

CFT 190 Specialty and Manufactured Hardware (.5, 1, 2, 3)*½, 1, 2, or 3 hours lecture***Transfer acceptability:** CSU

Survey of traditional, contemporary, European, and Oriental market hardware found in the cabinet and furniture industries, including consumer applications. Exploration and application of various system solutions for given problem(s). Study and application of hinges, K D fasteners, fastening systems, joint systems, drawer guides, and runners.

CFT 195 Finishing Technology/Touch Up and Repair (2, 3, 4)*1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory***Prerequisite:** A minimum grade of 'C' in CFT 100**Transfer acceptability:** CSU

Finishes as used in the wood-related fields. Study and use of penetrating, surface, epoxy, catalytic, and resin surface finishes. Preparation to include staining, filling, and glazing. Chemistry of lacquers, urethanes, oils, and enamels. Instruction and practice in the touch-up of existing finishes through use of French polishing, burn-in sticks, and dry aniline staining. Repair of fine furniture as necessary prior to finishing.

CFT 196 Special Problems in Cabinet and Furniture Technology (1, 2, 3, 4, 5, 6)*3, 6, 9, 12, 15, or 18 hours laboratory***Prerequisite:** A minimum grade of 'C' in CFT 100 or 105**Transfer acceptability:** CSU

A research course through individual contract concentrating in the area of Cabinet and Furniture Technology.

CFT 197 Cabinet and Furniture Technology Topics (.5 - 4)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.

Transfer acceptability: CSU

Topics in Cabinet and Furniture Technology. See class schedule for specific topic covered. Course title will designate subject covered.

CFT 198 Advanced Wood Finishing (2, 3, 4)*1, 1½, or 2 hours lecture - 3, 4½, or 6 hours laboratory***Prerequisite:** A minimum grade of 'C' in CFT 195**Transfer acceptability:** CSU

Wood finishing history, processes, and application of multiple colors and complex finishes on furniture. Topics include media, solvents and tools used to apply media, faux finishes, gilding, coloring the finishing materials, turning broken or missing parts, and veneer repair.

CFT 295 Directed Study in Woodworking (1, 2, 3, 4, 5, 6)*48, 96, 144, 192, 240, or 288 hours laboratory***Prerequisite:** A minimum grade of 'C' in CFT 105**Transfer acceptability:** CSU

Independent study in furniture making, cabinet making, shop layout, design, operation, and maintenance for students who have demonstrated advanced skills and/or proficiencies in Cabinet and Furniture Technology subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Registration requires prior approval of supervising instructor.

Chemistry (CHEM)

Contact the Chemistry Department for further information.

(760) 744-1150, ext. 2505

Office: NS-355B

Associate in Science Degrees -

AS Degree requirements are listed in Section 6 (green pages).

- Chemistry

Certificates of Achievement -

Certificate of Achievement requirements are listed in Section 6 (green pages).

- Chemistry

PROGRAM OF STUDY**Chemistry**

Provides the background to begin upper division course work and prepares the student for entry level jobs that require a knowledge of chemistry. The student is advised to check with the institution to which he/she wishes to transfer for additional courses, which may be required.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CHEM 110	General Chemistry	3
CHEM 110L	General Chemistry Laboratory	2
CHEM 115	General Chemistry	3
CHEM 115L	General Chemistry Laboratory	2
CHEM 210	Analytical Chemistry	5
CHEM 220	Organic Chemistry	5
CHEM 221	Organic Chemistry	5
TOTAL UNITS		25

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.

Courses numbered under 100 are not intended for transfer credit.

CHEM 10 Chemistry Calculations (1)*1 hour lecture***Note:** Pass/No Pass grading only

Non-degree Applicable

The basic calculation skills needed for successful performance in CHEM 100, 110, and 115. Areas such as significant figures, exponential numbers, and basic chemical problems are discussed. Emphasizes student practice of chemistry problems.

CHEM 100 Fundamentals of Chemistry (4)*3 hours lecture - 3 hours laboratory***Prerequisite:** One year of high school algebra**Transfer acceptability:** CSU; UC – no credit if taken after CHEM 110

Introductory study of the principles and laboratory techniques of general chemistry. Laboratory must be taken concurrently with lecture.

CHEM 104 General Organic and Biochemistry (5)*3 hours lecture - 6 hours laboratory***Transfer acceptability:** CSU; UC

This course will cover the basic principles of general chemistry, organic chemistry and biochemistry as needed to understand the biochemistry, physiology, and pharmacology of the human body. This course is intended mainly for students pursuing health professions.

CHEM 105 Fundamentals of Organic Chemistry (4)*3 hours lecture - 3 hours laboratory***Prerequisite:** A minimum grade of 'C' in CHEM 100, or CHEM 110 and 110L**Transfer acceptability:** CSU; UC

An introduction to the study of organic chemistry with an emphasis on classification, reactions, and application to allied fields. Laboratory includes techniques of isolation, identification, and synthesis of organic compounds.

CHEM 110 General Chemistry (3)*3 hours lecture***Prerequisite:** A minimum grade of 'C' in CHEM 100 or high school chemistry with laboratory, and two years of high school algebra or MATH 60**Corequisite:** CHEM 110L**Transfer acceptability:** CSU; UC

C-ID CHEM 110 for CHEM 110 and 110L combined; CHEM 120S for CHEM 110, 110L, 115 and 115L combined

Principles of, and calculations in, areas such as atomic structure, solutions, chemical bonding, chemical formulas and equations, gases, energy transformations accompanying chemical changes, and descriptive chemistry.

