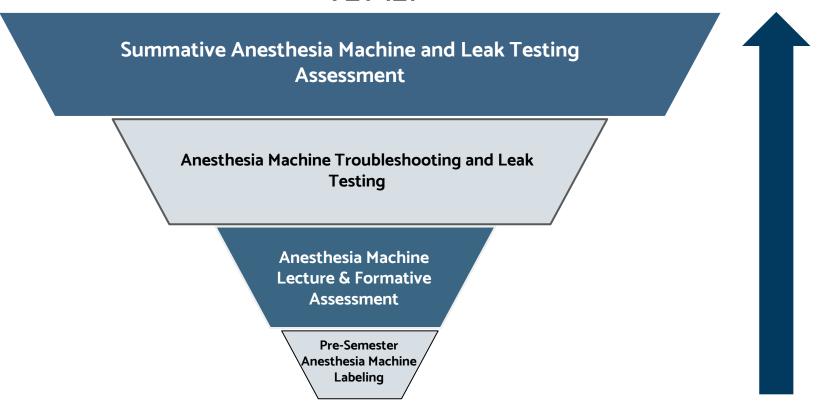
VET 105 Reviewing Basic + Advanced Calculations

> VET 103 Basic Medical Math



Scaffolding Progression: Projects & Assignments

VET 121





NAVLE® Course

Dentistry

Pain Mgt/Analgesia

Pharmacy

Surgery





93

62

156

187

△ Member Home / Readiness Exams

ırse: VTNE

TESTS BY PRACTICE VTNE

READINESS 1

VTNE CALCS, IMAGE AND **VOCAB QS**

VTNE Readiness 1



VTNE Readiness 2



7 8

Hide Jumper Show Jumper Show all

What kind of teeth do horses have?



HIDE

HIDE

HIDE

HIDE

HIDE

Save & Exit



Stuc (17/1

Extend My N

| NOW . | | | |
|---------------------------|-------------------------|-----|---|
| | Diagnostic Imaging | 146 | |
| 10 | Emergency/Critical Care | 155 | |
| | Lab Results | 359 | 3 |
| ıdy Progre /1921 compl | Nursing | 541 | • |
| | | | L |

☐ Aradicular hypsodontic

Apical orthodontic

Radicular hypsodontic

Radicular brachyodontic

Aradicular brachyodontic

Select Language:

0% (0 / 187)

0





0% (0 /0)





Next

Clinical Training That Reinforces the Classroom

- 20 hours/week minimum **Veterinary Assistant** work in approved clinical sites
- Sites evaluated against a gold-standard checklist by faculty
- Direct application of concepts learned in classroom in clinical setting



Tidewater Community College Veterinary Technology Program Clinical Facility Hospital Standards

To be approved as a clinical site, veterinary hospitals must meet certain minimum criteria regarding medical standards. Adherence to these standards ensures that students in TCC's Veterinary Technology program receive a quality education that emphasizes acceptable medical standards. These standards must also be maintained for the program's accreditation.

AAHA-accreditation number (if applicable):

Medical Records:

- There must be an established system of medical record keeping within the practice.
- Medical records must be legible and entries noted with the practice team members' initials.
- Problem-oriented medical records are utilized. All medical records must include
- o Chief Complaint
 - Patient History
 - Physical Examination Results
 - Assessment (tentative or definitive diagnosis)
 - Plan (diagnostic and/or therapeutic)
- In addition to the above, all medical records must clearly reflect client communication, discharge instructions, consultations, procedures (including descriptions of surgical, dental,
- anesthetic and medical procedures) and s
- Each patient must be properly identified.

 accurately on each patient's medical recor breed, date of birth, sex, color and/or mar
- There must be a separate medical record t records of juvenile offspring until the age
- Each client must be identified properly. The
- telephone numbers must be recorded acc All patients must be given an appropriate
- procedures. A systematic procedure of ex-Medical records must be filed and/or digit
- Medical records must be retained for the I patient care and in accordance with state

Examination Facilities:

- Examination facilities must be provided, be of sufficient size for patient examinations, and
- Each examination room must be supplied with cleaning materials, disinfectant, disposable towels, and a waste receptacle.
- To facilitate hand washing between each patient, a sink must be located in or convenient to

