

ENTOMOLOGY, PLANT PATHOLOGY, AND NEMATOTOLOGY (EPPN)

EPPN 110 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.

EPPN 154 Microbiology and the World Around Us (3 credits)

General Education: Natural/Integrated Science

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).

EPPN 155 Microbiology and the World Around Us: Laboratory (1 credit)

General Education: Natural/Integrated Science

Introductory Microbiology Laboratory is a course designed to complement the topics covered in Microbiology and the World Around Us (EPPN 154). 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.

Coreqs: EPPN 154

EPPN 200 (s) Seminar (1-16 credits)

Credit Arranged.

EPPN 203 (s) Workshop (1-16 credits)

Credit arranged.

EPPN 204 (s) Special Topics (1-16 credits)

Credit arranged.

EPPN 220 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.

Prereqs: EPPN 110

EPPN 299 (s) Directed Study (1-16 credits)

Credit arranged.

EPPN 398 (s) Internship (1-16 credits)

Credit arranged.

EPPN 400 (s) Seminar (1-16 credits)

Credit arranged.

EPPN 403 (s) Workshop (1-16 credits)

Credit arranged.

EPPN 404 (s) Special Topics (1-16 credits)

Credit arranged.

EPPN 405 (s) Professional Development (1-16 credits)

Credit arranged.

EPPN 440 Research Practicum (3 credits)

Senior capstone research experience for students working toward a BS in Global Disease Ecology. Students will work one on one with a faculty mentor, or outside mentor plus a faculty co-mentor, to pursue research questions developed in EPPN 220, Global Disease Ecology Seminar.

Prereqs: EPPN 110 and EPPN 220

EPPN 500 (s) Master's Research and Thesis (1-16 credits)

Credit arranged

EPPN 501 (s) Seminar (1-16 credits)

Credit arranged.

EPPN 502 (s) Directed Study (1-16 credits)

Credit arranged.

EPPN 503 (s) Workshop (1-16 credits)

Credit arranged.

EPPN 504 (s) Special Topics (1-16 credits)

Credit arranged.

EPPN 505 (s) Professional Development (1-16 credits)

Credit arranged.

EPPN 506 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 fits into graduate degree programs and academic certificate programs in CALS, CNR, COS and the College of Engineering. 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.

Prereqs: Permission

EPPN 598 (s) Internship (1-16 credits)

Credit arranged.

EPPN 600 (s) Doctoral Research and Dissertation (1-45 credits)

Credit arranged