

CH - CHEMISTRY

CH104Z Introduction to Chemistry

Credits 4
Registration Requirement: RD090 and WR090, or IECC201R and IECC201W; and MTH065; each with a grade of "C" or higher; or placement above stated course levels. Introduces principles of general chemistry including atoms, chemical formulas and equations, bonding, stoichiometry, acid/base chemistry, solutions, and unit conversion calculations. Does not equal a general chemistry course sequence. CH104Z is the lecture component; CH124Z is the laboratory component.
Additional Course Fee: \$25.00

CH105 Organic Chemistry for Health Professions

Credits 5
Registration Requirement: CH104, CH151, CH221 or CH221Z, and MTH058 or MTH065, all with a grade of "C" or higher, or placement above stated course levels. This course is an introduction to organic chemistry. The student must have passed CH104. The course includes an introduction to the nomenclature, physical properties, and chemical properties of alkanes, alkenes, alkynes, benzenes, haloalkanes, alcohols, ether, aldehydes, ketones, amines, and carboxylic acid derivatives.
Additional Course Fee: \$25.00
This course fulfills: Lab Science

CH106 Biological Chemistry for Health Professions

Credits 5
Registration Requirement: CH104, CH151, CH221 or CH221Z with a grade of "C" or higher. CH106 is an introduction to the general topics in biochemistry: carbohydrates, lipids, proteins, enzymes, nucleic acids and bioenergetics.
Additional Course Fee: \$25.00
This course fulfills: Lab Science

CH124Z Introduction to Chemistry Lab

Credit 1
Registration Requirement: RD090 and WR090, or IECC201R and IECC201W; and MTH065; each with a grade of "C" or higher; or placement above stated course levels. Experiments corresponding to the topics covered in CH104Z. CH124Z is the laboratory component; CH104Z is the lecture course.
Additional Course Fee: \$25.00

CH150Z Preparatory Chemistry

Credits 4
Registration Requirement: RD090 and WR090, or IECC201R and IECC201W, each with a grade of "C" or higher; or placement above stated course levels. Co-requisite: MTH095, MTH098 or higher. Explores and applies principles and applications of introductory chemistry. Emphasis on an introduction to measurement, components of matter, quantitative relationships including introductory stoichiometry, and major classes of chemical reactions. This course is preparation for the General Chemistry series for students with little to no previous chemistry experience.
Additional Course Fee: \$25.00

CH221Z General Chemistry I

Credits 4
Registration Requirement: RD090 and WR090, or IECC201R and IECC201W, each with a grade of "C" or higher; or placement above stated course levels. Co-requisite: CH227Z, MTH111Z or placement above stated course level. Recommended requisite: CH151. Explores and applies principles and applications of chemistry. Emphasis on measurement, components of matter, atomic and molecular structure, quantitative relationships including foundational stoichiometry, and major classes of chemical reactions. CH221Z is a lecture course; CH227Z is the laboratory component.
Additional Course Fee: \$25.00

CH222Z General Chemistry II

Credits 4
Registration Requirement: CH221Z with a grade of "C" or higher. Co-requisite: CH228Z. Explores and applies principles presented in CH221Z to the study of the solid, liquid, and gaseous states of matter. Principles of stoichiometry, thermochemistry, kinetics, and foundational equilibrium are explored and applied to the study of aqueous and gas-phase chemical reactions. CH222Z is a lecture course; CH228Z is the laboratory component.
Additional Course Fee: \$25.00

CH223Z General Chemistry III

Credits 4
Registration Requirement: CH222Z with a grade of "C" or higher. Co-requisite: CH229Z. Builds upon the principles presented in CH222Z, explores thermodynamics and chemical equilibrium, and applies them to the study of aqueous acid-base reactions, solubility, and electrochemistry. CH223Z is a lecture course; CH229Z is the laboratory component.
Additional Course Fee: \$25.00

CH227Z General Chemistry I Laboratory

Credit 1
Registration Requirement: RD090 and WR090, or IECC201R and IECC201W, each with a grade of "C" or higher; or placement above stated course levels. Co-requisite: MTH111Z or placement above stated course level. Recommended Requisite: CH151. Experiments correspond to the topics covered in CH221Z including the fundamentals of chemical measurements, quantitative relationships in chemical analysis, and understanding atomic and molecular structure. CH227Z is the laboratory component; CH221Z is the lecture course.
Additional Course Fee: \$25.00

CH228Z General Chemistry II Laboratory

Credit 1
Registration Requirement: CH221Z with a grade of "C" or higher. Experiments correspond to the topics covered in CH222Z including the fundamentals of intermolecular interactions, stoichiometric relationships, chemical equilibria and their application to the synthesis, identification, and analysis of chemical compounds. CH228Z is the laboratory component; CH222Z is the lecture course.
Additional Course Fee: \$25.00

CH229Z General Chemistry III Laboratory

Credit 1

Registration Requirement: CH222Z with a grade of "C" or higher.

Experiments correspond to the topics covered in CH223Z including the principles of chemical equilibria and their application to chemical analysis through the use of volumetric and electrochemical methods.

CH229Z is the laboratory component; CH223Z is the lecture course.

Additional	Course	Fee:	\$25.00
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CH241 Organic Chemistry I

Credits 5

Registration Requirement: WR121 or WR121Z and MTH095,

each with a grade of "C" or better, or

placement above stated course levels; and CH222.

The study of aliphatic, aromatic and biochemical compounds.

CH241 includes a study of nomenclature, aliphatic

hydrocarbons, structure, conformation, stereochemistry, resonance

and aromaticity, addition mechanism and infrared spectroscopy.

Additional	Course	Fee:	\$25.00
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This	course	fulfills:	Lab	Science
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CH242 Organic Chemistry II

Credits 5

Registration Requirement: CH241 with a grade of "C" or higher.

This course continues organic chemistry involving the study of

free radical, substitution and elimination mechanisms involving alkyl

halides, alcohols and ethers. Organic redox reactions, nuclear magnetic

resonance spectroscopy and carbonyl chemistry are also studied.

Additional	Course	Fee:	\$25.00
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This	course	fulfills:	Lab	Science
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CH243 Organic Chemistry III

Credits 5

Registration Requirement: CH242.

This course continues the study of carbonyl chemistry as well as

polymers, heterocycles, proteins, carbohydrates and nucleic acids.

Additional	Course	Fee:	\$25.00
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This	course	fulfills:	Lab	Science
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Course fees are subject to change. Additional section fees (web, hybrid, etc.) may apply.

~~CH221~~ CH221 and CH221Z/CH227Z are not equivalent courses. Students who have completed CH221 cannot register for CH222Z/CH228Z, instead must register for CH222.

~~CH222~~ CH222 and CH222Z/CH228Z are NOT equivalent. Students who have completed CH221 must complete CH222 in order to register for CH223Z/CH229Z.