

CHEMISTRY COURSE OFFERINGS

Summer, 2019

CHEM 0001A - CHEMICAL FUNDAMENTALS W/LAB

Atomic and molecular structure, intermolecular forces and states of matter, the relation of structure and bonding to the physical and chemical properties of matter, patterns of chemical reactions, stoichiometry, and thermochemistry. Additional topics may include qualitative thermodynamics and equilibrium and chemistry of materials. Only one of CHEM 1, 11, or 16 may be counted for credit. **Palluccio**

CHEM 0002B - CHEMICAL PRINCIPLES W/LAB

Properties of solutions, chemical kinetics and thermodynamics, physical and chemical equilibria, aqueous equilibria (acid-base, precipitation, and complex formation), electrochemistry. Additional topics may include environmental, nuclear, and coordination chemistry, and chemistry of selected elements. Only one of CHEM 2 or 12 may be counted for credit. **Palluccio**

Recommendations: Chemistry 1, 11, 16, or consent

CHEM0006B - FROM THE BIG BANG TO HUMANKIND

Course will explore the origins of the Universe, the formation of Earth and its structure, the chemistry of life, the development of complex organisms, and the development of modern humans. Students will learn the evidence for the various ideas presented, the scientific method used by scientists, and how the community of scientists evaluates the evidence. This course does not fulfill pre-medical requirements for a lab-based chemistry course. **Kenny**

CHEM 0051A - ORGANIC CHEMISTRY I

Structure, bonding, conformational analysis, functional groups, and stereochemistry. Organic reactions, synthesis, and mechanisms including acid/base reactions, nucleophilic substitution and elimination, reactions of alcohols, ethers, aldehydes, ketones, carboxylic acids and their derivatives, and amines. Tools for structure determination including nuclear magnetic resonance and infrared spectroscopy. (Note: The laboratory course, CHEM 53, is normally taken concurrently with CHEM 51) **Kryatov**

Prerequisites: CHEM 2 or 12.

CHEM 0053A - ORGANIC CHEMISTRY I LABORATORY

Experiments based on topics in Chemistry 51. **Kryatov**

Requires completion or same term enrollment of CHEM 0051

CHEM0052B - ORGANIC CHEMISTRY II

Continuation of CHEM 51. Structure, properties, and reactions of alkenes, alkynes, conjugated unsaturated systems and aromatic compounds. Radical reactions. Mechanisms, retrosynthetic analysis and synthetic strategy. Additional topics such as the chemistry of carbohydrates, lipids, amino acids, and nucleic acids. (Note: The laboratory course, CHEM 54, is normally taken concurrently with CHEM 52.) **Kryatov**

Prerequisites: CHEM 51

CHEM0054B - ORGANIC CHEMISTRY LABORATORY II

Experiments based on topics in Chemistry 52. **Kryatov**

Prerequisite: Chemistry 53. **Requires completion or same term enrollment of CHEM 0052**

FACULTY TEACHING SCHEDULE Summer 2019

	Monday	Tuesday	Wednesday	Thursday	Friday
FIRST SESSION (May 22 – June 27)					
Chem 0001A <i>Palluccio</i>	9:30 – 11:15 P106	9:30 – 11:15 P106	9:30 – 11:15 P106	9:30 – 11:15 P106	
Chem 0001ARA <i>Palluccio</i>	1:00 – 2:00 P106		1:00 – 2:00 P106		
Chem 0001ALA <i>Palluccio</i>		1:00 – 5:00 P200		1:00 – 5:00 P200	
Chem 0051A <i>Kryatov</i>	9:30 – 11:30 P104	9:30 – 11:30 P104	9:30 – 11:30 P104	9:30 – 11:30 P104	
Chem 0051ARA <i>Kryatov</i>	1:00 – 2:00 P104		1:00 – 2:00 P104		
Chem 0051ARB <i>Kryatov</i>		1:00 – 2:00 P104		1:00 – 2:00 P104	
Chem 0053AA <i>Kryatov</i>	1:00 – 5:00 P210		1:00 – 5:00 P210		
Chem 0053AC <i>Kryatov</i>		1:00 – 5:00 P210		1:00 – 5:00 P210	
Chem 0053AD <i>Kryatov</i>		1:00 – 5:00 P210		1:00 – 5:00 P210	
Chem 0053AE <i>Kryatov</i>	1:00 – 5:00 P210		1:00 – 5:00 P210		
SECOND SESSION (July 2 – August 8)					
Chem 0002B <i>Palluccio</i>	9:30 – 11:15 P106	9:30 – 11:15 P106	9:30 – 11:15 P106	9:30 – 11:15 P106	
Chem 0002BR <i>Palluccio</i>	1:00 – 2:00 P106		1:00 – 2:00 P106		
Chem 0002BL <i>Palluccio</i>		1:00 – 5:00 P200		1:00 – 5:00 P200	
Chem 0006B <i>Kenny</i>	10:00 – 12:00	10:00 – 12:00		10:00 – 12:00	
Chem 0052B <i>Kryatov</i>	9:30 – 11:30 P104	9:30 – 11:30 P104	9:30 – 11:30 P104	9:30 – 11:30 P104	
Chem 0052BR <i>Kryatov</i>	1:00 – 2:00 P104		1:00 – 2:00 P104		
Chem 0054BA <i>Kryatov</i>		1:00 – 5:00 P210		1:00 – 5:00 P210	