



Course Number Course Name	CHEM 302L ORGANIC CHEMISTRY II LAB
Credit Value (Breakdown of theory and lab credits)	1 Laboratory
Catalog Course Description	Application of more advanced techniques in the preparation, isolation, purification, and characterization of organ compounds, with special emphasis on the use of spectroscopic techniques to elucidate structure. <i>Co-requisite:</i> CHEM 302.
Student Learning Outcomes/Objectives /Competencies of the Course	<p>Course Objectives - <i>course content upon which a student's level of mastery will be assessed includes the ability to...</i></p> <ul style="list-style-type: none"> Analyze relationships among molecular structure, chemical reactivity, physical and spectral properties Understand chemical reactivity and reaction mechanisms relating to dienes, arenes, alcohols, ethers, amines, phenols, and carbonyl compounds, i.e. aldehydes, ketones, carboxylic acids and derivatives. Recognize and understand the structures, properties, functions and reactivity of both natural and synthetic macromolecules. Show how mechanisms are investigated including use of spectroscopy, kinetics, and stereochemistry Relate structures to spectral properties - interpreting IR, ^{13}C and ^1H NMR
College-Wide Student Learning Outcomes	<i>This lab will be assessed in conjunction with the associated lecture/theory course which is a co-requisite.</i>