

**Certificate in Public Health Entomology
Course Descriptions**

CATEGORY I

ENTO 210. Global Public Health Entomology. (3-0). Credit 3.

Impacts of insects and insect-borne diseases on public health and well-being around the globe; insect biology, bloodfeeding, and transmission of human diseases; role of insect borne diseases on human history, socio-economic development, and public health infrastructure. Prerequisite: Freshman or sophomore classification or approval of instructor.

BESC 314. Pathogens, the Environment and Society. (3-0). Credit 3.

The impact of microorganisms (bacteria, fungi and viruses) on the development of modern culture and society; the role pathogens played in the history of mankind and the influence of the changing environment on emerging diseases. Prerequisite: Junior or senior classification.

VTPB 221. Great Diseases of the World. (3-0). Credit 3.

Great infectious and parasitic diseases; introduction to the major diseases affecting humans and other mammals including plague, tuberculosis, AIDS and malaria. Prerequisite: Freshman or sophomore classification

CATEGORY II

ENTO 208. Veterinary Entomology. (2-2). Credit 2.

Classification, biology and control of insects and other arthropods associated with livestock and poultry production; identification emphasized in laboratory.

ENTO 209. Veterinary Entomology Laboratory. (2-2). Credit 1. To be taken with ENTO 208.

ENTO 423. Medical Entomology. (2-3). Credit 3.

Biologies, disease relationships, and control of insects and other arthropods parasitic on or in humans; aspect of the fields of clinical and preventative medicine; survey, collection and taxonomy of medically-important arthropods in laboratory sessions. Prerequisite: Junior or senior classification or approval of instructor.

CATEGORY III

ENTO 403. Urban Entomology. (2-3). Credit 3.

Biology, economic importance and control strategies for arthropod pests commonly invading households and commercial structures in urban environments; laboratory consists of urban pest identification and special presentations and demonstrations covering topics related to urban pest problems and their control. Offered in 2011-2012 academic year and alternating years thereafter. Prerequisite: ENTO 201 or equivalent or approval of instructor

HLTH 354. Medical Terminology for the Health Professions. (3-0). Credit 3.

Designed for students interested in pursuing a career in a health, medical, scientific or other helping profession; develop medical word power skills combined with related health and disease knowledge. Prerequisite: Junior or senior classification.

VIBS 204. Fundamentals of Food Toxicology and Safety. (3-0). Credit 3.

Toxicity and safety of various foods and food additives, ingredients and contaminants; occurrence, control and prevention of food transmitted diseases. Prerequisite: Sophomore classification and CHEM 101.

VIBS 413. Introduction to Epidemiology. (3-0). Credit 3.

Study and measurement of disease and health in populations; examples from literature and current events; emphasizes concepts and appreciation for epidemiologic approaches and applications in life. Prerequisite: Junior or senior classification.

VIBS 432. Public Health Practices. (3-0). Credit 3.

Study of various diseases, causes and methods of prevention; epidemiology of disease; social and behavioral sciences; health policy and management; environmental and occupational health. Prerequisites: Junior or senior classification; BIMS major with a minimum overall 2.5 Texas A&M GPA

PHLT 302 Foundations of Public Health. Credits 3. 3 Lecture Hours.

History, philosophy, development and careers of public health; core values, ethics, concepts, functions and essential services of public health; population health and health improvement. Prerequisites: Public health major; junior or senior classification; or approval of instructor.

VTPB 301/WFSC 327. Wildlife Diseases. (3-0). Credit 3.

Basic mechanisms of diseases as they occur in wildlife populations; interplay of habitat requirements, individual physiological requirements and disease producing mechanisms of varied wildlife species. Prerequisite: Junior classification or approval of department head. Cross-listed with WFSC 327.

VTPB 409. Introduction to Immunology. (3-0). Credit 3.

Diverse concepts relative to immunologic mechanisms inherent to domestic and laboratory animals. Prerequisite: Advanced classification.

CATEGORY IV

ENTO 425. Disease Ecology. (3-0). Credit 3.

Ecological interactions that influence the distribution and abundance of pathogens, vectors, and hosts ultimately determine the spread of disease; impacts of urbanization, climate change, and other human influenced environmental changes on disease dynamics; integration of disease ecology into pathogen and vector monitoring and comprehensive strategies to reduce disease occurrence. Prerequisite: Junior or senior classification, or approval of instructor.