

# ENTOMOLOGY, PLANT PATHOLOGY, AND NEMATOTOLOGY (EPPN)

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## **EPPN 1000 Human, Plant, Animal and Insect Epidemics: Drivers of Society (1 credit)**

This is a 1000-level survey course that will discuss the ecological, social and economic impacts of human, plant, animal and insect epidemics. Historical and current real-world epidemics will be presented for each of the four main topics (human, plant, non-human vertebrate, and insect epidemics) to educate students on the ecological, social, and economic impacts that these have had or present to society. The course will be organized into four 4-week modules covering each epidemic category (human, plant, non-human vertebrate, and insect). In each 4-week module, three 50 minute lectures will be presented by faculty experts in the field discussing various aspects of each epidemic followed by a student debate to evaluate previous responses to epidemics and/or address potential responses to new unknown but potential epidemics. Typically Offered: Fall.

## **EPPN 1100 Introduction to Global Disease Ecology (2 credits)**

Introduction to the Global Disease Ecology major. Course will discuss research and internship opportunities, and potential career paths in human, animal, and plant health. Focus on communication, ethics, and the nature of science. Typically Offered: Varies.

## **EPPN 1540 Microbiology and the World Around Us (3 credits)**

General Education: Scientific Ways of Knowing

The purpose of this introductory microbiology course is to provide students with the basic understanding of the biology of microorganisms (emphasis on prokaryotes) and their interaction and importance in the environment. Topics addressed will include the structure, function, physiology, and the functional diversity of microorganisms (bacteria, Archaea, fungi, and viruses). Typically Offered: Spring.

## **EPPN 1550 Microbiology and the World Around Us: Laboratory (1 credit)**

Introductory Microbiology Laboratory is a course designed to complement the topics covered in EPPN 1540. The laboratory experience is aimed at introducing non-science majors to the skills of scientific observation, interpretation, and logical conclusion that are the basis for hypothesis testing using basic microbial techniques as a model. Typically Offered: Spring.

**Coreqs:** EPPN 1540

## **EPPN 2000 (s) Seminar (1-16 credits, max 99)**

Credit arranged.

## **EPPN 2030 (s) Workshop (1-16 credits, max 99)**

Credit arranged.

## **EPPN 2040 (s) Special Topics (1-16 credits, max 99)**

Credit arranged.

## **EPPN 2200 Global Disease Ecology Seminar (2 credits)**

Seminar leading to development of the research proposal and academic plan for the Global Disease Ecology major. The final product will be the research proposal prepared by the students and approved by their research mentor. Typically Offered: Varies.

**Prereqs:** EPPN 1100

## **EPPN 2990 (s) Directed Study (1-16 credits, max 99)**

Credit arranged.

## **EPPN 3980 (s) Internship (1-16 credits, max 99)**

Credit arranged.

## **EPPN 4000 (s) Seminar (1-16 credits, max 99)**

Credit arranged.

## **EPPN 4030 (s) Workshop (1-16 credits, max 99)**

Credit arranged.

## **EPPN 4040 (s) Special Topics (1-16 credits, max 99)**

Credit arranged.

## **EPPN 4050 (s) Professional Development (1-16 credits, max 99)**

Credit arranged.

## **EPPN 5000 (s) Master's Research and Thesis (1-16 credits, max 99)**

Credit arranged

## **EPPN 5010 (s) Seminar (1-16 credits, max 99)**

Credit arranged.

## **EPPN 5020 (s) Directed Study (1-16 credits, max 99)**

Credit arranged.

## **EPPN 5030 (s) Workshop (1-16 credits, max 99)**

Credit arranged.

## **EPPN 5040 (s) Special Topics (1-16 credits, max 99)**

Credit arranged.

## **EPPN 5050 (s) Professional Development (1-16 credits, max 99)**

Credit arranged.

## **EPPN 5060 Biology of Vector-borne Diseases Workshop (3 credits)**

The goal of the course is to create a knowledge network for a diverse community of practitioners that applies interventions to plant, animal and human vector-borne diseases. The course features sessions on selected themes developed by instructors from different areas of expertise.

The instructors will present short talks, relevant discussion questions, podcasts and case studies. Themes of the course will focus on the common biological and abiotic drivers of diseases that are carried by vectors, and will include diseases of humans, animals and plants. Typical subject areas include, but are not limited to: 1) host and pathogen biology and heterogeneity, 2) virulence and resistance mechanisms, 3) diagnostics, 4) containment, 5) disease ecology, 6) global change, 7) emergence and re-emergence of pathogens and 8) various methods of controlling disease. Typically Offered: Fall.

**Prereqs:** Permission

## **EPPN 5980 (s) Internship (1-16 credits, max 99)**

Credit arranged.

## **EPPN 6000 (s) Doctoral Research and Dissertation (1-45 credits, max 99)**

Credit arranged