CHEMISTRY (CHMY)

CHMY 155G, CHEMISTRY AND SOCIETY 3 (3)
Course designed for non-science and non-Health and Wellness students. An introduction to chemistry presented in the context of current world problems (i.e. ozone depletion, acid rain, and global warming) and commercial products (foods, drugs, plastics). Natural Science Core Course. (OT 36)
General Education: GEO2, GEO7
Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment score in mathematics.
Typically Offered: Summer, Fall and Spring Semesters

CHMY 161, GENERAL, ORGANIC AND BIOCHEMISTRY I 4 (6)
Designed to give the Health and Wellness student an understanding of and appreciation for general chemistry. Includes atomic and molecular structure, intermolecular and intramolecular forces, properties of matter, states of matter, solutions, principles of reactions (including acid-base, redox), and nuclear chemistry. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36)
General Education: GEO2, GEO7, GEO8
Course Entry Requirement(s): Course placement policy: Satisfactory placement assessment score in mathematics.
Typically Offered: Summer, Fall and Spring Semesters

CHMY 162, GENERAL, ORGANIC AND BIOCHEMISTRY II 4 (6)
Continuation of CHMY 161. Emphasis is on organic and biochemistry. Topics include nomenclature; structure classification and typical reactions of organic compounds; and properties, synthesis, and metabolism of carbohydrates, lipids, nucleic acids, and proteins. Role of enzymes, hormones, vitamins, and drugs is also discussed. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36)
General Education: GEO2, GEO5, GEO7
Course Entry Requirement(s): Prerequisite: CHMY 161 or CHMY 171 or division approval
Typically Offered: Summer, Fall and Spring Semesters

CHMY 171, GENERAL CHEMISTRY I 5 (7)
Course recommended for Science majors as an introduction to the principles of chemistry. Emphasis is on atomic, molecular, and electronic structures, gas laws, stoichiometry, chemical bonding, solutions, and equilibrium. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36, TAG)
General Education: GEO1, GEO2, GEO7, GEO8
Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 081 or MTHM 095 or satisfactory placement assessment score in mathematics
Typically Offered: Summer, Fall and Spring Semesters

CHMY 172, GENERAL CHEMISTRY II 5 (7)
Continuation of CHMY 171. Emphasis is on acids and bases, thermodynamics, electrochemistry, coordination compounds, nuclear chemistry, descriptive chemistry, and reaction kinetic. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36, TAG)
General Education: GEO1, GEO2, GEO7, GEO8
Course Entry Requirement(s): Prerequisite: CHMY 171
Typically Offered: Summer, Fall and Spring Semesters

CHMY 270, INTRODUCTORY BIOCHEMISTRY 4 (6)
This course provides an introduction to biochemistry including biochemical macromolecules such as nucleic acids, proteins, lipids, and carbohydrates and an overview of metabolism. This course is designed for science majors.
General Education: GEO1, GEO2, GEO4, GEO5, GEO6, GEO7
Course Entry Requirement(s): Prerequisite: CHMY 161 or CHMY 171
Typically Offered: Fall Semester

CHMY 271, ORGANIC CHEMISTRY I 5 (7)
Course designed for science majors that focuses on the fundamentals of hydrocarbon and functional group chemistry with emphasis on structure, properties, preparation, stereochemistry, reactions (mechanism and synthesis), and spectroscopy. The course includes theoretical discussion of lab techniques. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36, TAG)
General Education: GEO1, GEO2, GEO7
Course Entry Requirement(s): Prerequisite: CHMY 172
Typically Offered: Fall Semester

CHMY 272, ORGANIC CHEMISTRY II 5 (7)
Continuation of Organic Chemistry I. Course designed for science majors that focuses on structure, properties, and reactions of aromatic and polyfunctional compounds. Laboratory required. (A special fee will be assessed.) Natural Science Core Course. (OT 36, TAG)
General Education: GEO1, GEO2, GEO7
Course Entry Requirement(s): Prerequisite: CHMY 271
Typically Offered: Spring Semester

CHMY 284, INDEPENDENT STUDENT RESEARCH 1 (5)
Laboratory-only course designed to provide students with an opportunity in authentic scientific research utilizing appropriate research techniques and laboratory equipment. (A special fee will be assessed.) Course repeatable up to 10 times.
General Education: GEO1, GEO7
Typically Offered: Offer as required

CHMY 287, WORK-BASED LEARNING I - CHMY 1-3 (1)
This course provides supervised work experience building on experience in Work-Based Learning with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating classroom learning with work experience. Students will be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. Activities are coordinated and evaluated by college personnel.
General Education: GEO1, GEO2, GEO6, GEO8
Course Entry Requirement(s): Prerequisite: Minimum 2.0 GPA overall and division approval
Typically Offered: Offer as required

CHMY 288, WORK-BASED LEARNING II - CHMY 1-3 (1)
Building on experiences from Work-Based Learning I, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: GEO1, GEO2, GEO6, GEO8
Course Entry Requirement(s): Prerequisite: CHMY 287
Typically Offered: Offer as required

CHMY 289, WORK-BASED LEARNING III - CHMY 1-3 (1)
Building on experiences from Work-Based Learning II, this course provides supervised, paid work experience with approved employer(s) in an area related to the student's program. Emphasis is placed on integrating prior or concurrent classroom learning with work experience through career readiness competencies. Students will be able to evaluate career selection and satisfactorily demonstrate work-related competencies.
General Education: GEO1, GEO2, GEO6, GEO8
Course Entry Requirement(s): Prerequisite: CHMY 288
Typically Offered: Offer as required

CHMY 299, INDIVIDUALIZED STUDIES IN CHEMISTRY 1-3 (1)
An in-depth study of areas in Chemistry presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to six (6) times for a total of six (6) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required