



Health Science

About this Composite Major

The Health Science major is organized to prepare students to pursue professional programs by covering all the pre-requisite coursework for your professional program of choice. There is flexibility of pursuing education beyond the undergraduate level, such as medicine, dentistry, optometry, pharmacy, chiropractic, physical therapy, physician assistant, mortuary science. This major combines all of the courses students need to put them on the right track for a biomedical career or for entry level positions that require an understanding of the biomedical field and its practical application, such as jobs in laboratories, hospitals, the government, field offices, and small business and industry.

The program is thorough and rigorous. VCSU prepares students by educating with hands-on opportunities that are usually reserved for graduate students. Our students run the planetarium, conduct research, and gather samples. The department has a strong field and practical application emphasis, and classes involve field study in local areas.

Students also travel to regional and national scientific meetings to present on their current research. We pride ourselves in our small class sizes, which makes a superior learning environment for our students. All faculty in the program have earned their Ph.D.'s, and several have research grants and research labs which they run with the assistance of VCSU students.

Meet a Student



“The people I met in Valley were so kind to me and nice to me that I will remember and appreciate them forever. I hope I can now provide that same experience for my patients.” - Dr. Jaycee George, VCSU alumni, chiropractor and owner of Willow Creek Chiropractic

VCSU's science faculty and staff prepared me for PA school by listening to me, answering my questions, teaching me, and being there for me whenever I needed them. I would sit in Dr. Hilde's office for venting/advice sessions and received words of encouragement from the science faculty that believed in me to get to where I am now. -McKenzie Bruce, 2018 graduate, Master's of Science Physician Assistant professional school program

One Major, Multiple Career Opportunities

Start your customizable education and prepare for graduate or professional school. There are multiple paths that start with Health Sciences including:

- **Physician (Pre-Med):** The Health Science degree is tailored to help students get into the medical school of their choice. The degree includes all necessary pre-requisite courses. The advisor and fellow students in the Pre-Professional Club provide support in gaining work experience, observation hours, leadership skills and other necessary elements for admission.
- **Physical and Occupational Therapist (Pre-PT and Pre-OT):** The Health Science degree covers all pre-requisite courses needed for admission to Physical and Occupational Therapy School. Health Science graduates have a 100% admission rate into Physical and Occupational Therapy programs.
- **Chiropractor (Pre-Chiropractic):** There are many practicing chiropractors in North Dakota with undergraduate Health Science degrees from VCSU. The Health Science degree is tailored to help students get into the chiropractic program of their choice.
- **Dentist or Orthodontist (Pre-Dental):** The Health Science degree is tailored to help students get into the dental of their choice. The small class sizes and ability to take various arts courses like ceramics ensures future success in dental careers.
- **Pharmacist (Pre-Pharmacy):** The Health Science degree can be tailored to include various chemistry, math, and sciences to help students get into the pharmaceutical program of their choice.
- **Optometrist or Optician (Pre-Optometry):** Getting a Health Science degree can ensure students have the required courses and optimal experiences to get into the optometry program of their choice.
- **Veterinarian Science (Pre-Vet):** The Health Science program ensures the required prerequisites are met and partnerships with local vet clinics ensure students have



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the ability to gain valuable hands-on experiences before graduation.

Get Involved in your Major



The Pre-Professional Club is for students interested in continuing their education in the medical field (including nursing), law, accounting, and graduate school. This club provides support for students going through the application process and provides opportunities to practice aptitude tests such as the GRE, mCAT, LSAT, and DAT. Volunteer work, job shadowing, and educational and leadership opportunities are also part of the club's activities. The goal is for students to support each other, learn from other students' experiences, thus making your applications stronger, and increasing your chance for successful admission into your program of choice.

Practical Experience



The Rhoades Science Center includes a greenhouse for work in biology and botany, a planetarium and laboratories for

biology, chemistry, earth science, physics, and computer science. You will have access to Cell Culture and Synthetic Biology instrumentation and fully equipped Biomedical Research and Aquatic Macroinvertebrate labs. This major provides opportunities that are not part of any regular programs that exist on and off campus that provide sound practical experience, such as student assistants, participation in the campus-tutoring programs, field studies, research technicians, and biological travel tours. Internships and job shadowing at numerous facilities are available to students to develop and apply their skills.

Contact Information

Department Chair

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Department Location

Rhoades Science Center 203

Schedule your visit today!

<http://visit.vcsu.edu/>

(701) 845-7101 or (800) 532-8641



Plan of Study

First Year

Fall	Credits	Spring	Credits
BIOL 150 (Gen Ed)	4	BIOL 151	4
CHEM 121 (Gen Ed)	5	CHEM 122	5
CIS 170 (Gen Ed)	3	ENGL 125 (Gen Ed)	3
ENGL 110 (Gen Ed)	3	PSYC 111 (Gen Ed)	3
UNIV 150	1		
	16		15

Second Year

Fall	Credits	Spring	Credits
Additional Humanities or Social Science (Gen Ed)	2	BIOL 221	4
BIOL 220	4	BIOL 310	4
SOC 110	3	HPER 100 (Gen Ed)	2
MATH 107 (Gen Ed)	4	Health Science Elective	4
Speech Communication (Gen Ed)	3		
	16		14

Third Year

Fall	Credits	Spring	Credits
BIOL 340	4	Art and Music (Gen Ed)	3
Health Science Elective	4	Elective	3
Health Science Elective	4	Health Science Elective	4
Literacies (Gen Ed)	3	Health Science Elective	4
	15		14

Fourth Year

Fall	Credits	Spring	Credits
BIOL 491	2	Health Science Elective	4
Elective	3	Elective	4
Elective	3	Elective	4
Health Science Elective	4	Elective	3
Social Science (Gen Ed)	3		
	15		15

Total Credits 120

Learning Outcomes

Upon completion of the Health Science Program the students should be able to

1. Demonstrate a fundamental knowledge of the major concepts in chemistry and biology.
2. Exhibit critical thinking skills by applying the scientific method to solve problems.
3. Exhibit the ability to read and communicate in scientific style.
4. Analyze the consequences of activities on themselves and their environment.
5. Apply and gain admission to professional or graduate school.

Please note: This plan is intended for general information only. Students are strongly encouraged to meet with their academic advisor each semester before registration.