University of California, Santa Barbara
Program Learning Outcomes

PhD in Chemistry

Upon graduation with a PhD in Chemistry:

Core Knowledge

PLO.1 Students will be able to demonstrate a broad knowledge of areas cutting across the field of chemistry and biochemistry, which include interdisciplinary areas with elements of biochemistry, organic, inorganic/analytical, materials and physical chemistry.

PLO.2 Students will be able to demonstrate a deep understanding and expertise in at least one select area of specialization in chemistry (biochemistry, inorganic/analytical, materials, organic, or physical) forming the focus of their dissertation topic.

Scholarly Communications:

PLO.3 Students will be able to discover, critically evaluate, and systematically analyze published research in their field.

PLO.4 Students will be able to present their research effectively through oral and written communications.

Independent Research:

PLO.5 Students will complete an original research project using a wide range of qualitative and quantitative methodologies.

Teaching:

PLO.6 Students will possess classroom management skills, techniques for effective lecturing, and methods for guiding and assessing undergraduate students***.***