HEALTH SCIENCES, CERTIFICATE IN (POST-BACCALAUREATE UNDERGRADUATE CERTIFICATE)

The post-baccalaureate undergraduate Certificate in Health Sciences is designed for students who hold a baccalaureate degree in a non-science area and wish to pursue their undergraduate pre-health sciences requirements at VCU. The program is intended for students who have few or none of the prerequisites they need to enter doctoral-level programs in physical therapy, pharmacy, dentistry, medicine, osteopathic medicine, optometry or veterinary sciences. This program challenges students to complete more intensive science and math course work than the basic prerequisites and maintain at least a 3.0 cumulative GPA. The certificate program assists students in becoming more competitive for admission into graduate-level programs in the health sciences, but it does not guarantee admission into any program.

Those students completing the certificate are expected to achieve competency in introductory and more advanced-level science courses and will be granted opportunities to gain health care experience. Students can learn about health care program admissions requirements and strengthen their credentials through advising, student-run club activities and seminars.

Depending on the types of courses students complete before entering the program, the certificate can take one to three years to complete with either full- or part-time study. Students are advised on how to progress based on prior math and science course work, work and family constraints, and other factors that could affect the time frame to completion. The certificate program requires the completion of minimal competencies and a core curriculum.

Before beginning the core curriculum, students must show minimum competency by completing or transferring in equivalent courses with minimum grades of B for the following:

**Course** | **Title** | **Hours**
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MATH 200 | Calculus with Analytic Geometry I | 4
STAT 210 | Basic Practice of Statistics | 3
STAT 314 | Applications of Statistics | 4

**Biology**

Biol 205 | Basic Human Anatomy | 4
Biol 209 or Biol 303 | Medical Microbiology | 3

**Chemistry**

CHEM 301 | Organic Chemistry | 5
& CHEZ 301 | Organic Chemistry Laboratory I | 5
CHEM 302 | Organic Chemistry | 5
& CHEZ 302 | Organic Chemistry Laboratory II | 5
CHEM 303 | Physical Chemistry | 5
& CHEZ 303 | Physical Chemistry Laboratory I | 5
CHEM 304 | Physical Chemistry | 5
& CHEZ 304 | Physical Chemistry Laboratory II | 5
CHEM 305 | Physical Chemistry for the Life Sciences | 3

**Physics**

PHYS 201 | General Physics I (includes laboratory) | 4
PHYS 202 | General Physics II (includes laboratory) | 4
PHYS 207 | University Physics I (includes laboratory) | 5
PHYS 208 | University Physics II (includes laboratory) | 5

A maximum of 11 credit hours can be transferred toward the core curriculum of the certificate program. Students must have earned a minimum grade of B in all course work accepted for transfer, which must come from an accredited institution. Students should consult with the pre-health sciences advisers to determine the most appropriate courses to meet their educational and career goals.

Courses will be selected from the following lists:

**Math and statistics**

Math and statistics

**Chemistry**

CHEM 301 | Organic Chemistry | 5
& CHEZ 301 | Organic Chemistry Laboratory I | 5
CHEM 302 | Organic Chemistry | 5
& CHEZ 302 | Organic Chemistry Laboratory II | 5
CHEM 303 | Physical Chemistry | 5
& CHEZ 303 | Physical Chemistry Laboratory I | 5
CHEM 304 | Physical Chemistry | 5
& CHEZ 304 | Physical Chemistry Laboratory II | 5
CHEM 305 | Physical Chemistry for the Life Sciences | 3

**Physics**

PHYS 201 | General Physics I (includes laboratory) | 4
PHYS 202 | General Physics II (includes laboratory) | 4
PHYS 207 | University Physics I (includes laboratory) | 5
PHYS 208 | University Physics II (includes laboratory) | 5

The academic requirements to complete the core portion of the program are as follows: a minimum of 25 credit hours (comprising at least six courses) in mathematics, statistics, chemistry, biology or physics. All program core courses must be at the 200 level or above. At least three of the courses in the core must have a laboratory.
The minimum total of credit hours required for this certificate is 25.

While matriculating all students must maintain a minimum cumulative GPA of 3.0. Courses may not be repeated after gaining admission into the certificate program. Failure to maintain the minimum GPA will result in formal dismissal from the certificate program.

Students accepted into the program must also commit to at least 50 hours of volunteer service in the VCU Medical Center Volunteer Program or a private health care setting. Volunteer hours must be documented and submitted to the Office of Pre-professional Health Advising at the time application is submitted for graduation.

Admission to the post-baccalaureate health sciences certificate program is based on students' academic achievement in their baccalaureate programs and whether the certificate program will help them achieve their professional goals. The program accepts students to start in the fall and spring semesters. Application deadlines are the same for transfer students applying to the university. The program is not offered to students pursuing entry into undergraduate- or master's-level health professions programs, nor is it open to those pursuing pre-health course work as part of their undergraduate concentrations at VCU.