BUS-0480 Introduction to International Business
The course provides an introduction to the environment of international business; an examination of the international organizations, the international monetary system and their impact on business; a focus on the uncontrollable forces within the foreign environment; and illustrations and examples of their effects on business practice. No prerequisite. Offered as needed. 4 credits.

BUS-0490 Seminar for Business and Accounting Majors
The course integrate the knowledge, skills, and theories studied within the different business and accounting functions to enable students to make decisions in their computer-based simulation of managing a business. The emphasis is on the use of analytical decision-making procedures, effective oral and written communication skills, and the complication and review financial statements of a business. Senior status and completion of all major business requirements. Offered spring semester. 4 credits.

International Relations
A course designed to familiarize students with the major concepts, theories, and problems involved in the study of international relations. It will be concerned with matters such as the dilemmas of cooperation and conflict, the causes of war, and the possibilities of peace. Students are expected to gain an appreciation for different ways of thinking about international relations and to develop the skills necessary for a critical analysis of contemporary international political problems. See also PSC-0290. Prerequisites: none. Offered every other year, fall semester.

CHEMISTRY

Degree Offered

B.A., Bachelor of Arts in Chemistry
Biochemistry Track
Physical Chemistry Track

Faculty

Suzanne Varimbi, Professor, Chemistry
Discipline Chair, Chemistry
Mark Segall, Ph.D., Assistant Professor, Chemistry

The sequence of courses required for chemistry includes the breadth and integration found in traditional chemistry curricula, while providing opportunity for the needs of individual students planning for graduate school, medical school, teaching, or a variety of chemistry-related careers in healthcare, government, and industry. Internships and research opportunities, while not required within the major, are a typical part of the student's chemistry experience at Rosemont College and can be used to fulfill the general education experiential requirement. The

department supports two tracks in chemistry: physical chemistry and biochemistry. Students may complete the requirements for certification by the American Chemical Society at Villanova University. Specific requirements for professional and graduate schools, the three-plus-four programs with Temple University School of Dentistry and Drexel University College of Medicine, and teacher certification can be met by consultation with the student's major advisor.

Major Requirements for a B.A. in Chemistry, Physical Chemistry Track

Students must earn 38 credits in chemistry, 8 credits in physics and 8 credits in mathematics. Pre-health professionals and teachers may have additional requirements.
Coursework includes:

CHE-0100 General Chemistry
CHE-0105 Organic Chemistry
CHE-0200 Organic Chemistry II
CHE-0215 Inorganic Chemistry
CHE-0300 Analytical Chemistry
CHE-0320 Physical Chemistry
CHE-0325 Physical Chemistry
CHE-0400 Biochemistry I
CHE-0425 Coordinating Seminar
MAT-0120 Calculus I
MAT-0121 Calculus II
Physics two semesters (taken at other institutions)

In addition to meeting the course requirements for each respective major, all students must also fulfill the general education requirements that are listed under the heading, Rosemont Works: General Education Requirements.

Suggested Course Sequence for a B.A. in Chemistry, Physical Chemistry Track
(All courses are 4-credit courses unless indicated otherwise)

First Year
Fall: CHE-0100 General Chemistry
Spring: CHE-0105 Organic Chemistry I
Sophomore Year
Fall: CHE-0200 Organic Chemistry II (*5 credits*)
MAT-0120 Calculus I

Spring: CHE-0215 Inorganic Chemistry (*5 credits*)
MAT-0121 Calculus II
Junior Year
Fall: CHE-0300 Analytical Chemistry (*5 credits*)
Physics I

Spring: CHE-0400 Biochemistry I (*5 credits*)
Physics II

Senior Year

Fall: CHE-0320 Physical Chemistry I

Spring: CHE-0325 Physical Chemistry II
CHE-0425 Coordinating Seminar (*2 credits*)

Minor Requirements

Students must earn 23 credits in chemistry.
Coursework includes:

CHE-0100 General Chemistry
CHE-0105 Organic Chemistry
CHE-0200 Organic Chemistry II
CHE-0215 Inorganic Chemistry
CHE-0300 Analytical Chemistry

Major Requirements for a B.A. in Chemistry, Biochemistry Track

Students must earn 34 credits in chemistry and 19 credits in biology. Pre-health professional and teachers may have additional requirements.
Coursework includes:

CHE-0100 General Chemistry
CHE-0105 Organic Chemistry
CHE-0200 Organic Chemistry II
CHE-0215 Inorganic Chemistry
CHE-0300 Analytical Chemistry
CHE-0400 Biochemistry I
CHE-0415 Biochemistry II
CHE-0425 Coordinating Seminar
BIO-0102 Life Science I (Cell Biology)
BIO-0200 Microbiology
BIO-0220 Genetics
BIO-0400 Molecular Genetics
BIO-0415 Vertebrate Anatomy and Physiology
BIO-0103 Life Science II (Organisimal Biology) is a recommended elective.

Suggested Course Sequence for a B.A. in Chemistry, Biochemistry Track
(All courses are 4-credit courses unless indicated otherwise)

First Year

Fall: CHE-0100 General Chemistry
BIO-0102 Life Science I

Spring: CHE-0105 Organic Chemistry I

Sophomore Year

Fall: CHE-0200 Organic Chemistry II (*5 credits*)

Spring: BIO-0200 Microbiology (*5 credits*)

	CHE-0215 Inorganic Chemistry (*5 credits*)
Junior Year	
Fall:	CHE-0300 Analytical Chemistry (*5 credits*)
Spring:	CHE-0400 Biochemistry I (*5 credits*) BIO-0400 Molecular Genetic (*5 credits*)
Senior Year	
Fall:	CHE-0415 Biochemistry II BIO-0415 Vertebrate Anatomy and Physiology (*5 credits*)
Spring:	CHE-0425 Coordinating Seminar *(2 credits)*

Minor Requirements

Students must earn 22 credits.
Coursework includes:

CHE-0100	General Chemistry
CHE-0105	Organic Chemistry
CHE-0200	Organic Chemistry II
CHE-0400	Biochemistry I
BIO-0102	Life Science I (Cell Biology)
BIO-0200	Microbiology (recommended elective)

Major Requirements for the 3-4 Pre-Professional Program – Temple Dental School and Drexel University School of Medicine

Students must earn 48 credits required including:

CHE-0100	General Chemistry
CHE-0105	Organic Chemistry
CHE-0200	Organic Chemistry II
CHE-0215	Inorganic Chemistry
CHE-0400	Biochemistry I
CHE-0415	Biochemistry II
CHE-0425	Coordinating Seminar
BIO-0102	Life Science I (Cell Biology)
BIO-0103	Life Science II (Organisimal Biology)
BIO-0200	Microbiology
BIO-0300	Comp. Vertebral Anatomy
BIO-0400	Molecular Genetics

Students must also have completed one year of physics and all Rosemont College core requirements by the end of the junior year. Additional major requirements for a B.A. in Chemistry/ Biochemistry Track will be satisfied upon the successful completion of the first year curriculum at Temple University School of Dentistry or Drexel University College of Medicine.

Suggested Course Sequence for the 3-4 Pre-Professional Program – Temple Dental School and Drexel University School of Medicine

(All courses are 4-credit courses unless indicated otherwise)

First Year

Fall:	CHE-0100 General Chemistry
	BIO-0102 Life Science I
Spring:	CHE-0105 Organic Chemistry I
	BIO-0103 Life Science II

Sophomore Year

Fall:	CHE-0200 Organic Chemistry II *(5 credits)*
Spring:	CHE-0215 Inorganic Chemistry *(5 credits)*
	BIO-0200 Microbiology *(5 credits)*
Summer	Physics I, II

Junior Year

Fall:	CHE-0300 Analytical Chemistry *(5 credits)*
	BIO-0415 Vertebrate Anatomy and Physiology *(5 credits)*
Spring:	CHE-0400 Biochemistry I *(5 credits)*
	CHE-0425 Coordinating Seminar *(2 credits)*
	BIO-0400 Molecular Genetics *(5 credits)*

Nursing at Villanova University

Students interested in pursuing a BSN at Villanova University in the 2-2 transfer student program must register for CHE-0100 and CHE-0105 in their first year at Rosemont College. Consultation with the student's advisor for the additional course requirements for this program is strongly recommended.

