

VET 250S Veterinary Nursing Care and Techniques

Course Goals:

1. Describe the proper techniques for parenteral injections, venipuncture for blood collection, catheter placement and care, and urine collection methods.
2. Describe the importance of fluid therapy, how to recognize the need for fluid therapy, the various methods of fluid therapy, and how patient requirements may change.
3. Describe clinical signs, treatment, and monitoring of patients with clinically relevant respiratory, cardiovascular, central nervous system, renal, and reproductive system emergencies.
4. Describe emergencies caused by the ingestion of toxic substances by defining the clinical signs, decontamination procedures, and treatment.
5. Explain the equipment, supplies, and steps that may be needed to perform first aid and cardiopulmonary cerebral resuscitation.



Instructor's Name:	Instructor's Office Hours:	Meeting Days/Times
Elizabeth Bingham BS, RVT ebingham@edisonohio.edu 937. 381.1544 <u>Qualifications</u> AAS in Veterinary Technology Columbus State Community College Completed 2008 BS in Zoology The Ohio State University Completed 2004 Jason Johnston, DVM jjohnston2@edisonohio.edu <u>Qualifications</u> Doctorate of Veterinary Medicine The Ohio State University Completed 1997 BA in Chemistry Wilmington College Completed 1993	Summer office hours are by appointment only on Tuesdays, Wednesdays, and Thursdays	<u>Summer Semester 2025/26</u> June 8th – August 1st Tuesdays: 1–3 pm (RM 314) Wednesdays and Thursdays: 1-4 pm (RM 323) <u>Required Materials</u> • ISBN: 9780443278266 Small Animal Emergency and Critical Care for Veterinary Technicians, 5th edition (2021) Battaglia • ISBN: 9780323936514 McCurnin's Clinical Textbook for Veterinary Technicians and Nurses, 11th edition (2026) Samples • ISBN: 9780443117091 Workbook for McCurnin's Clinical Textbook for Veterinary Technicians and Nurses, 11th edition (2026) Samples • ISBN: 9780323680271 Small Animal Clinical Techniques 3rd edition (2021) Taylor • Stethoscope, watch, and blue or black pen for all labs with live animals

Dates	In-Class	Before Class	Homework
		*Chapters present in this column are expected to be reviewed BEFORE the class date on which they are listed	Assignments are due at the start of the next class. Exam due dates are noted with each exam.
Week 1 Tuesday 6/9	Syllabus Review Lecture: Patient's Lifeline: Intravenous Catheter Lab (Manikins Only): - Intro to IV, IM, and SubQ injections - Intro to IV catheter placement	Review Battaglia Chapter 3 Review McCurnin Ch. 17 pgs. 507-513 Review Taylor Chapters 2, 4, and 5	<u>Assignments</u> IV Catheter Scenario (20 points)
Wednesday 6/10	Lecture: Critical Thinking – Skill of Observation and Interpretation Lecture: Diagnostic Sampling and Therapeutic Techniques for Dogs and Cats	Review Battaglia Chapter 1 Review McCurnin Chapter 17, pgs. 491-503, 506-511, and 513-523	<u>Assignments</u> - Select McCurnin Ch. 17 Workbook (24 points) - Diagnostic Sampling and Techniques Presentations (65 points) <u>Examinations</u> Exam #1 (60 points, due 6/17 by 1 pm) - Battaglia Ch. 1 and 3 - Select McCurnin Ch. 17 (109 points)
Thursday 6/11	Lecture: Monitoring of the Critically Ill or Injured Patient Lecture: Isolation Techniques in Clinical Practice	Review Battaglia Ch. 2 Review Battaglia Ch. 14	<u>Assignments</u> - Ch. 2 Medical Math Exercise (20 points) <u>Examinations</u> Exam#2 (49 points due 6/18 by 1 pm) - Battaglia Ch. 2 and 14
Week 2 Tuesday 6/16	Lab (Manikins Only): - Urinary System Techniques - IV Blood Collection - IV, IM, and SubQ injections - IV catheter placement	Review Taylor Chapter 12	

