

Department of Chemistry and Biochemistry Curriculum Map

Course	C1 Atoms	C2 Reps	C3 Ethics	C4 Instrm	C5 EqNeq	SP1 Hyp	SP2 SciKnl	SP3 Comm
120AB	I,D	I,D	I	I	I	I	I	I,D
210/410	I,D	I,D,M		D		I,D	I,D	D
301AB	I,D,M	I,D	I	I,D	I	I		
302/306AB	I,D	I,D	I,D	I,D		I	I,D	I,D
315	D	D,M	D	D			I,D	
316			I,D	D,M		D	D	
325	D,M	D,M			I,D		D	
361AB		D,M			D,M			
371AB		D,M			D,M			
355	D	D,M	D	D,M		D,M	D,M	D,M
390			D					
411A-G			M	D,M		D,M		D,M
421	I,D,M	D,M			D,M			
422			I,D	D		D		D,M
423AB	I,D,M	D,M			D,M		D,M	
490/495/499			D,M	D,M		D,M	D,M	D,M
Biochem Electives 445/472B	D,M	D,M	D,M			D,M (472B)	D,M	D,M (472B)
Org/Inorg Electives 425/431/435	D,M	D,M	D,M (435)				D,M	M
Anl/Envr Elective 436/438	D,M	D,M	D,M	D,M			D,M	M

I – Introduced

D – Developed

M – Mastered

For the most up-to-date information, please contact the program

California State University Fullerton
Department of Chemistry and Biochemistry

COMMON UNDERGRADUATE STUDENT LEARNING OUTCOMES

The following goals and learning outcomes have been established for students pursuing a baccalaureate degree in chemistry or biochemistry:

Concepts

1. **(C1 Atoms)** Recognize that all matter is composed of atoms whose inherent periodic properties determine their interactions and combinations into compounds with specific molecular structure, chemical function and physical properties.
2. **(C2 Reprs)** Explain the various ways that chemists represent and test chemical knowledge in models, theories, mathematical relationships and symbolic notations.
3. **(C3 Ethics)** Illustrate the principles of safe practices and ethical use of scientific knowledge, materials and procedures, and explain their impact on a diverse society.
4. **(C4 Instrm)** Demonstrate literacy in concepts underlying fundamental analytical instrumentation and instrumentation techniques used in chemistry and biochemistry.
5. **(C5 EqNeq)** Discriminate between equilibrium and nonequilibrium systems using fundamental thermodynamic laws and kinetics.

Skills and Processes

1. **(S1 Hyp)** Demonstrate the ability to generate and collect data and information through designing and safely implementing hypothesis-driven experiments using contemporary methods and techniques.
2. **(S2 SciKnl)** Analyze, interpret, and retrieve data and appropriate literature, to develop critical thinking and problem solving skills.
3. **(S3 Comm)** Work effectively, independently and cooperatively to communicate data, concepts, skills and processes to experts and nonexperts in the field.