

Courses offered

CHEM 3: Introductory Chemistry

4 units, UC/CSU transferrable
3 hrs lecture / 3 hrs lab weekly

Prerequisite: MATH 253

Course Description:

A study of the fundamental principles of chemistry. This is an excellent preparatory course for students planning to take CHEM 1A.

CHEM 1A: General Chemistry I

5 units, UC/CSU transferrable
3 hrs lecture / 6 hrs lab weekly

Corequisite: CHEM 106

Prerequisite: CHEM 3 or Challenge Exam

Course Description:

A study of the principles of chemistry. Topics include atomic and molecular structure, bonding, nomenclature, formulas, equations, stoichiometry, thermochemistry, gases, liquids, solids & solutions.

CHEM 1B: General Chemistry II

5 units, UC/CSU transferrable
3 hrs lecture / 6 hrs lab weekly

Prerequisite: CHEM 1A ('C' or better)

Course Description:

A continuation of CHEM 1A in the study of the principles of chemistry. Topics include thermodynamics, equilibria, kinetics, acid-base chemistry, oxidation-reduction reactions, electrochemistry, coordination chemistry, nuclear chemistry & qualitative analysis.

CHEM 12A: Organic Chemistry I

5 units, UC/CSU transferrable
3 hrs lecture / 6 hrs lab weekly

Prerequisite: CHEM 1B ('C' or better)

Course Description:

A study of the principles, theories, and reactions of organic chemistry with emphasis on the relations of structure and reactivity.

CHEM 12B: Organic Chemistry II

5 units, UC/CSU transferrable
3 hrs lecture / 6 hrs lab weekly

Prerequisite: CHEM 12A (grade of 'C' or better)

Course Description:

A continuation of CHEM 12A in the study of the principles, theories, and reactions of organic chemistry with emphasis on the relations of structure and reactivity.

CHEM 106: Basics of Chemistry

2 units, CSU transferrable (not guaranteed)
2 hrs lecture weekly

Corequisite: CHEM 1A

Course Description:

A course to be taken concurrently with CHEM 1A. Consists of quiz, discussion, problem solving, and drill sessions. Designed to help students succeed in their study of general chemistry.

CHEM 108: Introduction to General, Organic, and Biochemistry

4 units, CSU transferrable
3 hrs lecture / 3 hrs weekly

Course Description:

A course for health pre-professionals and non-science majors. Ideal for students planning to enter nursing and dental hygiene programs. Designed as the first chemistry course to assist students in biology and health-related professions. The focus is on the biochemistry of the human body. Health, nutrition and basic laboratory techniques included.



General Info: (949) 582-4500
Admissions: (949) 582-4555
Address: 28000 Marguerite Pkwy
Mission Viejo, CA 92692

SOCCCD Board of Trustees: Thomas Fuentes, William Jay, David Lang, Frank M. Meldau, Marcia Milchiker, Nancy Padberg, T.J. Prendergast, III - Gary L. Poertner, Chancellor · Saddleback College: Tod Burnett, Ed.D., President
Updated: June 2011

Division of Mathematics,
Science, and Engineering

CHEMISTRY DEPARTMENT

Saddleback
College

Department Overview

The Chemistry Department has a tradition of excellence, as evidenced by the quality of its programs, the caliber of its faculty, and the excellence of its students.

Our vision is to maintain a leading role in innovative education. The education of our students encompasses not only the transfer of knowledge, but also training to become tomorrow's leaders in academia, government, health sciences, and scientific research and industry.

The department offers courses that lead to certificates and associates degrees in fields such as chemistry, biology, environmental studies, nursing and more. Courses are designed to prepare students for entry into four-year universities, professional schools in the health sciences, and for careers in industries and businesses that depend on chemically based technology.

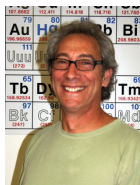
Our facilities are equipped with high tech instrumentation, including a high-pressure liquid chromatograph, GC/MS, automated refractometer, polarimeter, FTIR spectrophotometers, and gas chromatographs. Plus, there is an extensive network of computer-aided equipment and software, including LabPro, Spartan, ChemDraw, Odyssey, and Virtual Chem Lab. These instruments, along with other technical equipment and service activities extend the reach and impact of our faculty.

Full-time Faculty

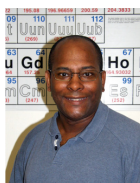
The department's curriculums are lead by six distinguished full-time professors and several associate faculty members.



Dr. Christina Abel has a Ph.D. in Biophysical Chemistry from UC Santa Cruz and a B.S. in Biochemistry from Cal Poly San Luis Obispo. Dr. Abel teaches General Chemistry 1A/1B. Email: cabel@saddleback.edu
Web: www.saddleback.edu/faculty/cabel



Professor Karl Abrams earned a M.S. in Chemistry from UC Santa Barbara. Professor Abrams is a published author of chemistry texts and has been teaching General Chemistry 1A at Saddleback College for more than 22 years. Email: kabrams@saddleback.edu



Dr. Bill Alston earned a Ph.D. in Organic Chemistry from the University of Arkansas. Dr. Alston teaches Organic Chemistry 12A/B and Introductory Chemistry. Email: walston@saddleback.edu



Professor Teresa Bear is the 2011 Associate Faculty of the Year. She received a B.S. in Chemistry and a M.S. in Organic Chemistry from UC Irvine. Professor Bear teaches the full range of courses offered by the department. Email: tbear@saddleback.edu



Dr. Scott Fier joined the college in 1993 and has been Department Chair since 2002. He is a UC Irvine graduate and teaches Introductory Chemistry and General Chemistry 1A/1B. Email: sfier@saddleback.edu
Web: www.saddleback.edu/faculty/sfier



Dr. Jim Zoval has a Ph.D. in Chemistry from UC Irvine and joined us with both academic and industrial experience. Dr. Zoval teaches Chem 108 & oversees a research group. Email: jzoval@saddleback.edu
Web link: www.saddleback.edu/faculty/jzoval

Technical Support Staff

The department's teaching operations are supported by one instructional programmer and two terrific technical support staff.

Warren Ansaldo is a Senior Lab Technician for the Chemistry Department. Warren received his B.S. in Chemistry from Boston University and came to Saddleback College with great industrial experience. Email: wansaldo@saddleback.edu

Bruce Lee is Chemistry's Instructional Programmer and manages the Chemistry Computer Laboratory. Bruce received his Masters of Science in Computer Engineering from Penn State University. Email: mlee@saddleback.edu

Sara Sheybani is a Senior Lab Technician and 2010 Classified Employee of the Year. Sara earned a B.S. in Biochemistry from UCLA and received the American Chemical Society's Student of the Year Award in 2004. Email: ssheybani@saddleback.edu



For more information contact:

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Visit our website:

www.saddleback.edu/mse/chemistry