

Associate of Applied Science Veterinary Technology

McLENNAN COMMUNITY COLLEGE

Degree Description

Accredited by the American Veterinary Medical Association

This academically challenging program is designed to provide the theory and practice necessary to follow a fulfilling career as a Licensed Veterinary Technician. A veterinary technician is knowledgeable in the care and handling of animals, basic principles of normal and abnormal anatomy and physiology, and routine laboratory and clinical procedures.

Training as a veterinary technician enables the student to work as professional technical support to veterinarians, biomedical researchers and other scientists. Students can also find positions in the pharmaceutical industries, zoological gardens, animal control and humane organizations, and local and state health departments.

Enrollment into the Veterinary Technology Program is limited and competitive. Students must meet the admission requirements to the college as well as admission requirements into the Veterinary Technology Program. See the Veterinary Technology website or contact the program director for more information.

Students must maintain a minimum grade of C in all required courses, as well as an overall grade of 2.0 in order to progress in the degree program. Veterinary Technology students have five academic program years to complete the curriculum after official enrollment in the first program course.

Marketable Skills:

Upon completion of the Veterinary Assistant Program, students will be able to demonstrate entry-level proficiency in the following areas:

1. Office and Hospital Procedures

2. Pharmacology-medication administration and dispensing, handling and disposal of pharmaceuticals, prescription drug labeling

3. Anesthesia and surgical assisting-basic understanding of an anesthetic machine, principles of aseptic technique, patient preparation, basic surgical instrument identification, and preparation of items needed for surgery.

4. Radiology-patient positioning, safety and protective equipment used when taking radiographs

5. Parasitology, Clinical Pathology and Hematology-knowledge of supplies needed in the noted areas, proper handling of and preparing specimens for diagnostic assessment

6. Animal Husbandry, Handling, Behavior and Restraint

7. Kennel care-maintaining the patient care area, understanding the principles of disinfection/sanitation, feeding, walking and caring for the veterinary patient while boarding and/or hospitalized in the veterinary facility.

8. Professionalism and communication in the veterinary setting

9. The importance of a commitment to lifelong learning

Program Prerequisites

Academic courses must be completed before entering the program.

| BIOL 1406 Biology for Science Majors 1 or BIOL 1408 Biology for Non-Science Majors 1 | 4 hours |
|---|---------|
| ENGL 1301 Composition I | 3 hours |
| MATH 1314 College Algebra or MATH 1332 Contemporary Mathematics (Quantitative Reasoning) | 3 hours |
| PSYC 2301 General Psychology or SOCI 1301 Introduction to Sociology | 3 hours |

Total prerequisite hours: 13 hours

| Semester I | Hours |
|---|----------|
| VTHT 1301 Introduction to Veterinary Technology | 3 hours |
| VTHT 1105 Veterinary Medical Terminology | 1 hours |
| VTHT 1413 Veterinary Anatomy & Physiology | 4 hours |
| CHEM 1405 Introductory Chemistry I | 4 hours |
| | 12 hours |

| Semester II | Hours |
|--|----------|
| VTHT 1249 Veterinary Pharmacology | 2 hours |
| VTHT 2321 Veterinary Parasitology | 3 hours |
| VTHT 2223 Clinical Pathology I | 2 hours |
| VTHT 2201 Canine and Feline Clinical Management | 2 hours |
| <u>Creative Arts elective</u> or Language, Philosophy, & Culture elective | 3 hours |
| | 12 hours |

| 1 hours |
|---------|
| 1 hours |
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| Semester III | Hours |
|--|----------|
| VTHT 1341 Anesthesia & Surgical Assistance | 3 hours |
| VTHT 1245 Veterinary Radiology | 2 hours |
| VTHT 2331 Veterinary Clinical Pathology II | 3 hours |
| VTHT 2205 Equine Clinical Management | 2 hours |
| | 10 hours |

| Semester IV | Hours |
|--|----------|
| VTHT 2325 Large Animal Assisting Techniques | 3 hours |
| VTHT 2213 Lab Animal Clinical Management | 2 hours |
| VTHT 1217 Veterinary Office Management | 2 hours |
| VTHT 2439 Veterinary Nursing Care | 4 hours |
| VTHT 2166 Practicum Veternarian Animal Health Technology | 1 hours |
| | 12 hours |