Wednesday 6/17	Lecture: Fluid Therapy Lecture: Transfusion Medicine	Review Battaglia Ch. 4 and 5 Supplemental: McCurnin Ch. 24	<u>Assignments</u> - Ch. 4 and 5 Medical Math Exercises (40 points) - McCurnin WB Ch. 24 (31 points)
Thursday 6/18	Lecture: Nutritional Support for the Critically Ill Patient	Review Battaglia Ch. 6	<u>Assignments</u> - Ch. 6 and 11 Medical Math Exercises (34 points) - Parenteral Nutrition CE Article (10 points) - Urine Collection Competency Video (1 point) <u>Examinations</u> Exam #3 (58 points, due 6/24 by 1 pm) - Battaglia Ch. 4, 5, and 6
Week 3 Tuesday 6/23	Lab (Live Animals and Manikins): - Urinary System Techniques - IV Blood Collection - IV, IM, and SubQ injections - IV catheter placement		
Wednesday 6/24	Lecture: Neonatal Care of Puppies and Kittens Lecture: Geriatric and Hospice Care (Dogs and Cats)	Review McCurnin Ch. 21 pgs. 677-690 Review McCurnin Ch. 36 pgs. 1175-1189	<u>Assignments</u> - Select Ch. 21 and 36 McCurnin Workbook (33 points) <u>Examinations</u> Exam #4 (29 points, due 7/2 by 1 pm) - Select McCurnin Ch. 21 and 36 (31 points, due 7/2 by 1 pm)

Thursday 6/25	Lecture: Wound Management and Bandaging	Review McCurnin Ch. 27 pgs. 840-857	<u>Assignments</u> - Select Ch. 27 McCurnin Workbook (33 points) <u>Examinations</u> Exam #5 (31 points, due 7/3 by 1 pm) - Select McCurnin Ch. 27 (31 points, due 7/2 by 1 pm)
Week 4 Tuesday 6/30	Lab (Manikins Only): Bandaging		
Wednesday 7/1	Lecture: Emergency Receiving (includes Triage from McCurnin 25) Lecture: Oxygen Therapy Techniques and Mechanical Ventilation	McCurnin Ch. 25 pgs. 772-777 Review Battaglia Ch. 15 Review Battaglia Ch. 7-9	<u>Assignments</u> - Select Ch. 25 McCurnin Workbook (30 points) - Ch. 7 Medical Math Exercise (10 points) - Mechanical Ventilation Articles (20 points) <u>Examinations</u> Exam #6 (46 points, due 7/8 by 1 pm) - Battaglia Ch. 7-9, and Ch. 15
Thursday 7/2	No Class: Happy 4 th of July!		
Week 5 Tuesday 7/7	Lecture: Cardiopulmonary Resuscitation Current Practice Lab (Live Animals and Manikins): - Bandaging - CPR	Review Battaglia Ch. 17 Supplement: McCurnin Ch. 25 pgs. 779-802	<u>Assignments</u> Ch. 17 Medical Math Exercise (12 points)

Wednesday 7/8	Lecture: Management of Patients in Shock Lecture: Toxicologic Emergencies Discuss Project	Review Battaglia Ch. 16 Review Battaglia Ch. 28 Supplement: McCurnin Ch. 26	<u>Assignments</u> - Ch. 16 Medical Math Exercise (12 points) - McCurnin WB Ch. 26 (30 points) - Toxicology VTNE Review Table (30 points) - Toxicology Report Presentation (40 points) <u>Examinations</u> Exam #7 (76 points, due 7/15 by 1 pm) - Battaglia Ch. 16 and 17 Exam #8 (32 points, due 7/16 by 1 pm) - Battaglia Ch. 28 - McCurnin Ch. 26
Thursday 7/9	Toxicology Report Presentations Lecture: Traumatic Emergencies Lecture: Hematologic Emergencies	Review Battaglia Ch. 18 Review Battaglia Ch. 19	<u>Assignments</u> - Ch. 18 and 19 Medical Math Exercises (24 points) - Ch. 19 VTNE Review Table (12 points) <u>Examinations</u> Exam #9 (58 points, due 7/17 by 1 pm) - Battaglia Ch. 18 and 19
Week 6 Tuesday 7/14	Lab (Live Animals and Manikins): - Bandaging - CPR - IV Blood Collection - IV, IM, and SubQ injections - IV catheter placement		

