

Biology, Chemistry & Pre-Health

AT BETHANY COLLEGE

BACHELOR'S DEGREES IN BIOLOGY & CHEMISTRY

At Bethany College the biology, chemistry and pre-health curricula require course work in biology, chemistry, math and physics.

The biology program develops knowledge in cell and molecular biology, organismal biology, and principles governing ecological patterns and relationships.

The chemistry program involves study of organic and biochemical reaction mechanisms, standard methods of analysis and modern instrumental methods, and fundamental studies of reaction energies and molecular structure. From both programs, you also acquire the skills necessary to investigate natural phenomena in the field and laboratory and learn how to communicate these findings to others.

Students interested in pre-health programs, including medicine, veterinary, physical therapy, pharmacy and dentistry, often major in biology, chemistry or both. Your exact pre-health curriculum depends on your area of interest and the professional schools to which you plan to apply.

The biology/chemistry department features small class sizes, so you get personal attention from faculty members in both lecture and laboratory settings. We provide access to current technology and instrumentation, so our graduates have a working knowledge of equipment commonly used in industrial, medical and academic research laboratories.

In addition to the major course offerings, many students observe physicians, physical therapists, pharmacists and other

Biology Mission Statement:

The mission of the Biology Major at Bethany College is to prepare students for continued study in professional health school, graduate school, and for entry-level positions in careers requiring general biology knowledge and laboratory skills.

Chemistry Mission Statement:

The chemistry program provides a challenging and supportive environment in which students develop the skills and knowledge pertaining to the scientific method, the fundamental principles of chemistry, and scientific communication. Chemistry is committed to the preparation of majors for professional health careers, entry-level careers in laboratory sciences and technology, and graduate programs in scientific disciplines.

professionals through our Experience-Based Education program.

We also highly recommend undergraduate research experiences. Students have recently done summer research in field ecology, pharmacology and chemistry in research laboratories and worked with exotic animals in zoological and natural settings.

Students learn leadership and communication skills by participating in the Bio-Chem Club and Bethany College

Tri-Beta Chapter. These groups participate in community service projects; sponsor trips to museums, zoos, and research centers; and host guest speakers.

Bethany biology and chemistry majors acquire the skills necessary to investigate natural phenomena in the field and laboratory and learn how to communicate these findings to others.

Career Opportunities

Graduates of the biology and/or chemistry curricula are prepared for graduate or professional schools in

- medicine
- dentistry
- pharmacy
- physical therapy
- veterinary
- related fields of study

The biology program also prepares students for entry-level careers in science- and technology-related fields, including

- environmental science
- pharmaceuticals
- laboratory science

The chemistry curriculum also prepares graduates for a wide variety of careers, including those involving

- medical research
- drug discovery
- environmental agencies
- materials science
- food science
- chemical engineering

The Career Services Office provides students with support and resources throughout the career-development process. The staff is prepared to help in the selection of career options and academic majors as well as with internship placement and volunteer-service placement. The office also provides assistance with resume writing, preparation for interviews and other elements of both summer jobs and permanent employment.

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What Courses are Available?

Core Courses Typically Taken Include:

BI124/125 Introductory Biology I & II.....	8 hrs
BI320 Microbiology	4 hrs
BI360 Genetics	4 hrs
BI330 Comparative Anatomy.....	4 hrs
BI335 Vertebrate Physiology.....	4 hrs
BI340 Histology.....	4 hrs
BI222 Medical Terminology.....	3 hrs
BI343 Immunology.....	3 hrs
BI345/CH345 Scientific Research and Writing.....	3 hrs
CH110/111 General Chemistry I & II.....	8 hrs
CH330/331 Organic Chemistry I & II.....	8 hrs
CH320/321 Analytical Chemistry I & II.....	8 hrs
CH350/351 Physical Chemistry I & II.....	6 hrs
CH360 Biochemistry.....	3 hrs
CH360L Biochemistry Laboratory.....	1 hr

Supporting Courses May Include:

PH201/202 University Physics I & II.....	8 hrs
MA130/230 Analytic Geometry and Calculus I & II.....	8 hrs

Academic Advising and Faculty

Your success in college depends on a close relationship with your academic advisor. At Bethany College, the academic advisor is an active partner with the student in designing an interesting and challenging academic program, encouraging the growth and development of gifts and talents to a higher level, and providing personal and professional support beyond graduation.

Come visit us!

Let us talk with you about our program, show you around and treat you to lunch! Call our admissions office to set up an appointment.

Contacting Biology and Chemistry Faculty:

Mark Kozubowski, Ph.D.

Biology, Pre-Physical Therapy
Office: Nelson Science Center, Rm. 112
(785) 227-3380, Ext. 8150
E-mail: kozubows@bethanylb.edu

Loranelle Lockyear, Ph.D.

Chemistry
Office: Nelson Science Center, Rm. 213
(785) 227-3380, Ext. 8152
E-mail: lockyearl@bethanylb.edu

Mark McDonald, Ph.D.

Biology, Pre-Medicine, Pre-Veterinary
Office: Nelson Science Center, Rm. 126
(785) 227-3380, Ext. 8201
E-mail: mcdonaldm@bethanylb.edu



OFFICE OF ADMISSIONS
(800) 826-2281 OR
(785) 227-3380, EXT. 8113
FAX: (785) 227-8993

EMAIL: admissions@bethanylb.edu
WEB SITE: www.bethanylb.edu

Fast Facts

About Bethany: a four-year, undergraduate liberal arts-based college with a blend of professional programs

Location: Lindsborg, Kansas; 20 miles southwest of Salina, 70 miles north of Wichita and 200 miles west of Kansas City. Bethany College is within a seven-hour drive of St. Louis, Oklahoma City, Tulsa, Dallas, Denver, Omaha and Sioux City.

Founded: 1881, by Swedish-Lutheran settlers

Religious Affiliation: Evangelical Lutheran Church in America (ELCA)

Degrees and Programs: Bachelor of Arts in 51 majors and concentrations, nine teaching endorsements; Bachelor of Music in four majors; Bachelor of Music Education in two majors; Bachelor of Social Work; 17 minors

Enrollment: About 600 students from 29 states and 29 foreign countries

Student-Faculty Ratio: 13:1; average class size is 15

Athletics: 15 National Association of Intercollegiate Athletics (NAIA) varsity sports, as well as college-sponsored cheer and dance squads

Accreditation: Accredited by the Higher Learning Commission and a

member of the North Central Association
www.ncahigherlearningcommission.org
800-621-7440

Bethany Mission Statement: The mission of Bethany College is to educate, develop, and challenge individuals to reach for truth and excellence as they lead lives of faith, learning, and service.