Drexel Pre-Health Programs

See section **JOINT PROGRAMS WITH DREXEL UNIVERSITY COLLEGE OF MEDICINE AND TEMPLE UNIVERSITY SCHOOL DENTISTRY** under Admissions for requirements for the Drexel Pre-Health Programs.

Course Descriptions: Chemistry

CHE-0100 General Chemistry

A study of the foundational concepts in chemistry and the basis of the physical and chemical properties of matter. Topics covered include atomic structure, periodicity of properties, reaction stoichiometry and equilibrium, and the basic nature of chemical reactivity with emphasis on acid/base chemistry and redox reactions. A two-hour laboratory integrates laboratory techniques and data analysis with computer technology for a better understanding of the basic concepts

covered in class. Prerequisite or co-requisite: Satisfactory performance on mathematics placement testing or satisfactory completion of MAT-0050. Offered fall semester. 4 credits.

CHE-0105 Organic Chemistry I
A systematic study of the structure, properties, and reactions of aliphatic compounds, including reaction mechanisms, stereochemistry, and synthetic applications. Includes a two-hour laboratory covering the synthesis, isolation, purification, and identification of organic compounds. Prerequisites: AP chemistry credit or CHE-0100. Offered spring semester. 4 credits.

CHE-0200 Organic Chemistry II
A further study of organic molecules including aromatic as well as aliphatic compounds. Emphasis is on reaction mechanisms and synthetic applications. Includes a three-hour laboratory emphasizing structure/reactivity relationships of synthesized and/or extracted organic compounds. Offered fall semester. 5 credits.

CHE-0215 Inorganic Chemistry
An in-depth study of chemical bonding and reactivity trends in inorganic compounds. Coordination chemistry of transition metal complexes will be covered in some detail. The thermodynamic and kinetic properties of lattice formation, solubility, and chemical equilibrium will also be examined. Includes a three-hour laboratory, which examines basic techniques of quantitative analysis and computer assisted data acquisition, analysis and presentation as they apply to the synthesis and analysis of coordination complexes. Prerequisites: AP chemistry credit or CHE-0100. Offered spring semester. 5 credits.

CHE-0300 Analytical Chemistry
The study of the quantitative applications of chemical analysis as it applies to chemical equilibrium, reaction kinetics, acid/base chemistry, redox reactions, and electrochemistry. It includes the theory and interpretation of UV-Visible, IR, NMR and mass spectroscopy. Spreadsheet application to problem solving and the use of computer-assisted statistical analysis of data and data presentation will be an integrated part of the course. Literature research methods will be introduced as it relates to the course content. A three-hour laboratory provides hands-on experience in basic methods of quantitative and instrumental analysis. Prerequisites: CHE-0200 and CHE-0215. Offered fall semester. 5 credits.

CHE-0320/-0325 Physical Chemistry
An introduction to the concepts of classical thermodynamics, quantum mechanics, and atomic and molecular structure. Each course has a three-hour laboratory that provides practical applications to thermochemistry, phase equilibria, kinetics, electrochemistry, and quantum chemistry. Computer-assisted analysis, modeling, and spectroscopy are also included. Prerequisites: CHE-0215; AP physics credit or two semesters of college physics; AP calculus credit or MAT-0120/-0121. Offered in a fall/spring semester sequence at Eastern University or Villanova University.

