

**ADVANCED CHEMISTRY ELECTIVES OR
CONCENTRATION FOR THE CHEMISTRY MAJOR**

Select either the advanced electives or the concentration.

Advanced Chemistry Electives 15-18

Select 15-18 units of approved chemistry electives. At least three courses must be chosen from List B.

List A

- CHEM 252 Laboratory Glassblowing (1)
- CHEM 341 Environmental Chemistry: Water Pollution (3)
- CHEM 342 Environmental Chemistry: Air Pollution (3)
- CHEM 344 Environmental Chemistry Laboratory (1)
- CHEM 350 Chemical Safety (1)
- CHEM 372 Metabolism (3)
- CHEM 373 Molecular Biology (3)
- CHEM 374 Biochemistry Laboratory (2)
- CHEM 375 Molecular Biology Laboratory (2)
- CHEM 377 Chemistry of Drugs & Poisons (3)
- CHEM 385 Geochemistry (3)
- CHEM 400 Special Problems (1-3)¹
- CHEM 401 Adv Undergraduate Research (1-3)
- CHEM 447 Polymers & Coatings Laboratory I (2)
- CHEM 448 Polymers & Coatings Laboratory II (2)
- CHEM 449 Internship in Polymers & Coatings (2)
- CHEM 349 Chemical Warfare (4)
- CHEM 455 FT-NMR Laboratory (1)
- CHEM 465 College Teaching Practicum (2)
- CHEM 470 Selected Topics (1-3)
- CHEM 472 Plant Biochemistry (3)
- CHEM 473 Immunochemistry (3)
- CHEM 474 Protein Techniques Laboratory (2)
- CHEM 477 Biochemical Pharmacology (3)
- CHEM 478 Pharmaceutical Development (3) ₁
- CHEM 485, 495 Cooperative Educ Exp (6, 12)
- SCM 451 Ethics in the Sciences (3)

List B (*Select at least 3 courses*)

- CHEM 405 Advanced Physical Chemistry (3)
- CHEM 419 Bioorganic Chemistry (3)
- CHEM 420 Advanced Organic Chemistry-Synthesis (3)
- CHEM 444 Polymers & Coatings I (3)
- CHEM 445 Polymers & Coatings II (3)
- CHEM 446 Surface Chemistry of Materials (3)
- CHEM 458 Instrumental Org Qual Analysis (3)
- CHEM 463 Senior Project – Honors Research (2)

¹ *No more than 2 units may apply to chemistry electives*

Polymers and Coatings Concentration

CHEM 444 Polymers and Coatings I	3
CHEM 445 Polymers and Coatings II.....	3
CHEM 446 Surface Chemistry of Materials	3
CHEM 447 Polymers and Coatings Lab I.....	2
CHEM 448 Polymers and Coatings Lab II.....	2
CHEM 449 Internship in Polymers and Coatings	2
MATE 210 Materials Engineering	3