

Program Information

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

Program Student Learning Outcomes

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

- Formulate and explain the fundamental concepts in the core areas of the discipline (organic, inorganic, analytical, physical, and/or biochemistry).
- Integrate their knowledge of chemical structure and function, thermodynamics, reaction kinetics, and/or chemical equilibrium to solve complex chemical problems.
- 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.
- Rationalize choices made in the experimental methods to explore a proposed hypothesis based upon the student's understanding of related theories and models.
- Handle chemicals and maintain a safe laboratory workspace in accordance with safety guidelines.
- Demonstrate proficiency in using standard chemistry laboratory equipment appropriate to their field such as: UV/vis/fluorescence, NMR, IR, and chromatography (electrophoresis)
- Ethically handle data and results - responsible treatment of data reporting, proper citations, etc.
- Describe the benefits and impacts of chemistry related to the environment, society, and other disciplines outside the scientific community.
- Interact effectively in a group to solve scientific problems and work productively with a diverse group of peers.