

COURSE DETAIL

ECOLOGY AND EVOLUTION OF INFECTIOUS DISEASE

Country

Ireland

Host Institution

Trinity College Dublin

Program(s)

Trinity College Dublin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Health Sciences Biological Sciences

UCEAP Course Number

126

UCEAP Course Suffix**UCEAP Official Title**

ECOLOGY AND EVOLUTION OF INFECTIOUS DISEASE

UCEAP Transcript Title

INFECTIOUS DISEASE

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course provides an understanding of the ecological and evolutionary principles that underly disease symptoms, emergence, and outbreak. Though a series of lectures, supplemented with practical lessons the course explores how natural selection acts on hosts and their pathogens, what factors facilitate disease outbreaks, and how we might prevent pathogens from escaping our control. Using examples in human medicine, animals, and plants the course explores: why people get sick; how diseases emerge; super spreaders, individuals who generate many infections; how global warming can alter the interaction between diseases and their hosts; the evolution of antibiotic resistance and the evolution virulence; evolution proofing drugs; and many other concepts in evolutionary medicine, ecology, and evolution.

Language(s) of Instruction

English

Host Institution Course Number

ZOU33006

Host Institution Course Title

ECOLOGY AND EVOLUTION OF INFECTIOUS DISEASE

Host Institution Course Details

<https://www.tcd.ie/students/orientation/visiting-exchange/module-directory/Zool...>

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Zoology

Course Last Reviewed

2025-2026

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