

CAMPBELL

UNIVERSITY

Build Your Future @ Campbell



COLLEGE OF ARTS AND SCIENCES

CHEMISTRY

1-800-334-4111 • WWW.CAMPBELL.EDU

THE CAMPBELL PROGRAM

Chemistry is one of the three "foundational" sciences: biology, chemistry, and physics. Our goal is to provide a sound, challenging program designed to prepare students for professional and graduate schools as well as careers in government and private industry. We believe that students who are broadly trained will be successful in finding employment in their area of interest.

Students in our program are encouraged to select a minor that is in keeping with their career goals. Some good choices for minors are: biology, environmental science, math/computer science, business, or communication studies. *Students with strong interests in biotechnology might also consider a degree in biochemistry which is co-advised by the biology and chemistry departments.*

THE CAMPBELL APPROACH

We strongly believe that laboratory experiences are just as important as lecture time. Most courses have three lecture hours and three laboratory hours per week. Although lower level labs average about 18 to 20 students, most upper-level labs are much smaller and are taught by our experienced faculty. This ensures that there is ample opportunity for individual instruction and questions. Our courses and facilities are regularly updated...

- High speed internet access for on-line searches of the World Wide Web
- Eight visible spectrophotometers, 12 pH meters, and three gas chromatographs (GC) to be used in freshman lab and upper level courses
- Four high pressure liquid chromatographs (HPLC) and six scanning spectrophotometers (UV/VIS) for upper level courses
- One fourier transform infrared spectrophotometer (FTIR), nuclear magnetic resonance spectrometer (FTNMR) and atomic absorption spectroscopy (AA) for upper level courses.

THE CAMPBELL FACULTY

Our four full-time doctorate level faculty stay actively involved in their field, attending symposiums colloquiums around the nation or developing new lab experiences for their courses. They are dedicated to their teaching responsibilities and consider a good education to be extremely important. For this very reason, lab related courses change as the students' needs change.

For more information about the program contact:
The Administrative Assistant
1-800-334-4111, ext. 1730 • 910-893-1730
chemistry@campbell.edu

You will find that the faculty are friendly and approachable. They will be your advisors and instructors. You will have the opportunities to meet with them and other majors out of class by becoming a member of the American Chemical Society-Student Affiliates, Campbell University's chemistry club. Members typically plan organized trips to large chemical/pharmaceutical companies in the Research Triangle Park.

THE CAMPBELL STUDENT

We are looking for students who are genuinely interested in science. Successful students in our program will have a SAT above 1100 and a strong aptitude for math and science.

Most of our graduates take positions as lab support in industry (chemical, environmental, or pharmaceutical) or they continue their studies in graduate school (chemistry, biochemistry, toxicology, etc.) Recent graduates have taken positions in the Research Triangle Park; others have entered graduate programs in local universities, such as Duke and North Carolina State University.

Outstanding Chemistry students may be employed by Campbell to serve as laboratory helpers or instructors. Others may engage in small research projects directed by our faculty.

The Campbell Advantage

Chemistry at Campbell has been and will remain uncompromisingly strong. If you complete your degree here, you can be justifiably proud of it. You can also be assured you will have...

- Received intense but caring instruction in the fundamentals of your field.
- Enjoyed the camaraderie of a close-knit department.
- Experienced the distinctive benefits of a university committed to liberal arts education and our Christian Mission.

Chemistry: Bachelor of Science

Requirements for a Major in Chemistry

A candidate for a Bachelor's degree with a major in chemistry must, in addition to the General College Curriculum, complete with a "C" average or better at least 34 hours of chemistry courses, including: CHEM 111, 113, 215, 227, 228, 331, 334, 451, and 452 (plus a minimum of 4 hours CHEM electives 300 level or higher). Statistics (MATH 160), one year of calculus (MATH 122, 223), and one year of calculus-based physics (PHYS 251, 252) are required of all chemistry majors. Candidates who are considering graduate studies are recommended to take an additional year of math (MATH 224, 337) and CHEM 430 as an elective. Chemistry majors are also encouraged to select a minor complementary to the field in which they wish to work (e.g. biology, math/computer science, business or communication studies.)

