

CHEMISTRY > HEALTH SCIENCES

Choice of concentration, 3+1 degree program,
or 2+2 degree program

The Health Sciences degree program at Wayne State College is a great path to choose if you are interested in a career in the medical field – medicine, dentistry, nursing, pharmacy, optometry, physical or occupational therapy, medical laboratory science, and other allied health science fields. Your education will be heavily based in biology and chemistry with emphasis on how it relates to health sciences. The Health Sciences degree program is often chosen as part of a pre-professional program in the medical field. With a Health Sciences degree, you will be prepared to move on to career possibilities such as a physician, nurse, or similar health profession, or graduate work in medicine.

fast facts

Credit hours: 55 for concentration alone; additional hours if designing a 3+1 or 2+2 pre-professional program

Students must also take 30 credit hours of General Studies courses. A total of 120 credit hours are needed to graduate from WSC. Additional majors or minors can be added to help meet graduation requirements.

Degree options: B.A. or B.S.

Departments: Physical Sciences and Mathematics

School: Science, Health, and Criminal Justice

Popular pairings: Biology, Criminal Justice, Foods and Nutrition, Psychology, Public and Global Health

focus on results

Skills Learned

- Chemical processes and materials
- Chemical experiment and design
- Modern equipment usage
- Analytical, organic, and inorganic chemistry
- Biochemistry
- Molecular genetics
- Human anatomy
- Probability and statistics
- University physics and experimentation
- Advanced lab techniques and management
- Critical thinking and problem-solving

Possible Careers

- Doctor / physician
- Medical lab technician
- Medical research scientist
- Pharmacist
- Biochemical researcher
- Pathologist
- Toxicologist
- Forensic scientist
- Chemical engineer
- Chemist

Types of Employers

- Hospitals and medical clinics
- Medical research labs
- Pharmaceutical companies
- Schools, colleges, and universities
- Environmental agencies
- Public health organizations
- Government / federal agencies
- Non-profit organizations
- Chemical companies
- Cosmetic companies
- Manufacturing companies

outside the classroom

Activities / Opportunities

- Peer mentoring and tutoring
- Service-Learning
- Study Abroad

Clubs / Organizations

- Biology Club
- Health Science Club
- Physician Assistant Club
- Pre-Dental Club



Visit www.wsc.edu/clubs to learn more about clubs and organizations on campus.

Courses and outcomes

2026-27 Academic Year

The following courses are required for the program of study described on this sheet. Every effort is made to ensure this information is current, but please be aware that some content may have changed. To develop a plan for registering and taking these courses, please consult the current academic catalog and your advisor.

Program courses

For CAT 3, take MAT 140 Calculus I. For CAT 7, take BIO 110 Biology Concepts.

Chemistry Core Courses

CHE 106 General Chemistry I	4
CHE 107 General Chemistry II	4
CHE 305 Analytical Chemistry	4

Choose one of the following concentration plans, depending on your education and career goals:

Health Sciences Concentration

BIO 220 Human Anatomy	4
BIO 320 Molecular Genetics	4
BIO 340 Human Physiology	4
CHE 314 Organic Chemistry I	4
CHE 315 Organic Chemistry II	4
CHE 326 Biochemistry I	4
MAT 180 Applied Probability and Statistics	3
PHY 301 University Physics I	4
PHY 321 Physics Laboratory I	1
PHY 302 University Physics II	4
PHY 322 Physics Laboratory II	1
Electives (choose from the following)	6
CHE 380 Instrumental Analysis (4)	
CHE 390 Inorganic Chemistry (3)	
CHE 426 Biochemistry II (3)	
CHE 456 Physical Chemistry: Thermodynamics (3)	

3+1 Health Sciences Concentration

Pre-professional curriculum by advisement..... 78

Clinical Year: The final (clinical) year consists of 30 credit hours at a professional school. A minimum of 90 credit hours is required prior to the clinical year. Students should successfully complete the first year of the approved program at a professional school awarding master's or doctoral degrees.

2+2 Health Sciences Concentration

Pre-professional curriculum by advisement..... 48

Clinical Years: The final (clinical) years consist of 60 credit hours at a professional school. A minimum of 60 credit hours is required prior to the clinical year. Students should successfully complete the first two years of the approved program at a professional school awarding master's or doctoral degrees, where a master's or doctorate is the sole professional degree offered.

Student learning outcomes

1. Demonstrate mastery of the theoretical aspects of chemistry
2. Demonstrate mastery in the technical aspects of chemistry
3. Communicate effectively in a chemical manner, both verbally and in writing
4. Apply mathematical and mechanistic problem-solving skills to chemistry processes
5. Operate standard laboratory equipment and instruments and be able to interpret the data or spectra obtained

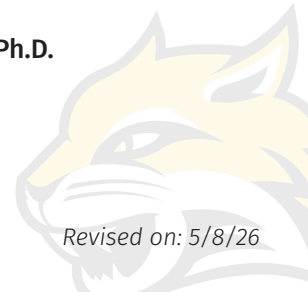
chemistry faculty



Visit www.wsc.edu/physical-sciences-mathematics-department to learn more about the Department Physical Sciences and Mathematics.

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