

Evolutionary Medicine, Certificate

LAEVMDCERT

Do you have a curious mind and a passion for solving problems in new ways? You can make a powerful impact in the future of medicine and human health by using a holistic approach to ideas about evolution, disease and public health.

Description

In the evolutionary medicine certification program, students discover a burgeoning new field that is improving human health and transforming our understanding of disease by merging the fields of evolutionary biology, genetics, medicine, global health and public health.

Students will integrate perspectives from across these fields to investigate questions about health and disease in the context of human history. Using their mastery of these new approaches within the biological and social sciences, they will address emerging and anticipated public needs such as reemerging infectious disease, challenges facing vaccination, expanding chronic disease and other growing public health crises.

At a glance

- **College/School:** [The College of Liberal Arts and Sciences](#)
- **Location:** [Tempe](#) or [Online](#)

Program requirements

[2024 - 2025 Certificate Map](#)
[Certificate Map \(Archives\)](#)

The certificate in evolutionary medicine consists of 15 credit hours, at least 12 of which must be upper division. All 15 credit hours must be completed at ASU. A grade of "C" (2.00 on a 4.00 scale) or higher is required for all courses used toward the certificate.

Required Courses -- 6 credit hours

ASM 403 / BIO 403: Evolutionary Medicine and Global Health (3)

BIO 408 / ASB 408: Advanced Evolutionary Medicine (3)

Electives (choose three) -- 9 credit hours

A minimum of six credit hours of electives must be upper division.

ASB 250 / BIO 250: Introduction to Evolution and Medicine (SOBE OR SB & G) (3)

ASB 448 / BIO 448: Maternal and Child Health (3)

ASB 462: Medical Anthropology: Culture and Health (SOBE OR SB & C) (3)

ASM 246: Human Origins (SOBE OR SB) (3)

ASM 342 / BIO 327: Evolution of Human Behavior (3)

ASM 345: Disease and Human Evolution (3)

ASM 394 / BIO 394: Ecology and Evolution of Infectious Diseases (3)

ASM 401: Health and Human Biology (3)

ASM 446 / BIO 446: Principles of Human Genetics (L) (3)

ASM 456: Infectious Disease and Human Evolution (3)

ASM 494 / BIO 494: Evolution and Mental Disorders (3)

BIO 302: Cancer--Mother of All Diseases (L) (3)

BIO 318 / HPS 331: History of Medicine (HUAD OR HU & H) (3)

BIO 345: Evolution (3)

BIO 394 / PSY 394: Introduction to Evolutionary Psychology (3)

BIO 440 / MBB 440: Functional Genomics (3)

BIO 462: Endocrine Physiology (3)

MBB 445 / MIC 445: Techniques in Molecular Biology/Genetics (3)

MIC 205: Microbiology (SCIT OR SG) or MIC 220: Biology of Microorganisms (3)

MIC 314: HIV/AIDS: Science, Behavior, and Society (3)

MIC 425: Advanced Immunology (3)

Prerequisite courses may be needed in order to complete the requirements of this certificate.

Enrollment requirements

A student pursuing an undergraduate certificate must be enrolled as a degree-seeking student at ASU. Undergraduate certificates are not awarded prior to the award of an undergraduate degree. A student already holding an undergraduate degree may pursue an undergraduate certificate as a nondegree-seeking graduate student.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may [view the program's ASU Online page](#) for program descriptions and to request more information.

Program learning outcomes

Program learning outcomes identify what a student will learn or be able to do upon completion of their program. This program has the following program outcomes:

- Demonstrate mastery of key evolutionary concepts related to human health and disease.
- Able to appropriately analyze data relevant to evolutionary medicine.

Career opportunities

The evolutionary medicine certificate program provides students with integrated and individualized skills in high demand to address a growing need for innovation in medicine and public health care. When combined with a major program of study, graduates will be well prepared for roles in a variety of fields, including biology, medicine, law and ethics.

Advanced degrees or certifications may be required for academic or clinical positions.

Contact information

[School of Life Sciences](#) | LSC 104
sols.advising@asu.edu | 480-727-6277