Biomedical Research, Certificate

ASBMRCERT

Description

The biomedical research certificate program offered by ASU’s New College of Interdisciplinary Arts and Sciences at the West campus combines authentic research experience conducted in laboratories of practicing academic scientists with upper-division coursework, including laboratory courses, that allow for specialization in given subject areas. The program is intended to serve students seeking competency in addressing scientific questions in the laboratory and prepares them to be highly competitive for careers in the research sector or to pursue graduate and professional schools, such as medical school.

At a Glance

- **College/School:** New College of Interdisciplinary Arts and Sciences
- **Location:** West campus

2018 - 2019 Major Map
Major Map (Archives)

Program Requirements

The certificate in biomedical research requires a minimum of 15 credit hours (at least 12 must be upper-division). 12 credit hours must be taken at ASU. The certificate requires three core credit hours, 8 credit hours of electives, and four hours of LSC 388 Research Fundamentals or LSC 499 Individualized Instruction. Students who select LSC 499 will register for two consecutive semesters for two credit hours each. Nine credit hours must be counted toward the certificate alone and may not be shared with a student's major requirements. Only courses in which a student received a grade of "C" (2.00 on a 4.00 scale) or higher may be used to meet certificate requirements.

**Required Course -- 3 credit hours**

STP 280: Probability and Statistics for Researchers (CS) (3)

**Elective Courses -- 8 credit hours**
BCH 371: Modern Concepts in Biochemistry AND BCH 372: Modern Concepts in Biochemistry Laboratory (4)
BIO 353: Cell Biology AND BIO 354: Cell Biology Laboratory (4)
BIO 360: Animal Physiology AND LSC 359: Animal Physiology Laboratory (4)
BIO 443: Applied Molecular Genetics and Genomics AND LSC 447: Molecular Genetics Laboratory (4)
MIC 443: The Microbial Universe AND MIC 444: The Microbial Universe Laboratory (4)

Other Certificate Requirements (choose one option below) -- 4 credit hours

Option A -- 4 credit hours
LSC 388: Research Fundamentals for the Natural Sciences (L) AND LSC 499: Individualized Instruction (4)
  Notes: Students complete LSC 388 (3 credit hours) and LSC 499 (1 credit hour)

Option B -- 4 credit hours
LSC 499: Individualized Instruction (4)
  Notes: Students who select LSC 499 will register for two consecutive semesters for two credit hours each.

Depending on a student's undergraduate program of study, prerequisite courses may be needed in order to complete the requirements of this certificate.

Enrollment Requirements

This certificate requires a 3.00 cumulative GPA in ASU coursework and upper-division standing or graduate student status.

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.

Contact Information

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