- Controlled drugs must be stored in a securely locked, substantially constructed cabinet or safe as required by federal, state, or provincial regulations with access limited to licensed veterinarians and licensed veterinary technicians.
- Drugs must only be dispensed or administered by order of a licensed veterinarian.
- Child-resistant containers are used unless otherwise requested by the client. Requests must be documented in the medical record.
- The pharmacy contains a current written or electronic reference text of pharmaceuticals Current antidote information must be readily available for emergency reference in addition to the telephone number of an animal poison control center.
- A separate log is maintained for all administered and dispensed Schedule II controlled substances and kept in an area separate from the controlled substances. A separate log is naintained for Schedule III-V controlled substances
- An adequate supply of drugs and supplies must be available and organized in a standard manner. Drugs should be stored under conditions recommended by the manufacturer.
- All expired drugs must be removed from working stock promptly and returned or disposed of in accordance with federal, state, or provincial regulations
- When dispensing medication, each label must:
 - o Be typed or printed
 - Be permanently affixed to the containe
- o Include warning labels, if appropriate Each label must be recorded with:
- Client's first and last name
- o Patient's name and species
- o Date dispensed
- Name of drug and strength Usage directions including route of administration
- o Dosage and quantity dispensed, including number of refills
- Hospital's name, address, and phone number
- o Name of the veterinarian dispensing the drug Drugs used in euthanasia procedures must be identified, segregated, and stored in a locked
- Each dose of any medication administered, dispensed, or prescribed must be recorded on the

Clinical Training Continued

15. PERFORM CEPHALIC VENIPUNCTURE (CANINE AND FELINE)*

Required Reading/Videos:

• Essential Clinical Procedures for Veterinary Technicians pgs. 115-116

Supplies Needed

Animal(s) Needed

Syringe and needle

- Dog
- Cat

Standard Criteria:

- · The student identified the distended vein and placed their thumb alongside for stabilization
- · The student inserted the needle bevel side up
- · The student drew back on the plunger steadily
- . The student told the assistant to release compression of the vein
- . The student withdrew the needle and syringe from vein

Material(s) to be Submitted for Instructor Evaluation: This sheet signed by your mentor.

The final evaluation of this task will be done by TCC veterinary technology faculty at the Nursing Skills lab

"I certify that the student properly performed the procedure according to the standard criteria as outlined above under my direct supervision."

| Signature of Clinical Mentor: | (Canine |
|-------------------------------|----------|
| Signature of Clinical Mentor: | (Feline) |



Structured Clinical Assignments

CONTINUOUSLY

Students are required to discuss assignments, such as drug selection and anesthetic protocols, with clinical mentors

FROM THE START

Clinical assignments and labs are **linked to didactic content**

UNTIL GRADUATION

Concepts and ideas are **reinforced** through active reflection and critical thinking in real-time

IMMERSIVE SIMULATION LABORATORIES: BRINGING CLASSROOM MATERIAL TO LIFE

Nursing Sim Lab

2nd Semester, basic nursing care for simulated patient going through the hospital

Anesthesia Sim Lab

4th Semester, hands-on learning, improved confidence & clinical readiness.

Mimics hospital team dynamic and time pressures



All labs planned with close collab between faculty members

Lab Ratios and Planning

For cases, students are exposed to a wide variety of abnormalities that occur and instructed on how to respond

Gold Standard Protocols



Source: Hayden et al., *Journal of Nursing Regulation*, 2014, Surgical Science, *An Introduction to Medical Simulation for Veterinary Training*, 2024

IMPACT OF SIMULATION

Why It Matters:

- Simulation creates a safe, repeatable, and immersive environment for skill building.
- Enables development of clinical confidence, decision-making, and team-based communication-without risking live patients.

What the Research Shows:

"Simulation-based training delivers all the benefits of world-class medical education—without putting patients at risk."

"NCSBN's landmark study (2014) concluded that simulation can effectively replace up to 50% of clinical hours without compromising competency."

Program Evaluations



Employer Evaluation of 2023 Veterinary Technician Graduates

As we grow as a program, we rely on the feedback from the employers of our graduates to help us enhance and improve our students' educational experience.

For this evaluation, all responses will be anonymous.

There will be 3 sections to evaluate regarding the knowledge, clinical skills, and overall performance of your employee as an entry level LVT.

If viewing this survey on a mobile device, please scroll to the right to view all assessment options.

| = Poor 5=Excell | ent * | | | | |
|-----------------|-------|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| Dentistry | 0 | 0 | 0 | 0 | 0 |
| Urinalysis | 0 | 0 | 0 | 0 | 0 |
| Parasitology | 0 | 0 | 0 | 0 | 0 |
| Hematology | 0 | 0 | 0 | 0 | 0 |
| Anesthesia | 0 | 0 | 0 | 0 | 0 |
| Surgery | 0 | 0 | 0 | 0 | 0 |
| Radiology | 0 | 0 | 0 | 0 | 0 |
| Nursing | 0 | 0 | 0 | 0 | 0 |

Section 2. Clinical Skills- How would you rate your employee's skill proficiency in

Program **Evaluations**



American Association of Veterinary State Boards 380 West 22nd Street, Suite 101 Kansas City, Missouri 64108 1-877-698-8482

