

College of Science and Mathematics

Dean and Professor of Chemistry Michael McGinnis

The College of Science and Mathematics is comprised of the Departments of Biology and Physical Education; Chemistry and Biochemistry; Earth and Environmental Science; Mathematics; Physics; and Sports Medicine. Each department has its own chair.

Mission:

The mission of the College of Science and Mathematics is to provide high quality academic degree programs in mathematics and in the physical, biological and life sciences for our majors. We also provide support courses in these areas to meet the needs of the University. To this end, we will provide the knowledge, experience and guidance in mathematics and the sciences in lecture, laboratory, and clinical settings that prepare our students to pursue advanced study, successful careers, and to become responsible citizens in a democratic society.

Accreditations:

- The Physical Education Teacher Licensure program--available in secondary and elementary tracks--is accepted for teaching licenses in Vermont and several other New England and Middle Atlantic states where the State of Vermont has interstate licensure agreements.
- The Athletic Training Program is accredited by The Commission on Accreditation of Athletic Training Education (CAATE).

Department of Biology & Physical Education

Department Chair: Associate Professor Elizabeth Wuorinen

Mission:

Biology and Physical Education curricula offer students the opportunity to study the structure and function of living systems, from the complexity of cellular components to whole organism dynamics to ecosystem design.

Majors Offered:

The Department of Biology & Physical Education offers the Bachelor of Science degree with majors in:

- Biology (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/biology>)
- Biology--Pre-Medical/Pre-Dental track
- Biology-Neuroscience Concentration
- Physical Education-Teacher Education Concentration (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/physicaleducation>)
- Physical Education-Exercise Science Concentration (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/physicaleducation>)

Minors Offered:

- Biology (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/biology/#minortext>)
- Health (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/health-minor>)
- Coaching (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/coaching>)

Accreditations:

- The Physical Education Teacher Licensure program--available in secondary and elementary tracks--is accepted for teaching licenses in Vermont and several other New England and Middle Atlantic states where the State of Vermont has interstate licensure agreements.

Department of Chemistry & Biochemistry

Department Chair: Associate Professor Natalia Blank

Our graduates are highly desired by industry and government employers for their laboratory skills, as well as being well qualified for admission to graduate and professional schools. The courses and labs required for these degrees assure that graduates are proficient in the fundamental principles of chemistry and prepared to apply these principles to specialized areas such as environmental, forensic, medicinal, and pharmaceutical chemistry.

Attainment of the Bachelor of Science in Chemistry requires at least 122 credits as does the Bachelor of Science in Biochemistry. Course work should conform to the following tables since many advanced chemistry courses have other course as prerequisites. All courses listed on the curriculum map are required, although the sequence varies somewhat for courses offered in alternate years. It is difficult for chemistry and biochemistry majors to schedule the required courses unless they follow the outline recommended here and pay special attention to the alternate year courses (designated with a symbol §).

The progress of all students majoring in chemistry and biochemistry will be evaluated by the department at the end of the first and second years. Students receiving an unsatisfactory evaluation will be requested to change majors.

Mission:

The Department of Chemistry & Biochemistry provides students with an introduction to the scientific methods, the correct and the effective presentation of data, and develops students' critical thinking skills by allowing the analysis and the interpretation of experimental data.

Majors Offered:

- Chemistry (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/chemistryandbiochemistry/#curriculumtext>)
- Biochemistry (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/chemistryandbiochemistry/#biochemistrytext>)

Minors Offered:

- Chemistry (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/chemistryandbiochemistry/#minorstext>)

Department of Earth & Environmental Sciences

Department Chair: Charles A. Dana Professor Richard Dunn

The Department of Earth and Environmental Sciences takes full advantage of Norwich University's location in the middle of the Green Mountain State, a location ideally situated for field studies of the natural environment. Our programs are guided by a philosophy that emphasizes "learning by doing," leading to degree programs designed with a focus on experiential learning. Our curricula are presented by faculty who are respected teachers as well as active researchers, most notably in New England, Europe, and the western U.S.

Mission:

- To provide a broad background in the physical sciences, with a strong focus on geology and environmental sciences and its pivotal role in understanding our environment.
- To prepare our graduates enter graduate school for continuing education, or move into the workforce prepared to contribute as leaders addressing the many local and global issues facing society.

Majors Offered:

- Geology (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/geology>)
- Environmental Science (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/geologyandenvironmentalscience>)

Minors Offered:

- Geology (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/geology/#minortext>)

Department of Mathematics

Department Chair: Professor Robert Poodiack

Mission:

- Prepare mathematics majors for graduate work in mathematics or careers in computer science, engineering, industry, business, actuary science, or teaching;
- Support the curricula in all disciplines, and
- Supply the students with the mathematics courses necessary to qualify for teacher licensure.

Majors Offered:

- Mathematics (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/mathematics/#curriculumtext>)
- Mathematics-Actuarial Science Concentration (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/mathematics/#mathmajortext>)
- Mathematics-Education Concentration (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/mathematics/#mathmajoreducationconcontext>)

Department of Physics

Department Chair: Professor Richard Hyde

Norwich University offers the Bachelor of Science in Physics (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/physics>) to students desiring a strong education in the fundamentals of physics. Designed to provide a comprehensive undergraduate education, the program's curriculum includes astronomy, classical physics and quantum physics. Norwich students thrive with experiential learning. The Department therefore emphasizes laboratory work; all physics majors join in one of the ongoing research endeavors of the physics faculty. A successful physics major will be prepared for advanced study in a graduate school program or for employment in a research facility of industry or government.

Mission:

- The Department of Physics delivers an excellent academic program for physics majors, as well as high-quality support courses for programs requiring basic physics. To this end, the physics faculty will provide all students with lectures and laboratories that develop the analytical skills required of students for their majors, for successful careers, and for responsible citizenship.

Major Offered:

- Physics (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/physics>)

Minor Offered:

- Physics (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/physics/#minortext>)

Department of Sports Medicine

Department Chair: Associate Professor Eduardo Hernandez, ATC

ATEP Director: James Murdock, ATC

Mission:

The Department of Sports Medicine prepares students for various healthcare professions through classroom and practical application of knowledge acquired.

Majors Offered:

- Athletic Training (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/athletictrainingandsportsmedicine>)
- Health Sciences (<http://catalog.norwich.edu/archives/2015-16/residentialprograms/catalog/collegeofscienceandmathematics/sportsmedicine>)

Accreditation:

Norwich University, through its Athletic Training program is accredited by the Commission on Accreditation of Athletic Training Education (CAATE).