

**TTEN-195 Toyota Computer Controlled Suspensions 1 cr.**

This course will cover the theory of operation of the electrical, mechanical, and hydraulic systems of the computer controlled suspension systems on Toyota vehicles. Proper service procedures and techniques will be presented. Safety will be emphasized. Corequisites: TTEN-190. Offered: Spring.

**TTEN-280 Toyota Cooperative Work Educ 4 cr.**

The student will be employed at an approved automotive repair facility which will provide relevant learning experiences that are directly related to the student's most recent classroom/laboratory experiences. Daily log and weekly reports MUST be submitted electronically once per week. The student will be supervised and evaluated jointly by his/her employer and San Juan College personnel. Prerequisites: TTEN-120. Offered: On Demand.

**TTEN-281 Toyota Cooperative Work Educ 4 cr.**

The student will be employed at an approved automotive repair facility which will provide relevant learning experiences that are directly related to the student's most recent classroom/laboratory experiences. Daily logs and weekly reports MUST be submitted electronically once per week. The student will be supervised and evaluated jointly by his/her employer and San Juan College personnel. Prerequisites: TTEN-140. Offered: On Demand.

**TTEN-282 Toyota Cooperative Work Educ 4 cr.**

The student will be employed at an approved automotive repair facility which will provide relevant learning experiences that are directly related to the student's most recent classroom/laboratory experiences. Daily logs and weekly reports MUST be submitted electronically once per week. The student will be supervised and evaluated jointly by his/her employer and San Juan College personnel. Prerequisites: TTEN-160. Offered: On Demand.

**TTEN-283 Toyota Cooperative Work Educ 4 cr.**

The student will be employed at an approved automotive repair facility which will provide relevant learning experiences that are directly related to the student's most recent classroom/laboratory experiences. Daily logs and weekly reports MUST be submitted electronically once per week. The student will be supervised and evaluated jointly by his/her employer and San Juan College personnel. Prerequisites: TTEN-175. Offered: On Demand.

**VETERINARY TECHNOLOGY****VETT-111 Vet Nursing Care I 2 cr.**

Veterinary Nursing Care 1 is an entry-level course designed to introduce students to basic nursing skills utilized by veterinary technicians and to act as a foundation of learning for subsequent nursing techniques courses. Offered: All. Faculty Permission Required.

**VETT-112 Vet Business Procedures 2 cr.**

Veterinary Business Procedures 1 is an entry-level course designed to give the student the basic skills necessary to function as a receptionist in a veterinary practice. Offered: All. Faculty Permission Required.

**VETT-113 Small Animal Disease I 2 cr.**

Small Animal Disease and Medical Care 1 is an entry-level course

designed to develop the basic knowledge of mammalian diseases and disease processes that may be encountered by a veterinary technician. Offered: All. Faculty Permission Required.

**VETT-114 Pharmacology & Medical Therapeutics 2 cr.**

Pharmacy and Medical Therapeutics 1 is an entry-level course designed to teach the student the basic classification and properties of the common pharmaceuticals used in veterinary medicine. Offered: All. Faculty Permission Required.

**VETT-115 Vet Anesthesia & Surgical Assisting I 2 cr.**

Veterinary Anesthesia and Surgical Assisting 1 is an entry-level course designed to help develop a strong foundation in anesthetic skills, surgical assisting skills, and perioperative procedures. Offered: All. Faculty Permission Required.

**VETT-116 Vet Diagnostic Imaging I 2 cr.**

Veterinary Diagnostic Imaging 1 is an entry-level course designed to develop the student's knowledge and basic skills in veterinary diagnostic imaging. Offered: All. Faculty Permission Required.

**VETT-117 Vet Clinical Pathology I 2 cr.**

Veterinary Clinical Pathology 1 is an entry-level course designed to develop the student's knowledge and skills in basic laboratory and diagnostic procedures. Offered: All. Faculty Permission Required.

**VETT-118 Veterinary Medical Terminology 2 cr.**

Entry level course designed to provide the student with a foundation in the language of veterinary medicine, focusing on pre-fixes, suffixes, word roots and their combining forms. Offered: All. Faculty Permission Required.

**VETT-130 Vet Nursing Care II 2 cr.**

Veterinary Nursing Care 2 is an intermediate course designed to instruct students in nursing care techniques including; bandages and casts, administration of medications, and sample collections. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-131 Vet Bus Procedures II 2 cr.**

Veterinary Business Procedures 2 is an intermediate course designed to instruct students in receptionist skills, animal behavior basics, utilization of computers in veterinary practice, veterinary business management, and grief counseling. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-132 Small Animal Disease & Medical Care II 2 cr.**

Small Animal Disease and Medical Care II is an intermediate course designed to instruct students in the study of selected small animal diseases and conditions, and the anatomical and physiological basis of the diseases that are being presented. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-133 Pharmacy & Medical Therapeutics II 2 cr.**

Pharmacy and Medical Therapeutics II is an intermediate course designed to instruct students in the cardiovascular, respiratory, and integumentary systems, the pharmaceuticals that affect those systems, and pharmacological calculations.

Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-134 Vet Anesthesia & Surgical Assisting II 2 cr.**

Veterinary Anesthesia and Surgical Assisting 2 is an intermediate course designed to instruct students in the preanesthetic evaluation of patients, the induction of anesthesia, and the monitoring of anesthetized and post-anesthetic patients. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-135 Vet Diagnostic Imaging II 2 cr.**

Veterinary Diagnostic Imaging 2 is an intermediate course designed to instruct students in radiographic safety techniques, developing radiographs, the proper use of contrast media, specialized radiographic procedures, and an introduction to veterinary diagnostic ultrasound. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-136 Vet Clinical Pathology II 2 cr.**

Veterinary Clinical Pathology II is an intermediate course designed to instruct students in parasitology and advanced cytological and hematological procedures. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-210 Vet Nursing Care III 2 cr.**

Veterinary Nursing Care 3 is an advanced course designed to instruct students in the topics of dentistry, and nursing care of small animal patients afflicted by disorders of specific body systems. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-211 Vet Business Procedures 2 cr.**

Veterinary Business Procedures 3 is an advanced course designed to develop advanced knowledge and skills in all financial aspects of veterinary practice, animal behavior, personnel and practice management, ordering of inventory, and accountability. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-212 Small Animal Disease & Medical Care III 2 cr.**

Small Animal Disease and Medical Care 3 is an advanced course designed to complete the study of selected specific small animal diseases and the anatomical and physiological basis of the specific diseases that are being presented. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-213 Pharmacology & Medical Therapeutic III 2 cr.**

Pharmacology and Medical Therapeutics 3 is an advanced course designed to instruct students in the musculoskeletal, nervous, endocrine, reproductive, digestive, urinary, special sense organs, and the pharmaceuticals that affect those systems. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-214 Vet Anesthesia & Surgical Asst III 2 cr.**

Veterinary Anesthesia and Surgical Assisting 3 is an advanced course designed to instruct students in advanced and interactive preanesthetic evaluations, induction of anesthesia, and the monitoring of anesthesia and post-anesthetic patients. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-215 Vet Diagnostic Imaging III 2 cr.**

Veterinary Diagnostic Imaging 3 is an advanced course designed to instruct students in advanced safety techniques, the use of contrast media, advanced radiographic procedures, and advanced veterinary diagnostic ultrasound techniques. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-216 Vet Clinical Pathology III 2 cr.**

Veterinary Clinical Pathology 3 is an advanced course designed to instruct students in hematology, cytology, histopathology, blood chemistry, urinalysis, and diagnostic microbiology. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-230 Vet Anatomy & Physiology 3 cr.**

Veterinary Anatomy and Physiology covers the anatomy and physiology of domestic animals and presents specific information on large animal and non-traditional species anatomy and physiology. Prerequisites: Student must have clinical site and preceptor approved. Offered: All. Faculty Permission Required.

**VETT-231 Lab Animal Diseases & Medical Care 3 cr.**

Laboratory Animal Diseases and Medical Care covers the common diseases of laboratory animals and emphasizes proper sanitation and disease prevention techniques, appropriate medication administration procedures, animal nutrition, reproduction, and behavior. Prerequisites: Student must have clinical site and preceptor approved. Video portfolios must be completed for animal nursing, surgical assisting, and clinical pathology. Offered: All. Faculty Permission Required.

**VETT-232 Large Animal Diseases & Medical Care 2 cr.**

Large Animal Diseases and Medical Care instructs students in sanitation and disease prevention techniques, correct use and administration and documentation of medications, and the pathophysiology of common diseases of large animals. Prerequisites: Student must have clinical site and preceptor approved. Video portfolios must be completed for animal nursing, surgical assisting, and clinical pathology. Offered: All. Faculty Permission Required.

**VETT-233 Large Animal Clinical Assisting 3 cr.**

Large Animal Clinical Assisting is designed to teach the student physical examinations, restraint techniques, treatment and medication administration, and record keeping techniques for large animals. Prerequisites: Student must have approved large animal clinical site or complete fast-track lab, and preceptor approved. Video portfolios must be completed for animal nursing, surgical assisting, and clinical pathology. Offered: All. Faculty Permission Required.

**VETT-235 Lab Animal/Small Exotic Clinical Procedure 2 cr.**

Covers the common diseases of lab animals and small exotics and emphasizes proper sanitation and disease prevention techniques, appropriate medication administration procedures, animal nutrition, reproduction, and behavior.

Prerequisites: All Tier-3 courses in VETT program. Student must have clinical site and preceptor approved. Video portfolios must be completed for animal nursing, surgical assisting, and clinical pathology. Offered: All. Faculty Permission Required.

**VETT-236 Emergency and Critical Care Medicine 2 cr.**

Emergency and Critical Care Medicine is designed to teach students emergency and critical care nursing skills to assist students in preparing for their credentialing examinations.