Wednesday 7/15	Lecture: Cardiovascular Emergencies Lecture: Respiratory Emergencies	Review Battaglia Ch. 20 Review Battaglia Ch. 21	<u>Assignments</u> - Ch. 20 and 21 Medical Math Exercises (16 points) - Ch. 20 and 21 VTNE Review Table (39 points) <u>Examinations</u> Exam #10 (33 points, due 7/22 by 1 pm) - Battaglia Ch. 20 and 21 - Select Math
Thursday 7/16	Lecture: Gastrointestinal Emergencies Lecture: Urologic Emergencies	Review Battaglia Ch. 22 Review Battaglia Ch. 24	<u>Assignments</u> Ch. 22 and 24 VTNE Review Table (30 points)
Week 7 Tuesday 7/21	Lab (Live Animals and Manikins): - Bandaging - CPR - IV Blood Collection - IV, IM, and SubQ injections - IV catheter placement		
Wednesday 7/22	Lecture: Metabolic and Endocrine Emergencies Lecture: Reproductive Emergencies	Review Battaglia Ch 23 Review Battaglia 25	<u>Assignments</u> - Ch. 23 and 25 VTNE Review Table (27 points) <u>Examinations</u> Exam #11 (49 points, due 7/29 by 1 pm) - Battaglia Ch. 22, 23, and 24 - CRI Math
Thursday 7/23	Lecture: Ocular Emergencies Lecture: Neurologic Emergencies	Review Battaglia Ch. 26 Review Battaglia Ch 27	<u>Assignments</u> - Ch. 26 and 27 VTNE Review Table (21 points) Research Project <u>Examinations</u> Exam #12 (45 points, due 7/29 by 1 pm) - Battaglia Ch. 25, 26, and 27 - CRI Math

Week 8 Tuesday 7/28	Assignment: Project Presentations (100 points) Make-up Lab if needed		
Wednesday 7/29	Final Review		
Thursday 7/30	No Class, instructor available		<u>Examinations</u> • Final Exam (130 points, due 8/1 by 11:59 pm)

EVALUATION METHODS

Grade Weight:

- ✓ Assignments – 35%
- ✓ Examinations – 65%

Assignments: All assignments and projects are due by the start of the next class time. There are no discussion board assignments currently scheduled in VET-250S. The instructor reserves the right to add assignments not listed in the above course outline.

Examinations: Examinations will be given throughout the class. Exams are listed above in the course outline. The instructor reserves the right to administer unannounced “pop-quizzes.” Final exams are comprehensive, and the majority of the final exam will be multiple choice. All exams are timed, to mimic the timed nature of the VTNE. In some web-flexed and online courses, examinations may be completed in Blackboard. This is done through Respondus with a lockdown browser and will be monitored through a webcam. **All Veterinary Technology students are required to achieve an average of 75% or higher score in the “Examinations” category in each VET course in either to receive a C or higher in the class.**

Late Submission Policy: In rare cases, a required absence with documentation can be excused by the Program Director. If an absence is excused, work can be completed and exams can be taken, if this is accomplished the first day the student returns to class. All student work made up with an excused absence is subject to a 20% deduction in score. The instructor may require the student to make an appointment to accomplish the missed assignments. Failure to keep this appointment results in an immediate failing grade on all missed assignments.

POLICY STATEMENTS

Students in the Veterinary Technology program must obtain a “C” or higher in all veterinary technology courses..

