Chemistry/Physics

Note: This fact sheet does not include the program specific curriculum. To access the curriculum from the program's webpage, click one of the links below the section titled "Degrees Offered."

Chemistry is called the central science because of its applicability to so many other areas. Chemistry is the study of the composition and properties of substances. Biochemistry focuses on the substances found in living systems. The practical value of chemistry and biochemistry is recognized through their impact on daily human living. Current health, social and political problems are more readily understood by people who have knowledge of basic chemistry and biochemistry.

DEGREES OFFERED

- Bachelor of Science in Chemistry
- Bachelor of Arts in Chemistry
- Bachelor of Science in Biochemistry
- Minor in Chemistry

PROGRAM INFORMATION

Chemistry Club

The Chemistry Club is a service and social organization consisting of a variety of science students. The Club sponsors field trips to local and regional science events and facilities. Some recent outings include an AmTrak trip to Chicago, Ill. to visit the science museums and a trip to the Underground Salt Museum in Hutchinson, Kan. The Chemistry Club also provides tutors and worked to complete a mural project in the Science Building. The chemistry faculty hosts at least one cookout each year in their homes for the Chem Club students.

Chemistry Club was recognized as the club of the year in both 2009 and 2010.

Research Opportunities

The significant presence of chemical and manufacturing industries in the Wichita area affords numerous opportunities for you to gain practical experience and establish professional relationships that will benefit you in your job search.

Research opportunities at various locations are available during your junior and senior years. Every bachelor of arts or science in chemistry student completes a semester of research.

Classroom Environment

Theories, concepts and models taught in the classroom are reinforced by hands-on access to virtually every major category of instrumentation, from mass spectroscopy to DNA fingerprinting.

Resources

The Chemistry Department is located on the lower level of Heimerman Science Center and is led by faculty members with expertise in a variety of areas. The department boasts a collection of chemical instrumentation including an FT-IR, GC-MS, NMR, LC, multiple UV/Vis spectrophotometers, and a capillary GC.

Accreditation Information

The American Chemical Society (ACS) is the preeminent professional society for chemistry and offers accreditation of chemistry programs. While the chemistry program at Newman University is *NOT* accredited by the American Chemical Society, the curriculum is modeled after the ACS publication, “Undergraduate Professional Education in Chemistry: Guidelines and Evaluation Procedures.” Assessment data of the chemistry major demonstrates that the quality, depth and breadth of student learning at Newman University compares very favorably with the ACS expectations.

PROMINENT CAREERS

Class of 2013: Where are they going and What are they doing?

Career opportunities for chemists have never been greater. As a chemist, you could find yourself working in an environmental laboratory protecting our environment, in a pharmaceutical company synthesizing new medicines or in a company developing new processes to manufacture the materials society needs to funciton.

According to the most recent annual salary and employment survey conducted by the American Chemical Society (Chemical and Engineering News, March 9, 2009):

> The median salary for chemists increased 5.7% from the year before to $93,000. Meanwhile, the unemployment rate dropped to only 2.3%, the lowest since 2001. Median base pay for bachelor's degree chemists rose 4.7% to $73,000 and the base pay for those with a Ph.D. went up 2.6% to $101,000..."

The majority of chemists work in the industry. A 2008 survey found that more than 62% of chemists are employed by industry (including more than 82% of respondents with a bachelor's as their highest degree), whereas 29% are in academia and less than 8% have government jobs. The survey found that the greatest portion of nonacademic chemists, 26.9%, work in the pharmaceutical industry.

If you are interested in a health-related field such as medicine, dentistry, optometry, pharmacy or veterinary medicine, a degree in chemisty, in addition to biology courses, will satisfy the curricular entrance requirements for professional schools and give you the background that sets the stage for success in these programs.

A graduate degree in chemistry prepares

you to enter into leadership roles in research and development laboratories, as well as careers in academia. Generally, financial support for masters and doctoral programs in chemistry include full tuition and fees, and a stipend to teach undergraduate laboratories and/or perform research (although this varies by institution).

EXPERT, ACCESSIBLE FACULTY

The Chemistry/Physics program consists of a group of carefully selected scholarly and professional practitioners who creatively introduce students to emerging theory and current best practices.

Newman Graduates regularly cite close collaboration with talented, dedicated faculty as one of their most meaningful experiences at Newman.

Newman faculty members are more than just leaders in their field. They take an active and personal role in students' studies and progress, forming strong relationships with students through coursework, special projects and informal out of class discussions.

ACCREDITATION

Newman University is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools, www.ncahigherlearningcommission.org.

FINANCIAL AID

With many scholarships, grants, work-study and company tuition assistance programs available, the cost of a degree from Newman University is comparable to that of state universities.

PROGRAM CONTACT

For more information about this program, visit the program's webpage on the Newman University website and click the link "Request more info".

To contact Newman University Admissions, office hours are 8 a.m. to 6 p.m., Monday-Thursday and 8 a.m. to 5 p.m. on Friday. For a personal appointment call 316-942-4291, ext. 2144 or e-mail admissions@newmanu.edu. Call us Toll-Free at 877-NEWMAN (639-6268) or visit our website at www.newmanu.edu.