

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Building 232—PHONE: 893-5675

http://www.chem.ucsb.edu

College of Letters and Science

University of California, Santa Barbara

NAME _____

Date _____ Perm # _____

BIOCHEMISTRY MAJOR, B.S. – 2020-2021

A UC GPA of 2.00 or above in each of the six sequences of courses listed in Area I, is required for admission to the full Biochemistry major. Acceptance into the pre-major does not guarantee admission to full major status. Upon satisfactory completion of the pre-major courses, students must complete a change of major petition, available in the Department of Chemistry and Biochemistry Student Affairs Office.

I. PRE-MAJOR REQUIREMENTS

UNITS YET TO COMPLETE

Chemistry 1A or 2A, 1B or 2B, 1C or 2C.....	9
Chemistry 1AL, 1BL or 2BC, 1CL or 2CC	6
Chemistry 6AL <u>and</u> 6BL or 6BH.....	6
Chemistry 109A or 109AH, 109B or 109BH, 109C (or W 109C) or 109CH.....	12
Mathematics 2A or 3A, 2B or 3B, <u>and</u> 4A.....	12-14
Physics 1-2-3-4 or 6A-B-C	14 or 9

II. PREPARATION FOR THE MAJOR

The following courses are not required to be admitted into the Biochemistry B.S. major, but are required to complete the major.

Mathematics 6A	4
Physics 3L-4L or 6AL-BL-CL.....	2 or 3
MCDB 1A-1B, EEMB 2, and MCDB 1LL	11.5

UPPER-DIVISION MAJOR

46 UD units required, distributed as follows:

A. Chemistry 112A, 112B, 112C, 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, 154B, 161, 162A, 162B, 171, 181.....	6
D. Five additional units from C above, or the following, with no more than one course from Chemistry 110, 123 and 149: Chemistry 110, 111, 113AL, 115A, 115B, 115C, 117A, 118, 120, 123, 124, 126 (provided 145 has not been taken), 127, 128, 129, 132, 133, 134, 148, 149, 150, 153, 163, 173B, 175, 176, 186; MCDB 101B, 103, 126B, 126C, 134, 135.....	5

MAJOR REGULATIONS

- PREREQUISITES**..... Check the *General Catalog* for the prerequisites to all listed courses. Completion of the Pre-Chemistry major is required to enroll in upper-division courses required for the major.
- P/NP GRADING OPTION** Not allowed for major courses (prep or UD), including courses applied to the major from other departments.
- SUBSTITUTIONS**..... In the major requirements permissible only by petition to the department chair and dean.
- RESIDENCE REQUIREMENTS** At least 20 UD units in major while in residence at UCSB.
- G.P.A REQUIREMENTS**..... At least 2.0 overall UC average in **all** upper-division major courses and **all** courses (Prep and UD) for the major.
- DOUBLE MAJORS** With the approval of each department chairperson, up to a total of 8 units may be applied simultaneously to both UD majors.

Sample Curriculum for B.S. Biochemistry

2020-2021

Fall		Winter		Spring	
Course	(Units)	Course	(Units)	Course	(Units)
Year 1					
Chem 1A/2A	(3)	Chem 1B/2B	(3)	Chem 1C/2C	(3)
Chem 1AL/2AC	(2)	Chem 1BL/2BC	(2)	Chem 1CL/2CC	(2)
Math 2A/3A	(4-5)	Math 2B/3B	(4-5)	Math 4A	(4)
Phys 6A/6AL	(4)	Phys 6B/6BL	(4)	Phys 6C/6CL	(4)
GEs	(4+)	GEs	(4+)	GEs	(4+)
Year 2					
Chem 109A/109AH	(4)	Chem 109B/109BH	(4)	Chem 109C/109CH	(4)
★MCDB 1A	(4)	Chem 6AL	(3)	Chem 6BL	(3)
GEs	(4+)	★MCDB 1B	(3)	Math 6A	(4)
GEs	(4+)	★EEMB 2	(3)	GEs/UD Electives	(4+)
		★MCDB 1LL	(1-1.5)		
Year 3					
★Chem 112A	(4)	★Chem 112B	(4)	★Chem 112C	(4)
★Chem 142A	(3)	★Chem 142B	(3)	★Chem 142C	(3)
★Chem 110L	(4)	★Chem 125L	(4)	★Chem 112L	(3)
GEs/UD Electives	(4+)	GEs/UD Electives	(4+)	GEs/UD Electives	(4+)
Year 4					
★Chem 173A	(3)	GEs/UD Electives	(4+)	GEs/UD Electives	(4+)
GEs/UD Electives	(4+)	GEs/UD Electives	(4+)	GEs/UD Electives	(4+)
GEs/UD Electives	(4+)	GEs/UD Electives	(4+)	GEs/UD Electives	(4+)
GEs/UD Electives	(4+)	GEs/UD Electives	(4+)	GEs/UD Electives	(4+)

★ Only offered in the quarter listed. 173A is also generally offered in the summer.

✦ All Math and Physics courses from the preparation for the major need to be completed before 112A.

✦ If you plan to take Physics 1-2-3-3L-4-4L, please see the undergraduate advisor for scheduling.

✦ 142A is a prerequisite to 110L, but may be taken concurrently.

✦ 110L and 142AB are prerequisites to 125L. 142B may be taken concurrently with 125L.

✦ 112A, 110L, and 142ABC are prerequisites to 112L. 142C may be taken concurrently with 112L.

✦ 112ABC are prerequisites to 173A.

✦ Must be enrolled in a minimum of 12 units per quarter to be considered a full time student.

✦ This is a sample curriculum. In order to guarantee that you are on track for graduation, be sure to see the undergraduate advisor. Also please note that there are College and University Requirements not listed here.

GE: General Education Requirement

UD: Upper Division