



Course Title: Organic Chemistry Honors

Content Area: Science

Grade Level: 11-12

Scope and Sequence

Grade Level:11/12			Content Area: Science			
Unit or Topic	Standards	Length of Time	Key Content	Assessment Tools	Scaffolding Strategies (Interventions, Special Education)	Resources & Materials
Lewis Diagrams and structures	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	2 weeks	Electron structures, bonding, electronegativity	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
Alkanes, alkynes, alkynes	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	3 weeks	Structures, naming, and models	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
isomers	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	2 weeks	constitutional, stereo isomers, cis and trans isomers, and enantiomers	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
Functional Groups	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	2 weeks	Aldehydes, ketones, alcohols, esters, ethers, carboxylic acids, amines, and amides.	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.

Basic organic reaction mechanisms	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	4 weeks	SN1, SN2, substitution, addition, oxidation, and reduction reactions	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
Cyclic Compounds	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	2 weeks	Cycloalkanes, cyclo alkenes, benzene, and phenols	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
Alcohols, ethers, and thiols	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	3 weeks	Primary, secondary, and tertiary alcohols, ethers, and thiols	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
amines	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	3 weeks	Amines and amides, drugs and reactions	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
Aldehydes and ketones	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	3 weeks	Grignard reaction, oxidation-reduction	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
Carboxylic acids	3.1.12 B 3.1.12 C 3.2.12 B 3.4.12 A 3.4.12 B	3 weeks	Nomenclature, reactions, reactions	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition. (Brown), Kahn Academy online.
Carbohydrates, amino acids	3.1.12 B 3.1.12 C 3.2.12 B	3 weeks	Structures, nomenclatures, reactions, and	Quizzes, graded homework, labs, test		Introduction to Organic Chemistry, 3rd edition.

and proteins, and lipids	3.4.12 A 3.4.12 B		medicines and drugs.			(Brown), Kahn Academy online.
-----------------------------	----------------------	--	-------------------------	--	--	----------------------------------