

College of Creative Studies

Chemistry and Biochemistry

Advances in science and technology arise from laboratory research conducted by scientist worldwide. UCSB is a leader in science with several Nobel Prizes being awarded to science faculty over the past decade (two in chemistry and one in physics). There are numerous opportunities for undergraduate students to become involved with exciting research at UCSB. The College of Creative Studies is a unique gateway into the research community.

The Chemistry and Biochemistry Program in the College of Creative Studies is ideal for students who are eager to get into the laboratory and start doing independent research. CCS student are encouraged to become involved in independent research projects early in their undergraduate careers working alongside graduate students and post-doctoral fellows. Students in this program can extend their study to a level of inquiry usually associated with graduate programs. Indeed, it is common for our undergraduate students to publish their work in leading scientific journals. The program aims to educate students for careers as professional researchers in chemistry and biochemistry. CCS seminar and laboratory courses are designed to prepare students for such work by enriching the basic courses offered by the Department of Chemistry and Biochemistry.

As with any worthwhile endeavor, research projects take time. The College of Creative Studies is uniquely organized to provide time for students to engage in independent research. The general education requirements in CCS are reduced and simplified so that students may stay focused on chemistry or biochemistry. Undergraduate students in CCS are extended many of the same privileges given to graduate students such as add/drop deadlines and library due dates. CCS students are able to take any chemistry or biochemistry class without meeting the prerequisites, including graduate level courses. This flexibility enables students to experience science at a high level earlier on. In addition, summer research fellowships specifically for CCS students are available each year allowing students to work full time over the summer months on their research project.

Graduates of the Chemistry and Biochemistry Program in CCS typically attend top ranking graduate or professional schools upon completion of their degree. Faculty at UCSB recognize CCS students as the among the best students on campus and are enthusiastic to have them work in their research groups.

Additional information about the Chemistry and Biochemistry program in the College including descriptions of current courses can be found on the web at:
<https://ccs.ucsb.edu/chemistry-and-biochemistry>

Contact: Dr. Laverman (laverman@chem.ucsb.edu)

MAJOR REGULATIONS

PREREQUISITES	Check the <i>General Catalog</i> for the prerequisites to all listed courses.
P/NP GRADING OPTION	Not allowed for major courses with an available letter grade option (LD or UD), including courses applied to the major from other departments.
SUBSTITUTIONS	In the major requirements permissible only by written approval of your advisor.
G.P.A REQUIREMENTS	At least 2.0 overall UC average in all upper-division major courses and all courses (LD and UD) for the major, including courses in excess of minimum requirements.
DOUBLE MAJORS	With the approval of each department chairperson, up to a total of 8 units may be applied simultaneously to both UD majors.
RESIDENCY REQUIREMENTS	A minimum of six full academic quarters of residence in the College of Creative Studies
GENERAL EDUCATION REQUIREMENTS	Check the <i>General Catalog</i> for the College of Creative Studies General Education Requirements.

B.S. Chemistry and Biochemistry Chemistry Emphasis

LOWER-DIVISION MAJOR	UNITS
Chemistry 1A, 1B or 2B, 1C or 2C	9
Chemistry 1AL, 1BL or 2BC, 1CL or 2CC	6
Chemistry 6AL, 6BL (or 6BH) and 6CL (or 6CH)	9
Chemistry 109A or 109AH, 109B or 109BH, 109C or 109CH	12
Mathematics 3A-B, 4A-B and 6A	20
Physics 1-2-3-4 and 3L-4L	16

UPPER-DIVISION MAJOR *	UNITS
A. Chemistry 113A-B-C, 142A (or W 142A), 150, and 173 A-B	24
B. Chemistry 116AL-BL-CL	9
C. UD Chemistry electives (Chemistry 101, 102, 193, 196 and 199 will not apply unless written approval from your advisor is given)	12

* **Exceptions:** With written consent from you Faculty Advisor, exceptions to the courses listed may be made.

Independent Study/ 199 units: are supplemental to your major course/unit requirement. 199 units are limited to 24.0 / year and 45.0 total toward graduation

B.S. Chemistry and Biochemistry Biochemistry Emphasis

LOWER-DIVISION MAJOR	UNITS
Chemistry 1A, 1B or 2B, 1C or 2C	9
Chemistry 1AL, 1BL or 2BC, 1CL or 2CC	6
Chemistry 6AL and 6BL (or 6BH)	6
Chemistry 109A or 109AH, 109B or 109BH, 109C or 109CH	12
Mathematics 3A-B, 4A and 6A	16
Physics 6A-AL-B-BL-C-CL	12
MCDB 1A-AL, MCDB 1B, EEMB 2, and either MCDB 1BL or EEMB 2L	11

UPPER-DIVISION MAJOR *	UNITS
A. Chemistry 112A-B-C, 142A (or W 142A), 142B, 142C, and 173A	24
B. Chemistry 110L, 112L, and 125L	11
C. Six units from the following core electives: Chemistry 141, 143, 145, 146, 147, 151, 154A-B, 161, 162A, 162B, 171, 181	6
D. Five additional units from C above or the following lists:	5
Chemistry 111, 115ABC, 117A, 118, 120,123, 124, 126 (provided 145 has not been taken), 127, 128, 129, 132, 133, 134, 150, 173B, 175, 176;	
MCDB 101B, 103, 126B-C, 134, 135	