



SINGLE SUBJECT CREDENTIAL PROGRAM

**Foundational Science
Subject Matter Domain Coursework**

Foundational Level Science credential has four General Science domains: Scientific Practices, Engineering Design and Applications, and Crosscutting Concepts (Domain 1), Physical Sciences (Domain 2), Life Sciences (Domain 3), and Earth and Space Sciences (Domain 4). This table will be used to determine domains where candidates meet subject matter via coursework.

CSET	Domain	CSULB Biological Science Domain Courses	Accepted Coursework
Subtest I (215)	Domain 1: Scientific Practices, Engineering Design and Applications, and Crosscutting Concepts	Take all the following: <input type="checkbox"/> CHEM 111A: General Chemistry (5) <input type="checkbox"/> CHEM 111B: General Chemistry (5) <input type="checkbox"/> GEOL 106: Earth Science for Teachers (4) <input type="checkbox"/> PHYS 100A: General Physics (4) <input type="checkbox"/> SCED 403: Integrated Science (3) <input type="checkbox"/> SCED 404: Nature of Science (3)	
	1.1 Understand scientific practices		
	1.2 Understand engineering practices, design, and applications 1.3 Understand crosscutting concepts among the sciences and engineering		
	Domain 2: Physical Sciences	Take all the following: <input type="checkbox"/> BIOL 212: Intro to Cell and Molecular Biology (4) <input type="checkbox"/> CHEM 111A: General Chemistry (5) <input type="checkbox"/> CHEM 111B: General Chemistry (5) <input type="checkbox"/> PHYS 100A: General Physics (4) <input type="checkbox"/> PHYS 100B: General Physics (4)	
	2.1 Understand structure and properties of matter		
	2.2 Understand chemical reactions and biochemistry		
	2.3 Understand motion and stability: forces and interactions		
	2.4 Understand waves and their applications in technologies for information transfer		
	2.5 Understand energy 2.6 Understand electricity and magnetism		
	Domain 3: Life Sciences	Take all the following: <input type="checkbox"/> CHEM 111A: General Chemistry (5) <input type="checkbox"/> BIOL 211: Intro to Evo and Diversity (5) <input type="checkbox"/> BIOL 212: Intro to Cell and Molecular Biology (4) <input type="checkbox"/> BIOL 213 Intro to Eco and Physiology (4)	
	3.1 Understand the structure and function of cells		
	3.2 Understand growth, development, and energy flow in organisms		
	3.3 Understand ecosystems: interactions, energy, and dynamics		
	3.4 Understand heredity: inheritance and variation of traits 3.5 Understand biological evolution: unity and diversity		
	Domain 4: Earth and Space Sciences	Take all the following: <input type="checkbox"/> ASTR 100: Astronomy (3) <input type="checkbox"/> CHEM 111A: General Chemistry (5) <input type="checkbox"/> CHEM 111B: General Chemistry (5) <input type="checkbox"/> GEOL 106: Earth Science for Teachers (4) <input type="checkbox"/> GEOL 300: Earth Systems (3)	
	4.1 Understand Earth's place in the universe		
4.2 Understand Earth's materials and systems and surface processes			
4.3 Understand plate tectonics and large-scale system interactions			
4.4 Understand weather and climate 4.5 Understand natural resources and natural hazards			

*Students must receive a "C" or better to receive subject matter credit; in EDSS 300C, students must receive a "B" or better.