



Program Information

College:	College of Science and Mathematics
Department:	Chemistry and Biochemistry – Undergraduate
Program:	Chemistry, BS

Program Student Learning Outcomes

Upon completion of this degree from KSU, students will be able to:

1. Recall, integrate, and/or apply the fundamental concepts in the core areas of the discipline (organic, inorganic, analytical, physical, and/or biochemistry).
2. Integrate their knowledge of chemical structure and function, thermodynamics, reaction kinetics, and/or chemical equilibrium to solve complex chemical problems.
3. Use conceptual, quantitative, and/or computational skills to identify the strengths and limitations of fundamental theories and models that apply to chemical systems under study.
4. Rationalize choices made in the experimental methods to explore a proposed hypothesis based upon the student's understanding of related theories and models.
5. Handle chemicals and maintain a safe laboratory workspace in accordance with safety guidelines.
6. Demonstrate proficiency in using standard chemistry laboratory equipment appropriate to their field such as: UV/vis/fluorescence, NMR, IR, and chromatography (electrophoresis).
7. Effectively represent, interpret, and/or communicate information, either written or orally, while using appropriate citation guidelines and ethical reporting of data.
8. Describe the benefits and impacts of chemistry related to the environment, society, and other disciplines outside the scientific community.
9. Interact effectively in a group to solve scientific problems and work productively with a diverse group of peers.