Total hours: 47 hours

Electives/General Education Courses

Creative Arts

| ARTS 1301 Art Appreciation | 3 hours |
|---|---------|
| ARTS 1303 Art History I (Prehistoric to the 14th Century) | 3 hours |
| ARTS 1304 Art History II (14th Century to the Present) | 3 hours |
| DRAM 1310 Theater Appreciation | 3 hours |
| DRAM 2361 History of Theater I | 3 hours |
| DRAM 2362 History of Theater II | 3 hours |
| HUMA 1315 Fine Arts Appreciation | 3 hours |
| MUSI 1306 Music Appreciation | 3 hours |
| MUSI 1308 Music Literature I | 3 hours |
| MUSI 1309 Music Literature II | 3 hours |
| MUSI 1310 American Music | 3 hours |

Language, Philosophy, & Culture

| ENGL 2321 British Literature | 3 hours |
|--|---------|
| ENGL 2322 British Literature I | 3 hours |
| ENGL 2323 British Literature II | 3 hours |
| ENGL 2326 American Literature | 3 hours |
| ENGL 2327 American Literature I: Up to the Civil War | 3 hours |
| ENGL 2328 American Literature II: Civil War to the Present | 3 hours |
| ENGL 2331 World Literature | 3 hours |
| ENGL 2332 World Literature I: Up to the 17th Century | 3 hours |
| ENGL 2333 World Literature II: 17th Century to the Present | 3 hours |
| ENGL 2341 Forms of Literature | 3 hours |
| FREN 2311 Intermediate French I | 3 hours |
| GERM 2311 Intermediate German I | 3 hours |
| HUMA 1301 Introduction to Humanities I | 3 hours |
| HUMA 1302 Introduction to Humanities II | 3 hours |
| PHIL 1301 Introduction to Philosophy | 3 hours |
| PHIL 1304 Introduction to World Religions | 3 hours |
| PHIL 2306 Introduction to Ethics | 3 hours |
| SPAN 2311 Intermediate Spanish I | 3 hours |
| SGNL 2301 Intermediate ASL I | 3 hours |

Course Descriptions

BIOL 1406 Biology for Science Majors I

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. NOTE: Must have passed the reading and writing portion of the TSI Assessment or have credit for INRW 0402. Semester Hours 4 (3 lec/3 lab)

BIOL 1408 Biology for Non-Science Majors I

Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Semester Hours 4 (3 lec/3 lab)

ENGL 1301 Composition I

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis is on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus is on writing the academic essay as a vehicle for learning, communication, and critical analysis. Prerequisite: TSI complete in Writing or the equivalent. Semester Hours 3 (3 lec)

MATH 1314 College Algebra

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Prerequisite: TSI math complete or MATH 0311. Semester Hours 3 (3 lec)

MATH 1332 Contemporary Mathematics (Quantitative Reasoning)

Intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered. Graphing calculator required. Prerequisite: TSI math complete or MATH 0308 or consent of division chair. Semester Hours 3 (3 lec)

PSYC 2301 General Psychology

General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. NOTE: Must have passed the reading portion of the TSI Assessment or have credit for INRW 0402. Semester Hours 3 (3 lec)

SOCI 1301 Introduction to Sociology

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. Semester Hours 3 (3 lec)

VTHT 1301 Introduction to Veterinary Technology

Survey of the profession of veterinary technology with emphasis on basic techniques, handling and care of domestic animals, and ethical and professional requirements. Admissions/Acceptance into Veterainary Tehcnology Associate Degree program, or, approval of Veterainary Technology Program Director for certificate students. Semester Hours: 3 (2 lec/4 lab)

VTHT 1105 Veterinary Medical Terminology

Introduction to word parts, directional terminology, and analysis of common veterinary terms. Admissions/Acceptance into Veterinary Technology Associate Degree program, or, approval of Veterinary Technology Program Director for certificate students. Semester Hours: 1 (1 lec)

VTHT 1413 Veterinary Anatomy & Physiology

Gross anatomy of domestic animals including physiological explanations of how each organ system functions. Prerequisites: Admission into the Veterinary Technology Program. Semester Hours: 4 (3 lec/4 lab)

CHEM 1405 Introductory Chemistry I

Survey course introducing chemistry. Topics may include inorganic, organic, biochemistry, food/physiological chemistry, and environmental/consumer chemistry. Designed for allied health students and for students who are not science majors. Semester Hours 4 (3 lec/3 lab)