Students must maintain a cumulative GPA of 2.0 or higher through the entirety of the program.

Students must achieve an exam average of 75% or higher in each VET course to remain in the program.

AVMA CVTEA Essential Skills: The majority of courses in the Veterinary Technology Program have either knowledge-based and/or hands-on skills in which each student must be deemed competent. All knowledge-based skills are covered under our Assessments policy (occasionally found in the Projects category), stated above. Hands-on skills scheduled in this class are listed below. If a skill is scheduled during the course, **attendance is mandatory**. Missing even just one hands-on AVMA CVTEA Essential Skill can result in an overall failing course grade and/or taking a class that has this course as a prerequisite. A comprehensive list is available at:

<https://www.avma.org/ProfessionalDevelopment/Education/Accreditation/Programs/Pages/cvtea-pp-appendix-i.aspx>

- ✓ The following must be completed in VET 250S Small Animal Nursing and Techniques
 - Collect urine sample:
 - Catheterize male dog* [GROUP]

- *Perform cystocentesis (small animal)** [GROUP]
- *Apply and remove bandages and splints**
- 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**
- ✓ These additional hands-on will be completed in Clinicals:
 - *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)**
 - *Collect urine sample:*
 - *collect voided urine sample (small animal)**
 - *Environmental conditions: implement sanitation procedures for animal holding and housing areas**
 - *Administer parenteral medications:*
 - *subcutaneous (dog, cat)**
 - *intramuscular (dog, cat)**
 - *intravenous (dog, cat)**
 - Fluid therapy:
 - *administer subcutaneous fluids**
 - *place intravenous catheters (cephalic*, saphenous*)*
 - *maintain and care for catheters**

Dress Code: Scheduled labs (includes any classroom time working with any animals or biological specimens), field trips where the student will be working with animals, and during clinic rotations and internship, VET students are required to meet a strict dress code. If the below dress code is not met, the student may be asked to leave until they are able to return in the proper attire. This could result in missing essential skills. See above policy regarding missed essential skills.

- ✓ Closed-toed and closed-heeled shoes (sneakers or orthopedic clogs recommended or weatherproof boots recommended for large animal sites)
- ✓ Scrubs
 - Clean and neatly pressed, not faded, discolored or ripped, nor "see through"
 - Scrub pants must be of a length to cover the ankle but must not touch the floor to prevent contamination and promote infection control.
 - A long-sleeved scrub jacket must be worn when working with animals or lab specimens.
- ✓ Long hair will need to be pulled back and secured
- ✓ Fingernails
 - Should be kept short as possible for personal safety, hygiene, and dexterity
 - No acrylic nails permitted
 - If painted, freshly painted with no chips required. Clear or neutral colors recommended.
 - Exception: when assisting in surgery, no nail lacquer is permitted
- ✓ Minimal jewelry. Loose jewelry, such as hooped or dangling earrings, necklaces, and bracelets are prohibited. NOTE: Prior to participating in a surgical procedure, you may be asked to remove all jewelry.
- ✓ Avoid wearing strong perfume/cologne
- ✓ Avoid chewing gum
- ✓ Watch, with a second hand (may need to be removed depending on the procedure), a functional pen and a stethoscope should be readily available
- ✓ Clinic rotations and internships may have additional dress code requirements.

AI Restrictive Policy: Students cannot use AI tools such as ChatGPT on assignments in this course. All assignments should be prepared entirely by the student. Developing strong competencies in this area will prepare you for a competitive workplace. Therefore, AI-generated submissions are prohibited and will be treated as academic misconduct.

Cell Phones: Cell phone use is not permitted in class. A cell phone is not permitted to be carried on oneself during field trips, clinic rotations, or internships.

Communication: Announcements and emails are available through the blackboard system. Periodically check your ESCC email for class announcements. If there is an urgent message, announcements will be sent to all students via e-mail. Instructors usually check e-mail daily Monday through Friday. This is the easiest way to contact them with questions or problems. The instructor will get back to you within 24-48 hours. If they have not responded within 48 hours, please email them again.