Prerequisites: Student must have clinical site and preceptor approved. Video portfolios must be completed for animal nursing, surgical assisting, and clinical pathology. Offered: All. Faculty Permission Required.

**WELDING****WELD-111 Basic Welding 2 cr.**

Course covers procedures, processes, equipment, and terminology employed in welding and related fields. Welding equipment and industry safety will also be covered. Provides students with the basic knowledge and hands-on experience to perform basic cutting operations. Stresses the theory and practical applications of stick electrode welding with E6010, E7018, and E7024 Electrodes. WELD 111, Basic Welding course is required for Machine Shop and the Diesel Degree and Certificate programs. Offered: Fall & Spring.

**WELD-128 Blueprint Reading for Welders 3 cr.**

Stresses interpretation of prints related to welding and metal fabrication. Types of prints, print reproduction, welding and construction symbols and workbook exercises are reviewed. Offered: Fall & Spring.

**WELD-129 Basic Welding I 4 cr.**

This course will cover introductory theory and practical applications of structural plate welding, welding safety, hand-held torch cutting operations and equipment set up. The development of student skills using the Shielded Metal Arc Welding process in all positions will be stressed. Corequisites: WELD-130,WELD-131,WELD-132. Offered: Fall & Spring.

**WELD-130 Basic Welding II 4 cr.**

This course will cover commonly used joint configurations and practical applications of these joints using structural plate. Advancing the development of student's skills using Shielded Metal Arc Welding in all positions and E-6010, E-7018 and E-7024 electrodes will be stressed. Corequisites: WELD-129,WELD-131,WELD-132. Offered: Fall & Spring.

**WELD-131 Basic MIG Welding 4 cr.**

A basic course designed to provide the student with the ability to setup, maintain, and operate Metal Inert Gas (MIG) welding equipment safely. Develop the necessary skills to weld structural joints and bend tests in all positions utilizing mild steel plate. Visual and destructive testing methods will be used to determine weld quality. Corequisites: WELD-129,WELD-130,WELD-132. Offered: All.

**WELD-132 Basic TIG Welding 4 cr.**

A basic course designed to provide the student with the ability to setup, maintain, and operate Tungsten Inert Gas (TIG) equipment safely. Develop the necessary skills to weld structural joints and perform bend tests in all positions utilizing mild steel plate. Weld quality will be measured with visual and destructive testing methods. Corequisites: WELD-129,WELD-130,WELD-131. Offered: All.

**WELD-133 Plate Welding I 4 cr.**

A continuation of Weld 130 with an emphasis on bend tests using light steel plate welded in all positions. The Shielded Metal Arc Welding (SMAW) process using E-6010 and E-7018 electrodes will be utilized. Weld quality will be measured using visual and destructive testing methods. Prerequisites: WELD-129, WELD-130, WELD-131, and WELD-132. Corequisites: WELD-134,WELD-135,WELD-136. Offered: Fall & Spring.

**WELD-134 Plate Welding II 3 cr.**

A continuation of Weld 133 with an emphasis on medium and heavy plate utilizing side bend tests in all positions using single vee groove and backing strips. The Shielded Metal Arc Welding (SMAW) process utilizing E-6010 and E-7018 electrodes will be used. Weld quality will be measured using visual and destructive testing methods. Prerequisites: WELD-129, WELD-130, WELD-131, AND WELD-132. Corequisites: WELD-133,WELD-135,WELD-136. Offered: Fall & Spring.

**WELD-135 Introduction to Metal Fabrication I 3 cr.**

This class will be an introduction to general layout and fabrication techniques as related to structural welding. Emphasis will be on construction of small projects to tolerances using blueprints. A variety of welding processes will be used in the vertical up and overhead positions only. Prerequisites: WELD-129, WELD-130, WELD-131, AND WELD-132. Corequisites: WELD-133,WELD-134,WELD-136. Offered: Fall & Spring.

**WELD-136 Introduction to Metal Fabrication II 3 cr.**

This class will focus on layout along with fabrication techniques as related to structural welding and repair. Emphasis will be on construction and repair of projects to tolerances using small groups and blueprints as applicable to industry settings. A variety of welding processes and all welding positions will be used. Prerequisites: WELD-129, WELD-130, WELD-131, AND WELD-132. Corequisites: WELD-133,WELD-134,WELD-135. Offered: Fall & Spring.

**WELD-204 Pipe Welding 1-G/2-G 3 cr.**

Stresses the theory and practical application of 1-G and 2-G pipe welding. This course will develop individual skills in the fit-up and technique of welding pipe, using E-6010 electrodes and the Shielded Metal Arc Welding process. Prerequisites: WELD-133, WELD-134, WELD-135, and WELD-136. Corequisites: WELD-205,WELD-206,WELD-207. Offered: Fall & Spring.

**WELD-205 Pipe Welding 5-G/6-G 4 cr.**

Stresses the theory and practical application of 5-G and 6-G pipe welding. This course will develop individual skills in the technique of downhill pipe welding, using E-6010 electrodes and the Shielded Metal Arc Welding process. Prerequisites: WELD-133, WELD-134,