

# CERTIFICATE REQUIREMENTS - BIOMEDICINE GRADUATE PROGRAM

The majority of credits toward all certificates must be earned through courses offered by EMU.

## BIOMEDICINE CERTIFICATE

**Semester Hours:** 24

Some students want to become more competitive applicants for professional health school, and only need a one-year program to enhance their application. Our Biomedicine certificate allows you to pick and choose which graduate-level natural science courses suit your academic goals the best. Our curriculum will set your application apart with our built-in cross-cultural experience, practicum shadowing, and interdisciplinary course offerings.

### Biomedicine Courses (22-25 SH)

- BMC 598 Biomedicine Practicum (1 SH)
- BMC 610 Interdisciplinary Seminar I (2 SH)
- BMX 603 Cross Cultural Health Care (3 SH)
- Select 16-19 SH from the following:
  - BMC 552 Cell Biology (3 SH) (Fall 2022)
  - BMC 561 Biochemistry Foundations (3 SH)
  - BMC 562 Human Physiology (4 SH)
  - BMC 612 Human Gross & Microscopic Anatomy (4 SH)
  - BMS 501 Biomedical Organic Chemistry I (4 SH)
  - BMS 502 Biomedical Organic Chemistry II (4 SH)
  - BMS 517 Developmental and Stem Cell Biology (4 SH)
  - BMS 540 Drugs: Discovery, Design and Action (2 SH)
  - BMS 561 Immunology (3 SH)
  - BMS 562 Neurobiology (3 SH) (Spring 2023)
  - BMS 563 Molecular Genetics (3 SH) (Spring 2022)
  - BMS 570 Medical Microbiology (3 SH) (Spring 2023)
  - BMS 572 Cognitive Psychology (3 SH)
  - BMS 585 Infectious Diseases (3 SH)
  - BMS 595 Bioinformatics (2 SH) (Spring 2023)

Additional [natural science course options](#) are available.

### Electives (0-3 SH)

Select from the following:

- BMS 530 MCAT Preparation OR BMS 531 DAT Preparation Course (3 SH)
- One course from any other master's program at EMU

## GAP YEAR CERTIFICATE

**Semester Hours:** 21-28

Gap Year Certificate students take courses at EMU's Harrisonburg campus in the fall and EMU's Washington Community Scholars Center in Washington D.C. in the spring and complete cross-cultural travel in the summer.

**Fall Courses, Harrisonburg campus (9-14 SH)**

Select from the following:

- BMC 552 Cell Biology (3 SH) (Fall 2022)
- BMC 561 Biochemistry Foundations (3 SH)
- BMC 612 Human Gross and Microscopic Anatomy (4 SH)
- BMS 517 Developmental and Stem Cell Biology (4 SH)
- BMS 561 Immunology (3 SH)
- BMS 571 Abnormal Psychology (3 SH)
- One course from any other master's program at EMU

Additional [natural science course options](#) are available.

**Spring Courses, Washington, D.C. campus (9-11 SH)**

- BMS 599 Internship (6-9 SH)
- BMS 654 Internship Theory and Practice (1 SH)
- BMS 655 Servant Leadership (2 SH)

**Summer Course, off campus (3 SH)**

- BMX 603 Cross-Cultural Health Care (3 SH)