VSCP
Veterinary Science Certificate Program

Veterinary Science Lessons	Knowledge and Skills	Student Expectations	
PRINCIPLES OF HEALTH SCIENCE			
Handling and Administering Medications-Clinical (7-4)	(1) The student applies mathematics, science, English, language arts, and social studies in health science.	(B) Apply data from tables, charts, and graphs to provide solutions to health-related problems	
Handling and Administering Medications-Clinical; Laboratory Aids & Examinations ; Causes of Infectious Diseases (7-4, 8, 10-1)		(C Interpret technical material related to the health science industry	
Anatomy & Physiology of Animals (4-1)		(H) Identify and analyze principles of body mechanics and movement such as forces and the effects of movement, torque, tension, and elasticity on the human body	
Anatomy & Physiology of Animals (4-1)		(J) Describes the stages of development relates to the life span	
Vital Signs (4-3)		(K) Identify the concepts of health and wellness throughout the life span	

Office Procedures-Clinical; Client Communications Clinical; Employee Communications-Clinical (2-1, 2 2, 2-3)	(2) The student uses verbal and nonverbal communication skills.	(A) Identify components of effective and non-effective communication	
Office Procedures-Clinical; Client Communications Clinical; Employee Communications-Clinical (2-1, 2 2, 2-3)		(B) Demonstrate effective communication skills for responding to the needs of individuals in a diverse society	
Office Procedures-Clinical; Client Communications Clinical; Employee Communications-Clinical {2-1, 2 2, 2-3)		(C Evaluate the effectiveness of conflict resolution techniques in various situations	

The Profession of Veterinary Medicine; The Veterinary Assistant(I-1, 1-2)	(4) The student assesses career options and the preparation necessary for employment in the health science industry.	(A) Locate, evaluate, and interpret career options and employment information	
Office Procedures-Clinical(2-1)	(5) The student identifies professional characteristics, academic preparation, and skills necessary for employment as defined by health science industry.	(A) Identify employer expectations such as punctuality, attendance, time management, communication, organizational skills, and productive work habits	
The Profession of Veterinary Medicine(I-1)		(B) Identify academic requirements for professional advancement such as certification, licensure, registration, continuing education, and advanced degrees	
Employee Communications-Clinical(2-3)	(6) The student identifies the systems related to health science.	(B) Identify the collaborative role of team members between systems to deliver quality health care	

Laws Related to Veterinary Medicine(IG-16)	(8) The student interprets ethical behavior standards and legal responsibilities.	(E) Research laws governing the health science industry	

Prevention (12-1)	(9) The student recognizes the rights and choices of the individual	(B) Identify wellness strategies for the prevention of disease	
Animal Management During Emergencies (17)	(10) The student recognizes the importance of maintaining a safe environment and eliminating hazardous situations.	(A) Identify governing regulatory agencies such as the World Health Organization, Centers for Disease Control, Occupations Safety and Health Administration, Food and Drug Administration, and National Institute for Occupational Safety and Health	
Animal Management During Emergencies (17)		(B) Relate industry safety standards such as standard precautions, fire prevention, safety practices, and appropriate actions to emergency situations	
Animal Management During Emergencies (17)		(C Identify safety practices in all aspects of the health science industry	
MEDICAL TERMINOLOGY			
Determining the Age of Animals (4-5)	(3) The student examines available resources	(A) Examine medical and dental dictionaries and multimedia resources	
HEALTH SCIENCES			

Handling and Administering Medications-Clinical (7-4)	(1) The student applies mathematics, science, English, language arts, and social studies in health science.	(A) Solve mathematical calculations appropriate to situations in a health-related environment	
Client Communications-Clinical (2-2)	(2) The student displays verbal and non-verbal communication skills.	(A) Demonstrate therapeutic communication appropriate to the situation	
Client Communications-Clinical (2-2)		(B) Execute verbal and nonverbal skills when communicating with persons with sensory loss and language barriers	
Client Communications-Clinical (2-2)		(C) Apply electronic communication with appropriate supervision	
Client Communications-Clinical; Employee Communications-Clinical {2-2, 2-3)	(3) The student analyzes and evaluates communication skills for maintaining healthy relationships throughout the life span.	(B) Demonstrate communication skills in building and maintaining healthy relationships	
Client Communications-Clinical; Employee Communications-Clinical {2-2, 2-3)		(C) Demonstrate strategies for communicating needs, wants, and emotions	

Client Communications-Clinical; Employee Communications-Clinical (2-2, 2-3)		(D) Evaluate the effectiveness of conflict resolution techniques in various situations	
Office Procedures-Clinical (2-1)	(S) The student identifies documents integrated into the permanent record of the health informatics system.	{B) Compile and record data according to regulatory agency policy	
Laws Related to Veterinary Medicine (16-16)	(11) The student maintains a safe environment	{A) Conform to governmental regulations and guidelines from entities such as the World Health Organization, Centers for Disease Control, Occupational Safety and Health Administration, Food and Drug Administration, and National Institute for Occupational Safety and Health	
Animal Management During Emergencies (17)		(B) Explain protocol related to hazardous materials and situations such as material safety data sheets	

