



## ADVANCED CHEMISTRY ELECTIVES OR CONCENTRATION FOR THE CHEMISTRY MAJOR

Select either the advanced electives or the concentration.

### Advanced Chemistry Electives ..... 15

Select 15 units of approved chemistry electives if not declaring a concentration. At least three courses must be 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 (4)  
CHEM 373 Molecular Biology (3)  
CHEM 374 Biochemistry Laboratory (2)  
BIO/CHEM 375 Molecular Biology Laboratory (3)  
CHEM 377 Chemistry of Drugs & Poisons (3)  
CHEM 385 Geochemistry (3)  
<sup>1</sup>CHEM 400 Special Problems (1-3)  
<sup>2</sup>CHEM 401 Adv Undergraduate Research (1-3) CR/NC  
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 (Area F)\* (4)  
CHEM 455 FT-NMR Laboratory (1)  
CHEM 465 College Teaching Practicum (2)  
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)  
<sup>1</sup>CHEM 485, 495 Cooperative Educ Exp (6, 12)  
[CHEM 528 Nutritional Biochemistry \(3\)](#)  
PSC/BIO 424 Org & Teaching of Phys Sci (4)  
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 (1)  
CHEM 470 Selected Topics (1-3)

### Polymers and Coatings Concentration

MATE 210 Materials Engineering .....	3
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
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<sup>1</sup> No more than 2 units may apply to chemistry electives

<sup>2</sup> No more than 4 units may apply to chemistry electives.