MURRAY STATE UNIVERSITY
COURSE SYLLABUS

VETERINARY TECHNOLOGY DEPARTMENT

COURSE NUMBER: AGR-322-01, 02  CREDIT HOURS: 3.0

I. **TITLE:**
Veterinary Laboratory Principles

II. **CATALOG DESCRIPTION:**
This is an introductory course to the veterinary laboratory for the veterinary technologist. Laboratory safety, microscopy, specimen collection and diagnostic analysis, laboratory instrumentation and techniques are taught for development of proficient laboratory skills. Each week there will be two 1-hour lectures and one 2-hour lab.

III. **PURPOSE:**
To introduce students to the basic skills and techniques utilized in the veterinary clinical laboratory

IV. **OBJECTIVES:**
- To develop within the student an awareness of the veterinary laboratory.
- To increase students awareness of various theories and principles behind them.
- To stimulate independent learning and self-motivation in learning various techniques necessary for a veterinary practice.
- To create a strong foundation in the veterinary clinical laboratory for future advanced classes.
- To increase student’s confidence in building the essential skills necessary to perform various diagnostic tests of various species.

V. **CONTENT OUTLINE:**
- Sample collection, anticoagulants, preservation and handling
- Composition of blood
- Understanding Diagnostics
  - Packed cell volume
  - Total plasma protein
  - Clinical chemistry
  - Hematology
- Laboratory
  - Refer to laboratory content for additional information needed. Any additional laboratory information is an adjunct to this syllabus and considered to be part of this syllabus

VI. **INSTRUCTIONAL ACTIVITIES:**
- Each week there will be a two-hour lab, allowing students hands-on-experience. Missed laboratories cannot be made up; however, each student is responsible for all materials and techniques covered in lab.
- Students will be required to create a laboratory procedure manual. The manual is designed to aid the student in future classes as a reference manual. The manual will consist of a thoroughly written explanation of the technique, materials, normal values, and any
supplemental materials that will enhance the student’s performance in each technique. Refer to laboratory instructor’s guidelines for specific details.

- No hats or caps of any kind worn during lecture or laboratory.

**ADDITIONAL REQUIREMENTS: Laboratory**

- Texts
- **White lab coat**
- **Ceil blue scrubs**
- **Closed toed shoes**
- Long hair tied back or put up during labs
- Not hats, caps or bandanas to be worn in lab

- **Students must dress appropriately to attend lab. Students coming to lab without ceil blue scrubs and a white lab coat will be sent home and receive an “O” for the day.**

- Calculator (No cell phones or other electronic devices will be permitted for calculations)
- Three ring binder for lab note book
  - To be discussed by instructor
- Handouts and assignments from Black Board

**VII. FIELD, CLINICAL AND/OR LABORATORY EXPERIENCES:**

- Laboratories will follow lectures as close as possible; however, there will be variations due to the amount and types of material and skills to be covered.

**VIII. RESOURCES:**

- Laboratory requirements:
  - Name tag (professional)-optional
  - Black or blue pen
  - Pencil
  - Sharpie
  - Calculator (Students MUST have a simple calculator. NO cell phones or other electronic devices will be allowed for any calculations)

**XI. GRADING PROCEDURES:**

- A minimum of three one-hour exams will be given. Due to the amount of material being covered, the number of exam may be adjusted to meet the needs of the class. Exam dates will be discussed in class and notice will be given. Prior arrangements for absences from an exam or quiz must be approved by instructor; otherwise, there will be no makeup of an exam or quiz. Missing an exam or quiz will result in a zero. Pop quizzes will be given periodically. An absence form a pop quiz will result in a zero with no opportunity for makeup.

- The final exam will be given as scheduled in the bulletin of classes. No early finals will be given.

- Any homework assignments or other projects are due on the day designated by the instructor.

- **Late papers or assignments will not be taken.**

- **DO NOT EMAIL ASSIGNMENTS OR PROJECTS.**

- **ALL ASSIGNMENTS MUST BE TYPED AND TURNED IN IN-PERSON TO INSTRUCTOR AT DESIGNATED TIME.**
• Grading Scale
  90%-- 100% = A
  80%-- 89% = B
  70%-- 79% = C
  60%-- 69% = D
  Below 60% = E

• The final grade is determined by weighted average with 70% derived for lecture exams, quizzes and assignments, and 30% derived from laboratory and assignments.

X. ATTENDANCE POLICY:
• Due to the nature and amount of material to be covered--Students are required to attend class and laboratories. Three absences will be allowed (excused or unexcused), including laboratory absences. After the third absence there will be an automatic deduction of one letter grade for each additional absence from the final grade.

XII. ACADEMIC HONESTY POLICY:
• NOTE: The School of Agriculture Faculty have adopted and implemented an Academic Honesty Policy in addition to the University Honesty Policy, which can be found in the current Undergraduate Bulletin and Graduate Bulletin. The policy sets guidelines regarding acts of dishonesty and the procedure to follow should an event occur. It is each Agriculture student’s responsibility to obtain and read a copy of this document. The School’s Academic Honesty Policy can be obtained by asking for a copy from any Agriculture Faculty member or the Secretary.

XIII. TEXT AND REFERENCES:
• Laboratory Procedures for Veterinary Technicians, 5th ed., Hendrix & Sirois, (required)
• Hematology Techniques and Concepts for Veterinary Technicians, 1st ed., Voigt, (required)
• Veterinary Hematology, Atlas of Common Domestic and Non-domesticSpecies, 2nd ed., Regan, Rovira and DeNicole, (required)
• Medical dictionary, (required)

XIV. PREREQUISITE: AGR-310 with a minimum grade of “D”. No exceptions

XV. MSU SCHOOL OF AGRICULTURE CELL PHONE POLICY:
  ▪ The School of Agriculture recognizes that in today’s world cell phones often a necessary form of communication for students.
  ▪ It shall be the policy of the School that no cell phone usage shall be allowed in class and/or labs without the prior consent of the course instructor. This shall include verbal calling, incoming calls, email, text messaging, and use of cell phone calculators on tests and quizzes.
  ▪ Cell phones must be kept on vibrate and out of sight and use (i.e. secured to a person’s belt or kept in a bag or purse away from desks and lab counters).
  ▪ Should a student’s cell phone be visible, ring, or other form of unauthorized usage that is interruptive to the class or lab, the student may be asked to leave class and not return for that class/lab period.
  ▪ Upon prior consent of the instructor, a student may obtain permission to use their phone in case of an emergency or in critical family situations.
XVI. STATEMENT OF AFFIRMATIVE ACTION AND EQUAL OPPORTUNITY:

- Murray State University endorses the intent of all federal and state laws created to prohibit discrimination. Murray State University does not discriminate on the basis of race, color, national origin, gender, sexual orientation, religion, age, veteran status, or disability in employment, admissions, or the provision of services and provides, upon request, reasonable accommodation including auxiliary aids and services necessary to afford individuals with disabilities equal access to participate in all programs and activities. For more information, contact Sabrina Y. Dial, Director of Equal Opportunity, Murray State University, 103 Wells Hall, Murray, KY 42071-3318. Telephone: 270-809-3155 (voice), 270-809-3361 (TDD).

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