

VT-1325: VETERINARY OFFICE APPLICATIONS

Cuyahoga Community College

Viewing: VT-1325 : Veterinary Office Applications

Board of Trustees:

1/30/2025

Academic Term:

Fall 2025

Subject Code

VT - Veterinary Technology

Course Number:

1325

Title:

Veterinary Office Applications

Catalog Description:

Overview of veterinary technician's role in office procedures, workflow, automated veterinary office processing, record-keeping, and computer hardware and software. Special emphasis on veterinary technician's role in these processes. Learn the basics of the metric system and conversion between units of measure commonly used in medical math systems.

Credit Hour(s):

2

Lecture Hour(s):

1

Lab Hour(s):

2

Requisites

Prerequisite and Corequisite

Departmental approval.

Outcomes

Course Outcome(s):

Communicate effectively and professionally with clients either via telephone or other electronic device or face-to-face regarding health and wellness issues for their animals.

Essential Learning Outcome Mapping:

Written Communication: Demonstrate effective written communication for an intended audience that follows genre/disciplinary conventions that reflect clarity, organization, and editing skills.

Oral Communication: Demonstrate effective verbal and nonverbal communication for an intended audience that is clear, organized, and delivered effectively following the standard conventions of that language.

Objective(s):

1. Admit and discharge patients, make appointments, and handle hospital telephone contacts including general questions about licensing, animal control, and euthanasia in accordance with standard veterinary office procedures.
2. Create a positive hospital impression by effectively resolving some of the difficult interpersonal situations which are routinely encountered in veterinary practice by utilizing good communication skills.

Course Outcome(s):

Communicate effectively and professionally with colleagues and co-workers in a veterinary or animal-care facility to provide optimum patient care and client service in a variety of veterinary and animal-care facilities.

Essential Learning Outcome Mapping:

Oral Communication: Demonstrate effective verbal and nonverbal communication for an intended audience that is clear, organized, and delivered effectively following the standard conventions of that language.

Written Communication: Demonstrate effective written communication for an intended audience that follows genre/disciplinary conventions that reflect clarity, organization, and editing skills.

Objective(s):

1. Use the system reference manuals and vendor support services to resolve problems and answer questions.
2. Create a positive hospital impression by effectively resolving some of the difficult interpersonal situations which are routinely encountered in veterinary practice by utilizing good communication skills.

Course Outcome(s):

Defuse potential conflicts or emotional situations and direct involved parties to creative and professional resolutions.

Essential Learning Outcome Mapping:

Oral Communication: Demonstrate effective verbal and nonverbal communication for an intended audience that is clear, organized, and delivered effectively following the standard conventions of that language.

Written Communication: Demonstrate effective written communication for an intended audience that follows genre/disciplinary conventions that reflect clarity, organization, and editing skills.

Objective(s):

1. Use the system reference manuals and vendor support services to resolve problems and answer questions.
2. Create a positive hospital impression by effectively resolving some of the difficult interpersonal situations which are routinely encountered in veterinary practice by utilizing good communication skills.

Course Outcome(s):

Generate effective legal and complete medical records, including but not limited to, patient observation and care notes, logs and consent forms.

Objective(s):

1. Perform introductory veterinary record keeping including maintenance of chronological records, problem-oriented veterinary medical records, and computer-based veterinary records, and explain the legal implications associated with these documents.
2. Recognize and follow legal and regulatory guidelines and limitations in record-keeping, especially concerning drugs, dispensing, and prescribing.
3. Recognize and implement the appropriate usage of authorization forms for treatment, surgery, hospitalization, euthanasia, and radiography of a client animal.

Course Outcome(s):

Handle routine hospital procedures, including patient admission and discharge, client education and information and inventory.

Objective(s):

1. Perform introductory veterinary record keeping including maintenance of chronological records, problem oriented veterinary medical records, and computer based veterinary records and explain the legal implications associated with these documents.
2. Recognize and implement the appropriate usage of authorization forms for treatment, surgery, hospitalization, euthanasia, and radiography of a client animal.
3. Apply methods of inventory control in veterinary practice.
4. Utilize client estimate forms and understand basic billing and collection procedures.

Course Outcome(s):

Utilize standard software packages for standard office and record-keeping procedures and to accurately handle daily and monthly veterinary business transactions for particular types of veterinary and animal-care facilities.

Essential Learning Outcome Mapping:

Written Communication: Demonstrate effective written communication for an intended audience that follows genre/disciplinary conventions that reflect clarity, organization, and editing skills.