CHE-0400 Biochemistry I
A study of the structure and function of proteins, lipids, nucleic acids, and carbohydrates. Emphasis is placed on the relationship between macromolecular conformation and function.

Membrane structure and transport will be covered as well as basic bioenergetics and enzyme catalysis. Clinical correlations will be made where appropriate. A three-hour laboratory will introduce students to the basic techniques of protein and lipid purification and analysis including extraction, centrifugation, chromatography, electrophoresis, and UV-Visible spectrophotometry. Enzyme and binding kinetics will be examined as well as the use of the computer to collect, analyze, tabulate, and graph experimental results. The course has a writing component designed to develop the student's literature research skills. Prerequisites: CHE-0105 and CHE-0200. Offered spring semester. 5 credits.

CHE-0415 Biochemistry II
A study of the mechanisms and regulation of intermediary metabolism with a human focus. Signal transduction, protein translocation, nuclear structure and transport, and cell cycle regulation will be covered. Emphasis will be placed on the physiological implications of biomolecular function and the relationship to metabolic, hormonal, and carcinogenic disease. The course contains a significant writing component to further develop the student's literature searching and technical writing skills. Prerequisite: CHE-0400. Offered fall semester. 4 credits.

CHE-0420 Advanced Inorganic Chemistry
An exploration of the comparative chemistry of the elements by applying theoretical models to experimental observations. Ligand field theory is used to interpret the spectroscopic and magnetic properties of transition metal compounds. Prerequisite: CHE-0300. Offered as needed. 2 credits.

CHE-0425 Coordinating Seminar
A special topics seminar designed to optimize student's literature searching skills and to provide them with oral presentation experience. Exposure to off-campus experiential opportunities provides a link between study and career. For senior chemistry majors only. Offered spring semester. 2 credits.

CHE-0430 Advanced Organic Chemistry
Application of chemical and physical methods to the study of the structure and reaction mechanisms of organic compounds. Methods include molecular orbital theory, spectroscopic analysis, and isotopic and kinetic studies. Prerequisites: CHE-0200 and CHE-0300. Offered as needed. 2 credits.

CHE-0440 Research
Participation in a research project under the direct supervision of a faculty member or at an off-campus research center. Offered every other year as needed. 4-8 credits.

CHE-0450 Independent Study
Topic selected by the student under the direction of a faculty member. Open to senior chemistry majors. 1-4 credits.

CHE-0460 Internship
Supervised work experience usually at an industrial or research site. The type of work, period of work, and means of evaluation will be arranged by the work supervisor in consultation with the student's major advisor. Open to junior and senior chemistry majors. 4 credits.

CHE-0500 Science and Society Seminar (Honors)
An interdisciplinary seminar on a special topic in an area of science at the intersection of other disciplines such as social science, business, ethics or public policy. Emphasis is placed on advanced research skills, writing, and oral presentation. The course is open to all juniors and seniors regardless of major who have a GPA of at least 3.5 or permission of instructor. 2 credits.

DANCE

Faculty
Renee Banson, Adjunct Instructor, Dance

Course Descriptions: Dance

DAN-0203 Dance Movement
An introduction to dance covering basic techniques with exercises in ballet, modern, jazz, and ethnic dances. Emphasis is on body control and the student's comprehension of the body's capacity for movement. No prerequisite. Offered in fall semester. 2 credits.

DAN-0204 Creative Experiences in Dance
Improvisation and composition in abstraction and design, themes, and character studies with music rhythms, poetry, and prose. No prerequisite. Offered in spring. 2 credits.

ECONOMICS

Degree Offered
B.S., Bachelor of Science in Economics

Faculty
Eleanor Gubins, Assistant Professor, Economics and Political Science
Discipline Chair, Economics

The Economics major introduces students to the content and techniques economists use to understand problems and issues such as unemployment and inflation, growth, poverty, discrimination, environmental issues, effective markets, and other issues of the global economy. Economics is a quantitative discipline, and students are trained to use analytic and computational