

Spokane Falls Community College  
**COURSE LEARNING OUTCOMES**

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<b>Prefix and Course Number:</b>	<b>CHEM&amp;241</b>
<b>Course Title:</b>	<b>Organic Chemistry I</b>
<b>Version Date: mm/dd/yyyy</b>	<b>1.22.2021</b>

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Course Learning Outcomes

Upon successful completion of the course, the student will be able to:

1. Identify and classify major organic functional groups, predict trends in physical properties for simple organic molecules based on their functional groups and recognize their presence in biological molecules.
2. Define and recognize the different types of isomerism, including geometric, stereo, and constitutional.
3. Predict the reactivity and stability of organic molecules based on the hybridization and geometry of atoms and discuss the relationship between structure and function.
4. Determine the structural relationship of chiral/achiral molecules and predict whether a compound will be optically active.
5. Categorize organic molecules as strong acids or bases, nucleophiles, electrophiles using electronegativity and resonance.
6. Compare and contrast the sequence of reactions, nucleophilic substitution, SN1 and SN2 and elimination E1 and E2 of alkyl halides.
7. Provide reagents, predict the outcome of organic reactions using the general reactivity of functional groups and the electron-pushing mechanisms for the reactions of alkanes, alkyl halides, alcohols, ethers, epoxides and alkenes.