VTHT 1249 Veterinary Pharmacology

Fundamentals of pharmacology including recognition, calculation, labeling, packaging, and administration of common veterinary drugs, biologics, and therapeutic agents. Discussion of normal and abnormal responses to these agents. Prerequisite: Successful completion of first semester of VTHT courses with a grade of C or better. Semester Hours 2 (2 lec/2 lab)

VTHT 2321 Veterinary Parasitology

Study of parasites common to domestic animals including zoonotic diseases. Prerequisite: Successful completion of first semester of VTHT courses and CHEM 1405, with a grade of C or better. Semester Hours 3 (2 lec/3 lab)

VTHT 2223 Clinical Pathology I

In-depth study of hematology and blood chemistries with emphasis on lab procedures. Successful completion of first semester VTHT courses with a grade of a "C" or better. Semester Hours: 2 (1 lec/3 lab)

VTHT 2201 Canine and Feline Clinical Management

Survey of feeding, common management practices, and care of canines and felines in a clinical setting. Review of common diseases of canines and felines encountered in the practice of veterinary medicine. Prerequisite: Successful completion of first semester VTHT courses with a grade of C or better. Semester Hours 2 (2 lec/1 lab)

VTHT 1166 Practicum Veternarian Animal Health Technology

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: Completion of all Previous VTHT courses and required general education courses with a grade of C or better. Student must have approval of program director to enroll in course. Semester Hours: 1 (9 clinical hours/week)

VTHT 1341 Anesthesia & Surgical Assistance

In-depth application of surgical, obstetrical, and anesthesia techniques including identification and use of instruments and equipment. Prerequisites: Successful completion of first years VTHT courses with a grade of C or better. Semester Hours 3 (2 lec/4 lab)

VTHT 1245 Veterinary Radiology

Presentation of theory and principles and practical application of radiology within the field of veterinary medicine. Prerequisite: Successful completion of first years VTHT courses with a grade of C or better. Minimum grade of C or better. Semester Hours: 2 (1 lec/4 lab)

VTHT 2331 Veterinary Clinical Pathology II

In-depth study of urinalysis and cytology. Survey of microbiological techniques. Emphasis on laboratory procedures. Prerequisite: Successful completion of first years VTHT courses with a grade of C or better. Semester Hours 3 (2 lec/4 lab)

VTHT 2205 Equine Clinical Management

Survey of feeding, common management practices, and care of equines in a clinical setting. Review of common diseases of equines encountered in the practice of veterinary medicine. Prerequisites: Completion of all first year VTHT courses with a minimum grade of C or better. Semester Hours: 2 (1 lec/3 lab)

VTHT 2325 Large Animal Assisting Techniques

Study of restraint, management, treatment, and medication techniques for farm animals. Prerequisites: Successful completion of all previous semesters of VTHT courses with a grade of C or better. Or, approval of Veterinary Technology Program Director for certificate students. Semester Hours 3 (2 lec/5 lab)

VTHT 2213 Lab Animal Clinical Management

Survey of feeding, management practices, and care of laboratory animals in a clinical setting. Review of common diseases of laboratory animals encountered in the practice of veterinary medicine. Prerequisites: Successful completion of all previous semesters of VTHT courses with a grade of C or better. Semester Hours 2 (2 lec/2 lab)

VTHT 1217 Veterinary Office Management

Practical experience in management of the veterinary practice. Emphasis on client relations, recordkeeping, inventory, employment skills, and computer skills in the veterinary environment. Prerequisite: Successful completion of all previous semesters of VTHT courses with a grade of C or better, for Veterinary Technology Associate Degree students, or, approval of Veterinary Technology Program Director for certificate students. Semester Hours: 2 (2 lec)

VTHT 2439 Veterinary Nursing Care

Capstone course requiring integration of course work in the field of veterinary technology. (Capstone) Prerequisites: No grade lower than a C in any VTHT course and approval of program director. Semester Hours 4 (3 lec/3 lab)

VTHT 2166 Practicum Veternarian Animal Health Technology

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: Successful completion of all previous semesters of VTHT courses with a grade of C or better. Semester Hours 1 (9 clinical/practicum hours per week)

ARTS 1301 Art Appreciation

A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical contexts. Semester Hours 3 (3 lec)

ARTS 1303 Art History I (Prehistoric to the 14th Century)

A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century. Semester Hours 3 (3 lec)

ARTS 1304 Art History II (14th Century to the Present)

A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day. Semester Hours 3 (3 lec)

DRAM 1310 Theater Appreciation

Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in major productions may be required. Applies as a required Humanities or Visual & Performing Arts course for all students. Semester Hours 3 (3 lec)