VETERINARY TECHNICIAN NATIONAL EXAMINATION

School: 867 -- Tidewater Community College

Testing window July 15 - August 20

Test Form: VTNAA13B Tested 7/15/2021 - 8/20/2021

Generated on: September 14, 2021 Score Report Prepared by PSI Services, LLC Internal Verification Report

YOUR SCHOOL FIRST TIMERS DATA BASED ON 13 CANDIDATES

| | Maximum Raw Scores | Range of Raw Scores | Average Raw Scores | Standard Deviation | Average Percent Correct |
|----------------------------------|-----------------------|------------------------|-----------------------|-----------------------|-------------------------------|
| Scaled Total | 800 | 457 - 690 | 581.23 | 82.12 | 72.65% |
| Raw Total | 150 | 97 - 133 | 116.23 | 12.70 | 77.49% |
| Pharmacy and Pharmacology | 18 | 11 - 18 | 14.92 | 2.43 | 82.91% |
| Surgical Nursing | 17 | 6 - 17 | 12.15 | 3.21 | 71.49% |
| Dentistry | 12 | 6 - 12 | 8.46 | 1.45 | 70.51% |
| Laboratory Procedures | 17 | 9 - 17 | 13.15 | 2.57 | 77.38% |
| Animal Care and Nursing | 30 | 20 - 29 | 24.54 | 2.85 | 81.79% |
| Diagnostic Imaging | 11 | 6 - 11 | 9.31 | 1.32 | 84.62% |
| Anesthesia | 22 | 13 - 19 | 16.15 | 2.18 | 73.43% |
| Emergency Medicine/Critical Care | 12 | 6 - 12 | 9.23 | 2.04 | 76.92% |
| Pain Management/Analgesia | 11 | 6 - 11 | 8.31 | 1.38 | 75.52% |

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Promoting Student Success Through Active Support

SECTION 3





PROMOTING STUDENT SUCCESS THROUGH ACTIVE FACULTY SUPPORT

Tutoring

- Individualized support
- Faculty-led

Financial Assistance

School pays50% ofZukureview



Remediation

- Faculty identify students who are **struggling**
- Faculty meet to determine support strategies

Advising

 Students assigned vet faculty member as advisor



STUDENT SUCCESS THROUGH ACTIVE SUPPORT

- Student Check-In
 - Inquires about classroom AND clinical skills
- Mid and End of Semester Evaluations from Clinical Mentors
- QR code post lab, for instructor to receive immediate feedback on lab experience for students
 - Able to adjust material in realtime

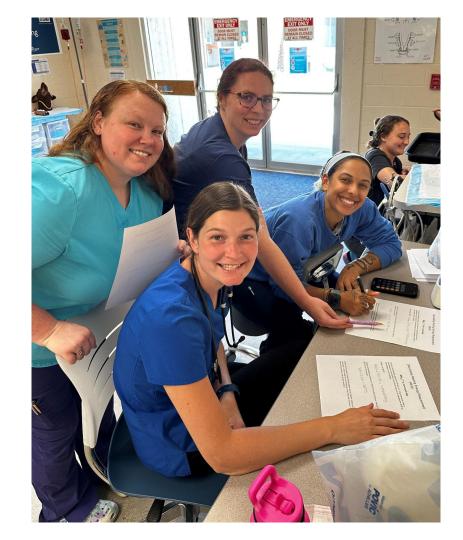
Post VET 105 Simulation Lab
Survey (2025)



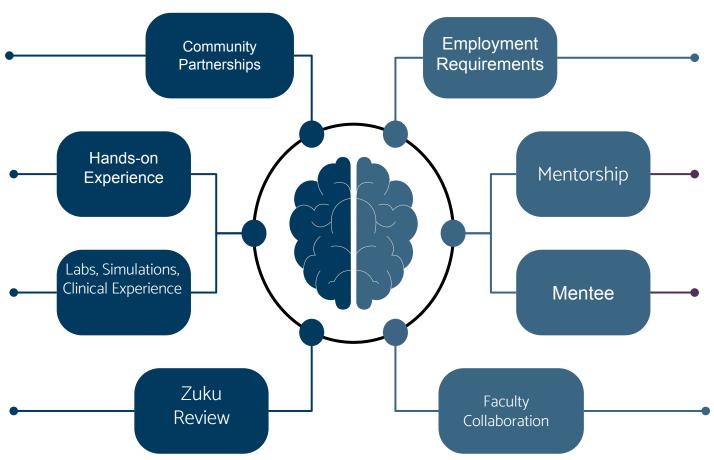
Key Elements of Success

SECTION 4





Strategies for Program Success



Q & A

