CHEMISTRY (CHE)

CHE100. Environmental Chemistry . 3 Credits.
Principles of chemistry behind the effects of such environmental problems as acid rain, ozone layer depletion, atmospheric and aquatic pollution, global warming. Evaluation of experimental data leading scientists to current conclusions regarding these environmental issues.

CHE110. Food, Medicine and Drugs. 3 Credits.
Biochemical consequences of substances we ingest: nutritional requirements, properties and metabolism of foods, vitamins and minerals; selected examples of actions of medicines and mechanisms of action of addictive drugs.

CHE182. Chemistry in Art . 3 Credits.
Materials used in the production of art works, including their sources, properties, and applications. Topics to be covered are: metals, their use in sculpture, printmaking, and gold and silver work; paper; black and white photography; pigments and dyes; coatings (varnishes and synthetic polymers). Designed for non-science majors.

CHE191. Medicinal Chemistry. 3 Credits.
An exploration of the intersection between chemistry and medicine; covering some basic chemistry; the structure of the human body at various scales; and use of pharmaceuticals, including the chemical basis of how they interact with the body.

CHE193. Chemistry Selected Topic. 3-12 Credits.
Selected topics courses are regularly scheduled courses that focus on a particular topic of interest. Descriptions are printed in the Schedule of Classes each semester. Selected topics courses may be used as elective credit and may be repeated for credit, provided that the topic of the course changes.

CHE199. Modular Course. 0 Credits.

CHE201. General Chemistry I . 3 Credits.
Principles governing chemical change in relation to the atomicity of matter, atomic structure and the periodic system of the elements.

CHE202. General Chemistry II . 3 Credits.
Kinetics, thermodynamics, equilibria and electrochemistry.

CHE211. General Chemistry I Lab. 1 Credit.
Laboratory work complements the lecture material covered in CHE 201.

CHE212. General Chemistry II Lab. 1 Credit.
Laboratory work complements the lecture material covered in CHE202. THERE WILL BE AN ADDITIONAL $30.00 FEE ASSOCIATED WITH THIS COURSE.

CHE293. Chemistry Selected Topic. 3-12 Credits.
Selected topics courses are regularly scheduled courses that focus on a particular topic of interest. Descriptions are printed in the Schedule of Classes each semester. Selected topics courses may be used as elective credit and may be repeated for credit, provided that the topic of the course changes.

CHE295. Indep Study Chemistry. 1-12 Credits.

CHE296. Departmental Elective. 0 Credits.

CHE299. Modular Course. 0 Credits.

CHE303. Introduction to Analytical Chemistry . 4 Credits.
Lecture and laboratory work in gravimetric, volumetric, and elementary instrumental analysis. Application of statistics to analytical chemistry.

CHE306. Organic Chemistry I Lab . 1 Credit.
Laboratory meets once a week and will provide practical experience in some fundamental techniques of organic chemistry.

CHE309. Organic Chemistry II Lab . 1 Credit.
Laboratory work will utilize the microscale techniques employed in Organic Chemistry I to the study of organic reactions. THERE WILL BE AN ADDITIONAL $30.00 FEE ASSOCIATED WITH THIS COURSE.

CHE314. Inorganic Chemistry . 3 Credits.
Inorganic Chemistry builds on the foundation provided in General and Organic Chemistry. The chemistry of the full periodic table will be discussed. Emphasis will be placed on modern techniques, theories, and applications.

CHE318. Organic Chemistry I . 3 Credits.
Structural theory and its application to the study of the properties of carbon compounds.

CHE319. Organic Chemistry II . 3 Credits.
Continuation of Organic Chemistry I.

CHE320. Physical Chemistry Recitation. 1 Credit.
Students will work in groups to solve problems that deal with concepts in thermodynamics and kinetics. These in-class activities will reinforce concepts learned in Physical Chemistry I (CHE 321).

CHE321. Physical Chemistry I . 3 Credits.
Study of ideal and real gases, kinetics, thermodynamics, phase and chemical equilibrium, electrochemistry.

CHE322. Physical Chemistry II . 3 Credits.
Introduction to quantum mechanics and atomic and molecular spectroscopy.

CHE323. Experimental Physical Chemistry . 3 Credits.
Lecture and laboratory work in methodology and techniques used in physical chemistry. Stresses design of experiments, thorough analysis of data, and the writing of scientific reports.

CHE393. Chemistry Selected Topic. 1-12 Credits.
Selected topics courses are regularly scheduled courses that focus on a particular topic of interest. Descriptions are printed in the Schedule of Classes each semester. Selected topics courses may be used as elective credit and may be repeated for credit, provided that the topic of the course changes.

CHE396. Departmental Elective. 0 Credits.

CHE399. Modular Course. 0 Credits.

CHE407. Instrumental Techniques . 4 Credits.
Familiarization with the modern instruments and techniques used in chemistry.

CHE415. Advanced Inorganic Chem Lab. 1 Credit.
Inorganic Chemistry Laboratory puts into practice the principles learned in Inorganic Chemistry. Modern laboratory techniques will be taught and used to explore the chemistry of s, p, and d-block elements.

CHE485. Seminars in Chemistry . 2 Credits.
A series of lecture and discussion sessions conducted by distinguished visiting scientists and faculty members and students of the chemistry department. Topics are of current interest in chemistry, many of which cannot be covered in traditional courses.
CHE490. Senior Research in Chemistry. 3 Credits.
Student undertakes a program of research under the guidance of a faculty advisor.

CHE493. Chemistry Selected Topic. 3-12 Credits.
Selected topics courses are regularly scheduled courses that focus on a particular topic of interest. Descriptions are printed in the Schedule of Classes each semester. Selected topics courses may be used as elective credit and may be repeated for credit, provided that the topic of the course changes.

CHE494. Fieldwork In Chemistry. 0 Credits.

CHE495. Indep Study Chemistry. 1-12 Credits.