

DISCOVER

Chemistry

Everything in the environment, whether naturally occurring or of human design, is composed of chemicals. Chemistry majors study the composition, structure, and properties of matter, as well as the reactions that transform one form of matter into another. Students learn to design and perform the investigations that will lead to a better understanding of the physical world. Chemical research has led to the discovery and development of new and improved synthetic fibers, paints, adhesives, drugs, cosmetics, electronic components, lubricants, and thousands of other products. Research on the chemistry of living things spurs advances in medicine, agriculture, food processing, and other fields.

Career Opportunities

The study of chemistry prepares you for a plethora of opportunities as the understanding of our world rapidly expands, from molecular interaction to technology to medicine. Our program of study is designed to prepare students who wish to pursue a career in chemistry or related fields.

As a chemist, you have the opportunity to work as a laboratory scientist in many traditional areas such as industry and academia, or other areas, such as government, engineering, and management. As a person with a strong knowledge of chemistry, you can work in associate fields, such as biology, astronomy, health and medicine, environmental science, food science, and forensics. An understanding of chemistry, and science in general, can support diverse careers including technical writing, technology development, sales and marketing, administration, and modern art. Entry

into a career in chemistry can occur at the bachelor's, master's, and doctoral levels. Upper level degrees are generally required to direct research in chemistry. A bachelor's degree in chemistry is excellent preparation for entry into medical and other health programs that require advanced study.

Internship and Directed Study Opportunities

The Cottey College laboratory facilities in chemistry for the first and second year of study are phenomenal. Students as early as the second semester of their first year of study have the opportunity to conduct directed research with one of our faculty members in chemistry. These experiences allow students first-hand experience of the research process, challenge students with more independent work, and allow students to work directly, one-on-one, with the chemistry faculty. Projects are designed

Get Involved

Want to have fun and develop your leadership skills and your resume at the same time? Then get involved at Cottey College and in the Nevada community.

Cottey College has more than 35 student clubs and organizations in which to be involved. Plus, the Nevada and surrounding community offer an abundance of service opportunities.

Here are a few activities on campus you might consider pursuing as a chemistry major: Explorers club for the outdoor enthusiast, Students Against a Vanishing Environment (S.A.V.E.) to help preserve the environment, AIDS Activists Coming Together (AACT) to educate themselves and others about AIDS/HIV awareness and prevention.

Activities off campus include: volunteering at the YMCA, Nevada Veterinary Clinic, or with the Red Cross.

both to complement the student's chemistry background and to result in new findings. The research interests of the chemistry faculty include the study of selective reactivity in a target system, and the synthesis of a series of molecules for clay layer expansion. You will work in collaboration with a faculty member to move forward in their area of interest. Past students have done research in other diverse areas such as analysis of the components of juniper berries using GC/MS and a library project on chemistry and the detection of art forgery.

A research project in the laboratory can be conducted for credit as CHE295, *Undergraduate Research in Chemistry*. A non-laboratory chemistry project can be undertaken as a directed study option during your second year. Directed study topics can be tailored to your interests, and can involve off-campus activities and collaborations.

SHAPING YOUR OWN DESTINY

Chemistry (4-Semester Sample Schedule)

Students should consult the catalog of the college to which they plan to transfer for specific requirements in their major. This suggested schedule is designed to provide the Associate in Science degree candidate with the appropriate Cottey College core curriculum and enough coursework in their field to complete the 62 hours required for an A.S. degree. *Schedules may vary based on available classes and interests.*

First Year Fall Semester	Credit Hrs.	First Year Spring Semester	Credit Hrs.
ENG101 English Composition I	3	ENG102 English Composition II	3
*MAT201 Calculus I	4	*CHE 104 General Chem II & Lab	5
*CHE103 General Chem I & Lab	5	*MAT202	4
Fine arts theory	3	Humanities	3
Physical Activity	1	Electives	0 to 3
Electives	0 to 2		

Second Year Fall Semester	Credit Hrs.	Second Year Spring Semester	Credit Hrs.
CHE 201 Princ. of Analytical Chem	3	Social Science	3
ECO-HIS-POL	3	*CHE 222 Organic Chem II & Lab	5
*CHE 221 Organic Chem I & Lab	5	*PHY202 General Physics II & Lab	5
*PHY201 General Physics I & Lab	5	*CHE202L Quantitative Analysis Lab	2
*CHE295 Research in Chemistry	1 to 2	*CHE 295 Research in Chemistry	1 to 2
Electives	0 to 2	Physical Activity	1
		Electives	0 to 2

*** Courses recommended for major**

OTHER RELEVANT COURSES THAT ARE ALSO HIGHLY RECOMMENDED AS ELECTIVES:

AST101 Introductory Astronomy
BIO101 Introductory Biology
BIO107 Principles of Biology
BIO207 Zoology
CHE298 Directed Study in Chemistry
CSC100 Computer Applications
CSC110 Computer Science
MAT112 Statistics

Faculty Advising

Preparing a class schedule, investigating majors, and researching transfer institutions can be confusing for a first-year student. At Cottey College, academic advising assists the individual student in clarifying and achieving her educational goals.

Each student is assigned a full-time faculty member as an academic advisor. Together the advisor and student devise a balanced academic program, which encompasses the student's educational

and career ambitions. The advisor reviews all registration decisions, the advisee's academic progress, and suggests transfer and career options.

This personalized approach to student advising allows the student to take responsibility for her own academic program, while tapping into faculty expertise.

For more information contact:
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