

Student Learning Outcomes for CH 361

- Students will demonstrate mastery of basic organic chemistry laboratory techniques, including distillation, recrystallization, melting point determination, liquid-liquid extraction, gravity and liquid filtration, reflux and chromatography.
- Students will demonstrate the ability to safely and effectively perform synthetic organic reactions, using proper glassware set-up, handling of hazardous chemicals, and following the prescribed experimental procedures
- Students will demonstrate safe laboratory practices through the use of appropriate personal protective equipment and appropriate handling of all chemicals, including proper disposal of waste.
- Students will critically assess the progress and success of their experiments, and be able to adjust experimental procedures when necessary.
- Students will demonstrate the ability to maintain a proper laboratory notebook, which includes clear descriptions of original data, observations and experimental procedures.
- Students will demonstrate their ability to effectively communicate scientific results by writing three formal laboratory reports.
- Students will interpret analytical data and will make scientific claims that are supported by their data and other observations.
- In performing lab operations and in communicating observations and results, students will recognize and apply principles of organic reactions and mechanisms, methods of chemical measurement, and an understanding of chemical thermodynamics.