Objective(s):

1. Correctly execute sign-on and password procedures.
2. Set up new client and patient records.
3. Update existing client and patient records.
4. Prepare and print invoices.
5. Post payments to open accounts.
6. Produce printed estimates for customers using standard invoice formats and word processing formats.
7. Update patient history records.
8. Produce and print "to-go-home" instructions.
9. Update inventory records.
10. Update and print code files.
11. Produce and print Rx labels.
12. Print vaccination certificates.
13. Use appointment-scheduling calendar.
14. Use word processing feature to create standard forms, letters, etc.
15. Print daily transaction report and balance to the actual monies received.
16. Print customer statements.
17. Run past due accounts report.
18. Set up and print vaccination reminders.
19. Set up and print special notices/reminders.
20. Describe the system's veterinarian-specific functions and reports.
21. Perform introductory veterinary record keeping including maintenance of chronological records, problem oriented veterinary medical records, and computer based veterinary records and explain the legal implications associated with these documents.
22. Describe the system's management reporting capabilities.
23. Describe basic differences of various software packages commonly used in the veterinary profession.
24. Recognize and follow legal and regulatory guidelines and limitations in record-keeping, especially concerning drugs, dispensing and prescribing.
25. Utilize client estimate forms and understand basic billing and collection procedures.
26. Correctly identify and operate all business computing equipment normally found in a veterinary practice.
27. Describe the organization of computerized data within the system.

Course Outcome(s):

Demonstrate knowledge of basic metric conversion.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Quantitative Reasoning: Analyze problems, including real-world scenarios, through the application of mathematical and numerical concepts and skills, including the interpretation of data, tables, charts, or graphs.

Objective(s):

1. Convert International System of Units (SI) and English measurements of length, volume, and weight.
2. Identify common medical notations and abbreviations related to the metric system, SI, and English units of measure.

Course Outcome(s):

Calculate and interpret dosages for medications given by veterinarians for multiple species.

Essential Learning Outcome Mapping:

Critical/Creative Thinking: Analyze, evaluate, and synthesize information in order to consider problems/ideas and transform them in innovative or imaginative ways.

Quantitative Reasoning: Analyze problems, including real-world scenarios, through the application of mathematical and numerical concepts and skills, including the interpretation of data, tables, charts, or graphs.

Objective(s):

1. Calculate dosages from percentage strength solutions.
2. Calculate the amount of solute per ml of solution given a ratio.
3. Calculate the ratio of drug to diluent given the amounts of drug and diluent or simple parts.
4. Calculate the amount or volume of drug needed given a medication order and the dose and amount of medication on hand.
5. Calculate a dosage based on a schedule (milligram/kilogram).
6. Identify correct dose and schedule for medications administered by veterinarians.
7. Convert from one unit to another within the metric system.

8. Demonstrate the ability to calculate a constant rate Infusion (CRI).
 9. Understand common drip sets used in veterinary medicine: macrodrip (various sizes) and microdrip set.
 10. Calculate drip rates for fluids in drops/min, drops/hour, ml/hour, ml/min, ml/second, and drops/second.
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Methods of Evaluation:

1. Quizzes
2. Unit lecture examinations
3. Unit laboratory written and practical examinations
4. Final examinations
5. Homework assignments
6. Student projects
7. Journal article review
8. Discussion board as assigned

Course Content Outline:

1. Basic metric conversion
 - a. Definition
 - b. Reasons
 - c. Use in veterinary medicine
 - d. Common units used in veterinary medicine
2. Calculation of drug dosages
 - a. Convert between units
 - b. Oral
 - c. Injectable
 - d. Fluid doses
 - e. Body weight conversion
 - f. Calculation
3. Fluid therapy dose calculations
 - a. Drip rates in gtts/min
 - b. Drip rates in gtts/sec
 - c. Drip rates in ml/hour
 - d. Drip rates in ml/min
4. Effective verbal communication
 - a. Telephone techniques
 - i. emergency calls
 - ii. making appointments
 - iii. questions on animal health
 - iv. questions on services and pricing
 - v. professional phone calls
 - vi. personal calls
 - vii. vendors
 - b. Face to face client communication
 - i. importance of body language
 - ii. attitude
 - iii. salutation and greetings/sign-in sheets
 - iv. listening
 - v. special situations
 - vi. conflict resolution skills
 - c. Staff communication and teamwork
5. Medical records
 - a. Chronological medical records
 - b. The problem-oriented veterinary medical records
 - c. Example of computerized veterinary medical records
 - d. Lost records
 - e. Medicolegal requirements of hospital records: Drug Enforcement Administration (DEA) and State of Ohio Board of Pharmacy
6. Hospital logs and forms

