Department of Chemistry
Undergraduate Student Academic Affairs Office
http://www.chem.ucr.edu/undergrad/welcome.html

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Minor in Chemistry

Procedure: It is assumed that you have completed the requirements listed in section A below **before** you send an email to colleen.fleming@ucr.edu telling her you intend to submit a *Request to Declare a Minor* to Chemistry. Include the following: full name, student identification number, and email address. Also include your overall gpa. You can find this information by conducting a Degree Check through GROWL at (https://ucribm.ucr.edu/Paws/PAWS.html). Please include which upper division Chemistry courses you intend to use to fulfill the Minor in Chemistry requirement. If you are approved to Minor in Chemistry, you will be notified by email to submit a *Request to Declare a Minor* form to Colleen Fleming in the Chemical Sciences I Building, Room 224 for processing. ***Request to Declare a Minor*** **forms cannot be processed the same day**. Please allow at least 10 working days.

Request to Declare a Minor forms are available in the CNAS Undergraduate Academic Advising Center (1223 Pierce Hall).

A. If you want to Minor in Chemistry you must:

1) have an overall GPA ≥ 2.0;

2) complete the following courses with grades of "C-" or better

CHEM 001A, 001B, 001C and CHEM 01LA, 01LB, 01LC
CHEM 005
MATH 009A, 009B, 009C
PHYS 040A, 040B, 040C (or PHYS 002A, 002B, 002C and PHYS 02LA, 02LB, 02LC)

B. The Minor in Chemistry consists of 28 upper-division units in Chemistry.

1) Of the specified upper division units, a minimum of 16 units must be unique to the Minor and may not be used to satisfy major requirements.

2) At least one of the courses used to satisfy the 28 units must be in CHEM 125, CHEM 111, CHEM 114, CHEM 140 or CHEM 166 (courses which include laboratory work).

3) No more than 4 (four) units of 190-199 courses may be used in fulfilling the upper division units for a Minor.

The list of all Chemistry courses showing titles, units, quarter offered and prerequisites is shown on the next page.

Course Title and Units	Quarter Offered	Prerequisite
CHEM 001A/CHEM 01LA General Chemistry (5)	F,W,U	a score of 3, 4, or 5 on the College Board Advanced Placement Chemistry Examination or a passing score on the California Chemistry Diagnostic Test or a grade of "C-" or better in MATH 005 or concurrent enrollment in MATH 008B or a grade of "C-" or better in MATH 008B or a grade of "C-" or better in an equivalent college-level mathematics or chemistry course; concurrent enrollment in CHEM 01LA or a grade of "C-" or better in CHEM 01LA
CHEM 001B/CHEM 01LB, General Chemistry (5)	W,S,U	CHEM 001A and CHEM 01LA or CHEM 01HA and CHEM 1HLA
CHEM 001C/CHEM 01LC, General Chemistry (5)	F,S,U	CHEM 001B and CHEM 01LB or CHEM 01HB and CHEM 1HLB
CHEM 005, Quantitative Analysis (5)	F	CHEM 001C and CHEM 01LC or CHEM 01HC and CHEM 1HLC
CHEM 110A, Physical Chemistry: Chemical Thermodynamics (4)	F	CHEM 001C and CHEM 01LC or CHEM 01HC and CHEM 1HLC, MATH 010A (or MATH 009C if MATH 010A is taken concurrently), and either PHYS 002C and PHYS 02LC or PHYS 040C (PHYS 040C may be taken concurrently); or consent of instructor
CHEM 110B, Physical Chemistry: Introduction to Statistical Mechanics and Kinetics (4)	W	CHEM 110A or consent of instructor; prior or concurrent enrollment in MATH 010B is recommended
CHEM 111, Physical Chemistry Laboratory (4)	W	CHEM 110A and CHEM 110B (CHEM 110B may be taken concurrently), or consent of instructor. CHEM 113 recommended
CHEM 112A, Organic Chemistry (4)	F,W,U	CHEM 001C and CHEM 01LC or CHEM 01HC and CHEM 1HLC
CHEM 112B. Organic Chemistry (4)	W,S,U	CHEM 112A
CHEM 112C, Organic Chemistry (4)	F,S,U	CHEM 112B
CHEM 113, Physical Chemistry: Introduction to Quantum Chemistry (4)	S	CHEM 001C and CHEM 01LC or CHEM 01HC and CHEM 1HLC; MATH 009C; MATH 046 recommended
CHEM 114, Advanced Physical Chemistry Laboratory (4)	S	CHEM 111, CHEM 113 (CHEM 113 may be taken concurrently)
CHEM 125, Instrumental Methods (5)	W	CHEM 005 with a grade of "C-" or better; either PHYS 002C or PHYS 040C (PHYS 002C or PHYS 040C may be taken concurrently)
CHEM 135, Chemistry of the Clean and Polluted Atmosphere (4)	W	CHEM 112A, CHEM 112B, or consent of instructor; ENSC 102 recommended
CHEM 136, Chemistry of Natural Waters (4)	S	CHEM 005 or ENSC 104 or consent of instructor
CHEM 140, Environmental Chemistry Laboratory (4)	S	CHEM 125; CHEM110A (or CHEM 109); or consent of instructor
CHEM 150A Inorganic Chemistry (4)	W	CHEM 112C; CHEM 110A
CHEM 150B, Inorganic Chemistry (4)	S	CHEM 150A
CHEM 166, Advanced Structural and Synthetic Methods (4)	S	CHEM 005 or BCH 102; CHEM112C; CHEM125 and CHEM150A recommended
CHEM 197, Undergraduate Research (4)	F,W,S,U	Juniors only
CHEM 199, Undergraduate Research (4)	F,W,S,U	Seniors only