CHEM 110L General Chemistry Laboratory (2)
 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CHEM 110, or concurrent enrollment in CHEM 110
Transfer acceptability: CSU; UC
 C-ID CHEM 110 for CHEM 110 and 110L combined; CHEM 120S for CHEM 110, 110L, 115 and 115L combined
 Qualitative and quantitative investigations designed to accompany CHEM 110.

CHEM 115 General Chemistry (3)
 3 hours lecture
Prerequisite: A minimum grade of 'C' in CHEM 110 and 110L
Recommended preparation: Concurrent enrollment in CHEM 115L
Transfer acceptability: CSU; UC
 C-ID CHEM 120S for CHEM 110, 110L, 115 and 115L combined
 A continuation of the general principles of chemistry with emphasis on chemical kinetics, chemical equilibria acids and bases, thermodynamics and electrochemistry. It includes an overview of coordination chemistry and organic chemistry.

CHEM 115L General Chemistry Laboratory (2)
 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CHEM 110 and 110L; A minimum grade of 'C' in CHEM 115, or current enrollment in CHEM 115
Transfer acceptability: CSU; UC
 C-ID CHEM 120S for CHEM 110, 110L, 115 and 115L combined
 Qualitative and quantitative investigations designed to accompany CHEM 115.

CHEM 197 Chemistry Topics (.5 - 4)
 Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
 Topics in Chemistry. See Class Schedule for specific topic offered. Course title will designate subject covered.

CHEM 205 Introductory Biochemistry (3)
 3 hours lecture
Prerequisite: A minimum grade of 'C' in CHEM 105
Transfer acceptability: CSU; UC
 Fundamental principles of the chemistry of living systems, including structure and function of proteins, nucleic acids, carbohydrates, and lipids. Emphasis on metabolism, energy storage and utilization.

CHEM 210 Analytical Chemistry (5)
 3 hours lecture - 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CHEM 115 and 115L
Transfer acceptability: CSU; UC
 Principles, calculations, and applications of volumetric, gravimetric, and instrumental analysis. Practice in standardizing reagents and determining the composition of samples of various materials.

CHEM 220 Organic Chemistry (5)
 3 hours lecture - 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CHEM 115 and CHEM 115L
Transfer acceptability: CSU; UC
 Integrated treatment of organic chemistry including electronic and orbital theory with applications to carbon bonding, stereo chemistry, resonance theory, and reaction mechanisms of both aliphatic and aromatic compounds. Strong emphasis on organic nomenclature, reactions, preparations, and synthesis of organic compounds. Laboratory: Techniques and theories involved in organic reactions and preparations, qualitative organic analysis, and instrumental methods.

CHEM 221 Organic Chemistry (5)
 3 hours lecture - 6 hours laboratory
Prerequisite: A minimum grade of 'C' in CHEM 220
Transfer acceptability: CSU; UC
 Continuation of the integrated treatment of organic chemistry including electronic and orbital theory with applications to carbon bonding, stereo chemistry,

resonance theory, and reaction mechanisms of both aliphatic and aromatic compounds. Strong emphasis on organic nomenclature, reactions, preparations, and synthesis of organic compounds. Laboratory: techniques and theories involved in organic reactions and preparations, qualitative organic analysis, and instrumental methods.

CHEM 295 Directed Study in Chemistry (1, 2, 3)
 3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
 Independent study for students who have demonstrated skills and/or proficiencies in chemistry subjects and have the initiative to work independently on projects or research outside the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

Chicano Studies (CS)

See also Multicultural Studies

Contact the Multicultural Studies Department for further information.
 (760) 744-1150, ext. 2206
 Office: MD-354

COURSE OFFERINGS

CS 100 Introduction to Chicano Studies (3)
 3 hours lecture
Transfer acceptability: CSU; UC
 The development of contemporary Chicano culture including various pre Columbian and Hispanic cultures in Mexico and the Southwest. A cross disciplinary approach examines applicable methods and theories from sciences and humanities.

CS 101 United States History from a Chicano Perspective I (3)
 3 hours lecture
Note: This course plus CS 102 meets the State requirement in American History and Institutions.
Transfer acceptability: CSU; UC
 A survey of early American history from the Mexican/Chicano perspective. Focus is on the period of discovery to Reconstruction with emphasis on the evolution, influence and experience of the Chicano. Chicano contributions are analyzed for political, social, economic and cultural development of the United States. Intended for students interested in history, ethnic studies or other social sciences.

CS 102 United States History from a Chicano Perspective II (3)
 3 hours lecture
Note: This course plus CS 101 meets the State requirement in American History and Institutions.
Transfer acceptability: CSU; UC – CS 102, AS 110 and AIS 102 combined: maximum credit, one course
 A survey course in American history that covers the period from the American acquisition in 1848 of Mexican territory to the present. Emphasis is placed on the role of the Chicano in the development of the United States throughout the nineteenth and twentieth century. Topics include slavery in the former Mexican territories, the native American experience, immigration patterns and constitutional development and government in California. Intended for students interested in history, ethnic studies, or other social issues.

CS 105 Chicano Literature (3)
 3 hours lecture
Transfer acceptability: CSU; UC
 A survey of Chicano literature from its pre-Columbian origins. Analyzes the identity conflicts resulting from the dual cultures of Mexican and American worlds through literary works. Introduces the student to the rich and culturally diverse Chicano and Chicana authors that reflect the literary traditions that have mirrored the Chicano-Mexican reality in the United States.