DRAM 2361 History of Theater I

Study of the history of the theater from primitive times through the Renaissance. Required of theatre majors; open to non-theatre majors. Semester Hours 3 (3 lec)

DRAM 2362 History of Theater II

Study of the history of the theater from the Renaissance through today. Required of theatre majors; open to non-theatre majors. Semester Hours 3 (3 lec)

HUMA 1315 Fine Arts Appreciation

This course is an exploration of the purposes and processes in the visual and performing arts (such as music, painting, architecture, drama, and dance) and the ways in which they express the values of cultures and human experience. Semester Hours 3 (3 lec)

MUSI 1306 Music Appreciation

Understanding music through the study of cultural periods, major composers, and musical elements. Illustrated with audio recordings and live performances. (Does not apply to a music major degree.) Applies as a required humanities or fine arts course for all students. Semester Hours 3 (3 lec)

MUSI 1308 Music Literature I

Survey of the principal musical forms and cultural periods as illustrated in the literature of major composers. Surveys music literature from Gregorian chant to the early classical period. Emphasis is on music materials and listening skills through recorded music and scores. Required for music majors and minors. Semester Hours 3 (3 lec)

MUSI 1309 Music Literature II

Survey of the principal musical forms and cultural periods as illustrated in the literature of major composers. Surveys music literature from the classical period to the present. Emphasis is on music materials and listening skills through recorded music and scores. Required for music majors and minors. Semester Hours 3 (3 lec)

MUSI 1310 American Music

General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music. Satisfies general humanities elective requirements. Semester Hours 3 (3 lec)

ENGL 2321 British Literature

A survey of the development of British literature from the Anglo-Saxon period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2322 British Literature I

A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2323 British Literature II

A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2326 American Literature

A survey of American literature from the period of exploration and settlement to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2327 American Literature I: Up to the Civil War

A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2328 American Literature II: Civil War to the Present

A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2331 World Literature

A survey of world literature from the ancient world to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2332 World Literature I: Up to the 17th Century

A survey of world literature from the ancient world through the 16th century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2333 World Literature II: 17th Century to the Present

A survey of world literature from the 17th century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

ENGL 2341 Forms of Literature

The study of one or more literary genres including, but not limited to, poetry, fiction, drama, and film. Prerequisite: ENGL 1301 or ENGL 2311. Semester Hours 3 (3 lec)

FREN 2311 Intermediate French I

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: FREN 1412, three years of high school French, or consent of instructor or division chair. Students with three years of high school French are encouraged to see a French instructor prior to enrolling. Semester Hours 3 (3 lec)

GERM 2311 Intermediate German I

Review and application of skills in listening comprehension, speaking, reading, and writing. Emphasizes conversation, vocabulary acquisition, reading, composition, and culture. Prerequisite: GERM 1412, three years of high school German, or consent of instructor or division chair. Students with three years of high school German are encouraged to see a German instructor prior to enrolling. Semester Hours 3 (3 lec)

HUMA 1301 Introduction to Humanities I

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Team taught by faculty from diverse departments as a colloquium (academic seminar led by a different lecturer and on a different topic at each session). Works may include studies, journals, novels, poems, treatises, graphic novels, films, plays, paintings, musical compositions, etc. Semester Hours 3 (3 lec)

HUMA 1302 Introduction to Humanities II

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Team taught by faculty from diverse departments as a colloquium (academic seminar led by a different lecturer and on a different topic at each session). Works may include studies, journals, novels, poems, threatises, graphic novel films, plays, paintings, musical compositions, etc. Semester Hours 3 (3 lec)

PHIL 1301 Introduction to Philosophy

A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications. Semester Hours 3 (3 lec)

PHIL 1304 Introduction to World Religions

A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam. Semester hours 3

PHIL 2306 Introduction to Ethics

The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value. Semester Hours 3 (3 lec)

SPAN 2311 Intermediate Spanish I

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis is on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412, three years of high school Spanish, or consent of instructor or division chair. Students with three years of high school Spanish are encouraged to see a Spanish instructor prior to enrolling. Semester Hours 3 (3 lec)

SGNL 2301 Intermediate ASL I

Review and application of conversational skills in American Sign Language and interpreting from signing to voice as well as from voice to signing. Introduction to American Sign Language literature and folklore. Prerequisite: SGNL 1402 with a grade of C or better or consent of the program director. Semester Hours 3 (3 lec)