UNIVERSITY OF CALIFORNIA, RIVERSIDE

Student Learning Outcomes for the B.A./B.S. in Chemistry

Students completing the B.A./B.S. major will be able to:

1. master a broad set of chemical knowledge concerning the fundamentals in the basic areas of the discipline;
2. solve problems competently by identifying the essential parts of a problem and formulating a strategy for solving the problem. They will be able to rationally estimate the solution to a problem, apply appropriate techniques to arrive at a solution, test the correctness of the solution, and interpret their results;
3. use computers in data acquisition and processing, and use available software as a tool in data analysis;
4. use modern library search tools to locate and retrieve scientific information about a topic, chemical, chemical technique, or an issue relating to chemistry;
5. properly perform experiments, and appropriately record and analyze the results;
6. properly use laboratory equipment (both standard equipment and modern state-of-the-art instrumentation);
7. know and follow proper safety procedures and scientific ethical practices;
   a) know and follow the proper procedures and regulations for safe handling and use of chemicals;
   b) proper scientific ethical practices;
8. communicate the concepts and results of their laboratory experiments through effective a) writing and b) oral communication skills; and
9. successfully identify and pursue their career objectives in advanced education in professional and/or graduate schools, in a scientific career in government or industry, in a teaching career in the school systems, or in a related career following graduation.

Program Website: https://chem.ucr.edu/