Courses numbered above 300 may be offered only in alternate years. CHEM 430 (Biochemistry) is cross-listed with BIOL 430 and is taught in the biology department.

Requirements for a minor in Chemistry
Students wishing to minor in Chemistry must complete with a "C" average or better at least 22 hours of chemistry courses including: CHEM 111, 113, 215, 227, and 228. The remaining hours may be obtained using any CHEM course numbered 300 or above (including seminars and lecture only courses).

Requirements for major in BioChemistry listed in a separate brochure.

Interested?

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Admissions Office
Campbell University
1-800-334-4111

International: 01-910-893-1415
www.campbell.edu

Consider us. Visit us. Call us today.

Curriculum Outline Chemistry

FRESHMAN YEAR

SEMESTER 1		HRS
GENERAL CHEM I	CHEM 111	4
COMPOSITION	ENGL 100	3
CALCULUS I	MATH 122	4
LIFETIME WELLNESS	PE 185	2
FOREIGN LANGUAGE	102	3
CU WORSHIP	CUW 100	0.5

CAMPBELL UNIVERSITY

SEMESTER 2		HRS
GENERAL CHEM II	CHEM 113	4
COMPOSITION	ENGL 101	3
CALCULUS II	MATH 223	4
ELECTIVE	PE 111	1
FOREIGN LANGUAGE	201	3
CU WORSHIP	CUW 100	0.5

SOPHOMORE YEAR

SEMESTER 3		HRS
ORGANIC I	CHEM 227	1
PHYSICS I (W/CAL)	PHYS 251	4
COMPOSITION	ENGL 102	3
WESTERN CIV	HIST 111	3
STATISTICS	MATH 160	3
CU WORSHIP	CUW200	.5

SEMESTER 4		HRS
ORGANIC II	CHEM 228	4
PHYSICS II (W/CAL)	PHYS 252	4
INTRO TO CHRISTIANITY	RELG 125	3
WESTERN CIV	HIST 112	3
LITERATURE	ENGL 2XX	3
CU WORSHIP	CUW200	.5

JUNIOR YEAR

SEMESTER 5		HRS
QUANT ANALYSIS	CHEM 215	4
ELECTIVE/MINOR ③		4
SOCIAL SCIENCE ELECTIVE ②		3
LITERATURE	ENGL 2XX	3
FINE ARTS ①		3

SEMESTER 6		HRS
INORGANIC CHEM	CHEM 331	4
SOCIAL SCIENCE ELECTIVE ②		3
ELECTIVE/MINOR ③		3
RELIGION ELECTIVE		3
FREE ELECTIVE		3

SENIOR YEAR

SEMESTER 7		HRS
CHEM ELECTIVE ④		4
SEMINAR	CHEM 451	1
ELECTIVE/MINOR ③		4
FREE ELECTIVE		3
FREE ELECTIVE		3

SEMESTER 8		HRS
PHYS CHEM	CHEM 334	4
SEMINAR	CHEM 452	1
ELECTIVE/MINOR ③		4
FREE ELECTIVE		3
FREE ELECTIVE		3

128 HRS REQUIRED TO GRADUATE

- ① ART 131, DRAMA 131, OR MUSIC 131
- ② COURSES TO MEET THIS REQUIREMENT MAY BE SELECTED FROM HISTORY, GOVERNMENT, SOCIOLOGY, ECONOMICS, PHILOSOPHY, GEOGRAPHY, CRIMINAL JUSTICE, AND PSYCHOLOGY.
- ③ CAREFULLY CHOSEN ELECTIVES CAN REPRESENT A MINOR. E.G. BIOLOGY, MATH, COMPUTER SCIENCE, BUSINESS, OR COMMUNICATION STUDIES.
- ④ CHOICE OF CHEMISTRY COURSES, 300 LEVEL OR ABOVE, THIS INCLUDES SPECIAL TOPICS COURSES AND RESEARCH.

The major requirements outlined within this brochure are intended as a guideline, and the curriculum outlines are only a sample. The most recent copy of the University's Undergraduate Studies Bulletin is the official source related to curriculum guidelines. It is the student's responsibility to consult with his/her academic advisor.