

## Cantonese

**CANT 1 Elementary Cantonese 5 Units**  
*Five hours lecture, one hour laboratory.*  
Intensive pronunciation and tonal drills; oral and written practice in vocabulary and grammar; conversation; simple reading and writing of standard characters; language laboratory practice.

**CANT 2 Elementary Cantonese 5 Units**  
*(See general education pages for the requirement this course meets.)*  
*Prerequisites: Cantonese 1.*  
*Five hours lecture, one hour laboratory.*  
Continuation of essentials of grammar and syntax; intensive oral and written drills; selected prose readings; conversation and composition; language laboratory practice.

**CANT 3 Elementary Cantonese 5 Units**  
*Prerequisites: Cantonese 2.*  
*Five hours lecture, one hour laboratory.*  
Continuation of Cantonese 2; intensive practice in reading and writing.

**CANT 501 Skills Development in Speaking and Listening 0 Units**  
*(Also listed as English as a Second Language 501, Speech Communication 501, and all foreign language classes offered by the Intercultural Studies Division. All foreign language classes listed will have a course number of 501. Student may enroll in only one department for credit.)*  
*Five to fifty hours laboratory per quarter.*  
*(No limit on repeatability for 0 unit classes.)*  
*No grade (NG) course.*  
Provides opportunities for students to practice and develop speech communication skills in a laboratory setting.

**CANT 502 Cross-cultural Partners 0 Units**  
*(Also listed as English as a Second Language 502, English Writing 502, Speech Communication 502, and all foreign language classes offered by the Intercultural Studies Division. All foreign language classes listed will have a course number of 502. Student may enroll in only one department for credit.)*  
*Five to fifty hours laboratory per quarter.*  
*(No limit on repeatability for 0 unit classes.)*  
*No grade (NG) course.*  
Provides opportunities to practice listening and speaking skills with peers and to develop cross-cultural understanding.

## Career Life Planning

**CLP 70 Self-Assessment 4 Units**  
*(See general education pages for the requirement this course meets.)*  
*Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 24 and 72 (or English as a Second Language 4).*  
*Four hours lecture.*  
Examine the decision-making process by exploring theories in career development and other factors such as familial, social and cultural issues that influence career and lifestyle choices. Utilize self-assessment inventories to identify individual interests, values, skills and personality types as they relate to career/college major options. Become familiar with career development software, related technology and develop skills to enhance the job search process.

## Chemistry

**CHEM 1A General Chemistry 5 Units**  
*(See general education pages for the requirement this course meets.)*  
*Prerequisites: High School Chemistry or Chemistry 50, and Mathematics 105 or 114 or equivalent, and satisfactory score on Chemistry Placement Test.*  
*Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 24 and 72 (or English as a Second Language 4).*  
*Three hours lecture, six hours laboratory.*  
An introduction to the structure and reactivity of matter at the molecular level. Application of critical reasoning to modern chemical theory and structured numerical problem solving. Development of molecular structure from rudimentary quantum mechanics, including an introduction to ionic and covalent bonding. Chemical problem solving involving both formula and reaction stoichiometry employing the unit analysis method. Application of Kinetic Molecular Theory to the study of classical gas laws and an introduction to thermochemistry.  
(CAN CHEM 1) (CHEM 1A + 1B + 1C = CAN CHEM SEQ A)

**CHEM 1B General Chemistry 5 Units**  
*Prerequisite: Chemistry 1A.*  
*Three hours lecture, six hours laboratory.*  
Continuation of an introduction to chemical principles. Investigation of reversible reactions from the standpoints of kinetics, thermodynamics, and equilibrium. Application of equilibrium to the reaction of acids and bases.  
(CAN CHEM 3) (CHEM 1A + 1B + 1C = CAN CHEM SEQ A)

**CHEM 1C General Chemistry and Qualitative Analysis 5 Units**  
*Prerequisite: Chemistry 1B.*  
*Three hours lecture, six hours laboratory.*  
An introduction to electrochemistry, the chemistry of transition metals, and the chemistry of organic compounds.  
(CAN CHEM 5) (CHEM 1A + 1B + 1C = CAN CHEM SEQ A)

**CHEM 10 Introductory Chemistry 5 Units**  
*(See general education pages for the requirement this course meets.)*  
*Advisories: Mathematics 101 or 112; English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 24 and 72 (or English as a Second Language 4).*  
*Four hours lecture, three hours laboratory.*  
Introduction to chemistry; chemical laboratory techniques and methods. Survey of important chemical principles. The course emphasizes chemistry as a subject of scientific inquiry and is designed to give the general education student an appreciation for chemistry as a science.

**CHEM 12A Organic Chemistry 5 Units**  
*Prerequisites: Chemistry 1C.*  
*Three hours lecture, six hours laboratory.*  
The chemistry of the important classes of organic compounds, emphasizing their structure, methods of synthesis, reactivity, and physical properties. For chemistry majors or those in closely allied fields such as biochemistry and chemical engineering.

**CHEM 12B Organic Chemistry 5 Units**  
*Prerequisites: Chemistry 12A.*  
*Three hours lecture, six hours laboratory.*  
A continuation of Chemistry 12A.

**CHEM 12C Organic Chemistry 5 Units**  
*Prerequisites: Chemistry 12B.*  
*Three hours lecture, six hours laboratory.*  
A continuation of Chemistry 12B.

**CHEM 30A Survey of Chemistry 5 Units**  
*Prerequisite: Mathematics 101 or 112 or equivalent.*  
*Four hours lecture, three hours laboratory.*  
Topics in general and in inorganic chemistry, developed as a background for the biological and health sciences.  
(CAN CHEM 6) (CHEM 30A + 30B = CAN CHEM SEQ B)

**CHEM 30B Survey of Chemistry 5 Units**  
*Prerequisites: Chemistry 30A.*  
*Four hours lecture, three hours laboratory.*  
Topics in organic and biological chemistry related to the biological and health sciences.  
(CAN CHEM 8) (CHEM 30A + 30B = CAN CHEM SEQ B)

**CHEM 50 Preparatory Course for General Chemistry 5 Units**  
*(Formerly Chemistry 74T.)*  
*Prerequisite: Mathematics 105 or 114.*  
*Advisory: English Writing 100B and Reading 100 (or Language Arts 100), or English as a Second Language 24 and 72 (or English as a Second Language 4).*  
*Four hours lecture, three hours laboratory.*  
An introduction to basic theory and problem-solving techniques in Chemistry as preparation for Chemistry 1A. An introduction to gravimetric and volumetric analysis, basic laboratory equipment and operations, and the preparation and maintenance of a laboratory notebook.

**CHEM 77 Special Projects and Readings in Chemistry 1 Unit**  
**CHEM 77X 2 Units**  
**CHEM 77Y 3 Units**  
*(Formerly Chemistry 40, 40X, and 40Y.)*  
*Prerequisites: Four quarters of college level chemistry and consent of instructor and division dean.*  
*Three hours laboratory per week for each unit of credit.*  
*(Any combination of Chemistry 77, 77X, and 77Y may be taken up to six times, not to exceed 18 units, as long as the topics/projects are different each time.)*  
*Pass-No Pass (P-NP) course.*  
Advanced laboratory procedures and practices. The use of instrumentation in analytical chemistry, inorganic and organic analyses and syntheses, physical measurements. Projects are assigned on consultation with instructor; laboratory hours arranged; outside reading.