GRADING:

The following grading scale will be utilized in all VET courses.

Grade	Percentage	GPA Points
A	93-100	4.0
B	85-92	3.0
C	78-84	2.0
D	70-77	1.0
F	69 or less	0.00

DELIVERY METHOD:

This course uses the web-flex delivery method.

Class Format	Class Time per Week	Study Time per Week	Total Time per Week	Length of Class	Total Time to Complete Course
Lecture	8 hours	16 hours	24 hours x	8 weeks =	192 hours

EDISON STATE COMMUNITY COLLEGE ACADEMIC HONESTY:

Cheating and plagiarism will not be tolerated in this course. Students who cheat or allow others to copy from their papers will receive a zero on the assignment in question. The ECC Academic Honesty Policy will be adhered to in this course. See the Student Handbook at <https://www.edisonohio.edu/Student-Resources/>

ACCOMMODATIONS /ACCESSIBILITY AND DISABILITY SUPPORT SERVICES POLICY

Edison State Community College will make reasonable accommodations for students with documented disabilities. If you believe you may need an accommodation based on the impact of a disability, contact the instructor privately with your self-identification letter. If you do not have a self-identification letter, contact Accessibility and Disability Support Services by emailing disabilities@edisonohio.edu or by calling 937.778.7850. Accessibility and Disability Support Services is located on the Piqua Campus in Room 160.

ADVISING SERVICES

Edison State's career pathway advisors are your partners in success. A career pathway advisor is the first advisor that you will meet with once you have made the decision to further your education. Together, you and your career pathway advisor will:

- Identify the right academic major to set you on your desired career path.
- Identify the courses you'll need to accomplish your academic goals.
- Help you develop a student plan tailored to your lifestyle and work schedule.
- Prepare you to navigate your first semester at Edison State.

You can find your career pathway advisor and faculty advisor information, including their email address, by logging into MyESCC and clicking on Student Planning. Go to Plan and Schedule and click on the Advising tab. You may also call 937-778-7850 to connect via phone call.

BOOKSTORE SERVICES

The Edison State Bookstore is here for all your educational supplies including textbooks, access codes, technology, and more! Online at <https://edisonohio.ecampus.com>

CAREER AND JOB SERVICES

Our Career and Job Services advisors are dedicated to helping students and alumni advance their professional development as they make career decisions, develop job search strategies, pursue experiential opportunities and secure employment. Career and Job Services also provides career assessments, career information, resume and cover letter help, job postings and resources, tips for interviewing and more. Visit <https://www.edisonohio.edu/Career-and-Job-Services/> for more information.

COMPUTERS

If you are working on campus, computers with internet access are available in the internet café. The Library and Tutoring Center has computers and printers available for your use.

STUDENT WELLNESS CENTER

College is stressful! Feeling burnt out, anxious, frustrated? When challenges arise, it's helpful to have someone to talk to. We have partnerships established with many local mental health providers and can connect you with area resources.

The Student Wellness Center helps students navigate obstacles which might cause issues or create a sense of distress during your school year. Edison State has built a network of health professionals to support students. With these partnerships, the Student Wellness Center can assist students who need support in areas such as:

- Recovery and Counseling referral
- Housing
- Food
- Physical well-being

Information and education are also provided on the topics of:

- Alcohol and drug abuse and prevention
- Sexual assault prevention and awareness
- Building healthy relationships
- Inclusion and belonging
- Survivor support
- Self-care
- Anti-Hazing

If you are struggling and need to speak with someone in person, please reach out to Velina Bogart, Coordinator of Student Wellness, at vbogart@edisonohio.edu, 937-778-7854, Room 193 (next door to the Security Office).

Walk in hours on campus are Tuesday, Wednesday, Thursday, 8am-5pm. Hours may vary according to the college schedule or events. You may schedule an appointment by clicking [here](#).