- a. Pharmacy logs
- b. Radiology logs
- c. Surgery/anesthesia logs
- d. Controlled substances records
- e. Laboratory logs
- f. Client medical handouts
7. Inventory control and purchasing techniques
 - a. Utilization of veterinary computer software to complete inventory
8. Routine office procedures
 - a. Admitting patients to exam rooms
 - b. Hospital admissions
 - c. Hospital patient releases
9. Hospital billing and collection procedures
 - a. Financial forms
 - b. Hospital ledgers
10. Introduction to computer usage in veterinary practice
 - a. Utilizing computer software on a weekly basis to complete basic office tasks
11. Description of computer hardware and its function
 - a. Peripheral devices
 - i. input (monitor, keyboard, mouse)
 - ii. output (printer for paper, labels)
 - iii. storage (disk drives/disks)
 - iv. surge protector
 - v. auxiliary power source
 - b. The processor
 - c. Communications set up (satellite offices)
12. Operation of computer equipment
 - a. Power-up sequence
 - b. Why have a surge protector and auxiliary power source
 - c. Usage and adjustment of the keyboard
 - d. Adjustment of monitor
 - e. Printer operation: paper adjustments, ribbon (ink cartridge) replacement
 - f. Disks and backup procedures
 - g. Reference manuals - how to use them
13. Describe data kept by a veterinary practice and the interrelationship of files
 - a. Customer
 - b. Patient
 - c. Code
 - d. Inventory
 - e. Payments
 - f. Documents
14. System security levels, sign on procedures and passwords
 - a. System security levels
 - b. Sign on procedures
 - c. Passwords
15. The screens for capture of customer and patient data
 - a. Ways of accessing these screens
 - b. Help features available in each screen
 - c. Printing of patient labels
16. Preparation and printing of routine transactions
 - a. Invoices and estimates
 - b. Posting of payments
17. Different options for maintaining patient history
 - a. Full detailed history vs. abbreviated history generated via invoice
 - b. Possible workflows
18. The process for maintaining billing codes and inventory data: items from which invoices draw their amounts
19. Uses of word processing to create standard and special forms for the practice (release forms, information sheets, etc.)

- a. Release forms
- b. Informational sheets
- c. Other forms used in veterinary setting
- 20. End-of-day processing routine
 - a. Daily business transaction
 - b. Balancing process
- 21. Billing options used in practices and the process to run statements and reports for the practice: documents needed to support collections
 - a. Use of veterinary software to perform these actions
- 22. Special or periodic processing
 - a. Rx labels
 - b. Reminders card
 - c. Special notices
 - d. The steps needed to generate each
- 23. System functionality: likely to be used by the veterinarian only and/or the practice manager
 - a. Use of veterinary software to pull reports
- 24. Procedural differences of a small animal practice vs. a farm animal/equine
 - a. Batch entry invoices (time-log of work sheet provided by practitioners outside of the hospital)
 - b. Batch application of cash from monthly (rather than immediate) billing
- 25. Other standard software packages use in the veterinary industry
 - a. Similarities
 - b. Differences
- 26. Organization of the system's reference manual and the process for contacting the vendor to get assistance
 - a. Difference between hardware and software problems
 - b. Option of manual processing while system repair is underway
- 27. Marketing, advertising and the impact of social media
 - a. Discussion of the impact of marketing, advertising, and social media

Resources

Bassert, Joanna, editor, et al. *McCurnin's Clinical Textbook for Veterinary Technicians*. 10th ed. Elsevier, 2022.

Opperman and Grosdidier. *The Art of Veterinary Practice Management*. 2nd ed. Advanstar Veterinary, 2014.

Prendergast, Heather. *Front Office Management for the Veterinary Team*. 3rd ed. Saunders/Elsevier, 2019.

Bassert, Joanna M. *Workbook for McCurnin's Clinical Textbook for Veterinary Technicians*. 10th ed. Elsevier, 2021.

Lake, Terry and Green, Nicola. *Essential Calculations for Veterinary Nurses and Technicians*. 4th ed. Elsevier, 2023.

Colville, Thomas, and Joanna Bassert. *Clinical Anatomy and Physiology for Veterinary Technicians*. 4th ed. Elsevier, 2024.

Colville, Thomas, and Joanna Bassert. *Laboratory Manual for Clinical Anatomy and Physiology for Veterinary Technicians*. 4th ed. Elsevier, 2024.

Tighe, Monica M., and Marg Brown, editors. *Mosby's Comprehensive Review for Veterinary Technicians*. 5th ed. Elsevier, 2020.

Prendergast, Heather, editor. *Review Questions and Answers for Veterinary Technicians*. 6th ed. Elsevier, 2022.

Tear, Marianne, , editor. *Small Animal Surgical Nursing*. 4th ed. Elsevier, 2022.

Resources Other

1. Intravet Veterinary Practice Management Software. Intra Corporation, Columbus, OH.
2. Veterinary Management Software Package and Support Services Professional Software, Inc., Hills Corporation, Effingham, IL.
3. Veterinary Office Applications, lecture and laboratory notes.
4. On the floor at dove. <https://go.atdove.org/>

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