Medical waste Disposal (16-14)		(D) Practice recycling and waste management for cost containment and environmental protection	

Prevention (12-1)	(12) The student assesses wellness strategies for the prevention of disease	(A) Research wellness strategies for the prevention of disease	
PRACTICUM IN HEALTH SCIENCE			
Office Procedures-Clinical (2-1)	(2) The student uses verbal and non-verbal communication skills.	(A) Accurately describe and report information, according to facility policy, observations, and procedures	
Client Communications-Clinical (2-2)		(Bl Demonstrate therapeutic communication skills to provide quality care	
Client Communications-Clinical (2-2)		(C) Employ therapeutic measures to minimize communication barriers	
The Profession of Veterinary Medicine (1-1)	(3) The student implements the knowledge and skills of a health science professional necessary to acquire and retain employment.	(B) Research academic requirements for professional advancement such as certification, licensure, registration, continuing education, and advanced degrees	

Employee Communications-Clinical (2-3)	(S) The student analyzes the role of a health science team member.	(A) Participate in team teaching and conflict management such as peer mediation, problem solving, and negotiation skills	
Handling & Restraining Animals (6)	(6) The student employs a safe environment to prevent hazardous situations.	(A) Integrate regulatory standards such as standard precautions and safe patient handling	
Animal Management During Emergencies (17)		(B) Respond to emergencies consistent with the student's level of training such as fire and disaster drills	
Handling and Administering Medications (7-4)		(C) Evaluate hazardous materials according to the materials according to the material safety data sheets	

The Battle Against Disease (9-2)		(D) Apply principles of infection control and body mechanics in all aspects of the health science industry	
Assisting with Surgery (14)	(8) The student implements skills in monitoring individual health status during therapeutic or	(A) Describe pre-procedural preparations	
Reading Animal Behavior; Vital Signs (4-2, 4-3)		(C) Identify care indicators of health status	
ANATOMY AND PHYSIOLOGY			
Anatomy and Physiology of Animals (4-1)	(4) The student evaluates the energy needs of the human body and the processes through which these needs are fulfilled	(B) Evaluates the means, including the structure and function of the digestive system, by which energy is processed and stored within the body	
Nutritional Diseases (11-1)		(C) Analyze the effects of energy deficiencies in malabsorption disorders such as diabetes hypothyroidism, and Crohn's disease	

Anatomy and Physiology of Animals (4-1)	(5) The student differentiates the responses of the human body to internal and external forces.		
Anatomy & Physiology of Animals (4-1)	(8) The student explores the body transport systems.	(A) Analyze the physical, chemical, and biological properties of transport systems, including circulatory, respiratory, and excretory	
Anatomy & Physiology of Animals (4-1)		(C) Contrast the interactions among the transport system	
Anatomy & Physiology of Animals (4-1)	(10) The student investigates structure and function of the human body	(A) Analyze the relationships between the anatomical structures and physiological functions of systems, including the integumentary, nervous, skeletal, musculoskeletal, cardiovascular, respiratory, gastrointestinal, endocrine, and reproductive	
Genetics & Disease; The Battle Against Disease; Diseases Common to Humans & Animals (9-1, 9-2, 9-3)		(Bl Evaluate the cause and effect of disease, trauma, and congenital defects of the structure and function of cells, tissues, organs and systems	
Determining the Age of Animals (4-5)		(D) Examine characteristics of the aging process on body systems	
Anatomy & Physiology of Animals (4-1)	(11) The student describes the process of reproduction and growth and development.	(Bl Identify the functions of the male and female reproductive systems	
MEDICAL MICROBIOLOGY			
Genetics & Disease; The Battle Against Disease; Infectious Disease(9-l , 9-2, 10)	(5) The student examines the role of pathogens in infectious diseases.	(C) Categorize diseases caused by bacteria, fungi, viruses, protozoa, rickettsias, arthropods, and helminths	
PATHOPHYSIOLOGY			

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Anatomy & Physiology of Animals (4-1)	(5) The student differentiates the responses of the human body to internal and external forces.	(A) Explain the coordination of muscles, bones, and joints that allow movement of the body

TEXAS A&M AGRILIFE EXTENSION

Genetics & Disease; The Battle Against Disease; Diseases Common to Humans & Animals; Food & Animal Diseases; Infectious Diseases; Non-Infectious Diseases (9-1, 9-2, 9-3, 9-4, 10, 11)	(4) The student analyzes the mechanisms of pathology.	(C) Identify factors that contribute to disease such as age, gender, environment, lifestyle, and heredity	
Infectious Diseases (10)	(6) The student examines a variety of human diseases.	(Fl Investigate ways diseases affect multiple body systems	
WORLD HEALTH RESEARCH			

Prevention; Treatment (12-1, 12-2)	(3) The student describes the engineering technologies developed to address clinical needs.	(A) Describe technologies that support the prevention and treatment of infectious diseases	