If this is a medical emergency, please call 911. If this is a mental health emergency, please call 988. Please note that the Charger Station Food Pantry has been relocated to Room 060 (next to the cafeteria).

LIBRARY SERVICES

The Edison State library is not only a comfortable place to study, we have an expansive collection of online resources available to help you with your research. Check out the library webpage here: <https://www.edisonohio.edu/Library/>. Libguides and short instructional videos are available to help you use these resources and can be found at: <https://libguides.edisonohio.edu/>. Please contact the library staff with any library questions you may have at library@edisonohio.edu, 937-778-7950 or stop in!

STUDENT RESOURCE CENTER AND CHARGER STATION FOOD PANTRIES

Edison State Community College is proud to assist students needing help to obtain basic necessities. The Student Resource Center and Food Pantry is stocked with all kinds of grab-and-go snacks, meal supplies, toiletries, household needs, and community resources. Stop by and check out our Charger Stations in Room 060 at Piqua, in the student lounge at Troy, in the Brooke-Gould Learning Resource Center at Eaton, and in Room 121 (for personal care items) and pantry items in the student lounge at Greenville.

TECHNICAL SUPPORT SERVICES

For Blackboard Assignment issues, the instructor should be the first point of contact.

For Log-in or other technology issues: There are several steps you can follow if you have issues logging in to Blackboard or Office.

During business hours:

- Password reset: Log onto office.com with your Edison email and follow the “forgot password” prompts.
- Reach out for help during regular business hours (9-5 Monday-Thursday, 9-4 Friday)
 - email to support@edisonohio.edu
 - call 937-778-8600 and ask for IT Help Desk

After hours:

- Password reset: Log onto office.com with your Edison email and follow the “forgot password” prompts
- Go to www.edisonohio.edu into the Resources tab and click "IT Help Desk" then click "Chat".
- Call 937-778-7957 and talk to the off-campus Blackboard company to get help

TITLE IX STATEMENT - Anti-Discrimination, Harassment and Bullying

It is the policy of the College to maintain a learning environment free from bullying, discrimination, sexual harassment or sexual violence. Title IX federal law protects students, employees and third parties with a relationship to the college. All Edison State Community College employees are required to report all knowledge of incidents that violate the Title IX policy to the Title IX Coordinator or Deputy Title IX Coordinator immediately. Student and employee confidential consultation is available through the Coordinator of Health and Wellness Services.

Title IX Policy and procedure language as well as contact information for the Coordinator of Health and Wellness, Title IX Coordinator and Deputy Title IX Coordinator can be found at www.edisonohio.edu/TitleIX/.

TESTING YOUR FAITH ACT POLICY

Edison State Community College is committed to providing an environment respectful of students' beliefs. Students are permitted to be absent for up to 3 days each semester based on their faith, religion, or spiritual belief system with no academic penalty. Students must complete the Testing Your Faith Act Accommodations

Form, <https://www.edisonohio.edu/services-support/registration-records>, located in “Forms” and provide a copy to their individual faculty within 14 days from the start of the course. The entire policy can be found in the student handbook at <https://www.edisonohio.edu/services-support/student-resources>.

TUTORING SERVICES

All Edison State students are eligible to receive free tutoring and learning support services through our Tutoring Center. Available services include Edison State tutors, both online and in-person, covering a wide variety of courses including various levels of math and paper reviews, online tutoring through OhioLINK eTutoring, distraction-reduced study rooms, and the use of Tutoring Center resources including subject-specific and general study guides. For more information on tutoring services, visit the Tutoring Center in the Library, email us at tutoringcenter@edisonohio.edu, call 937-778-7959, or visit our webpage at <https://www.edisonohio.edu/tutoring-center/>

ADDITIONAL SUPPORT SERVICES

For additional help, please click the ASSIST tab on Blackboard or the Edison State Student Resources folder within your course.