



## ADVANCED BIOCHEMISTRY ELECTIVES or POLYMERS AND COATINGS CONCENTRATION

### ADVANCED BIOCHEMISTRY ELECTIVES.....12

Select 12 units from Adv Biochemistry Electives (one course must be a lecture and at least two courses must be from List A).

#### LIST A (at least two courses)

CHEM 252	Laboratory Glassblowing
CHEM 302	Marine Chemistry
CHEM 341	Environmental Chemistry: Water Pollution
CHEM 357	Physical Chemistry III Lab
CHEM 377	Chemistry of Drugs and Poisons
CHEM 401	Advanced Undergraduate Research <sup>4</sup>
CHEM 405	Advanced Physical Chemistry
CHEM 414	Advanced Organic Chemistry - Mechanisms
CHEM 419	Bioorganic Chemistry
CHEM 420	Advanced Organic Chemistry - Synthesis
CHEM 428	Nutritional Biochemistry
CHEM 439	Instrumental Analysis
CHEM 441	Bioinformatics Applications
CHEM 444	Polymers & Coatings I
CHEM 445	Polymers & Coatings II
CHEM/MATE 446	Surface Chemistry of Materials
CHEM 447	Polymers and Coatings Laboratory I
CHEM 448	Polymers and Coatings Laboratory II
CHEM 449	Polymers and Coatings Internship
CHEM 450	Polymers and Coatings III
CHEM 451	Polymers and Coatings Laboratory III
CHEM 454	Functional Polymeric Materials
CHEM 458	Instrumental Organic Qualitative Analysis
CHEM 463	Honors Research
CHEM 465	College Teaching Practicum
CHEM 466	Learning Assistant Seminar
CHEM 470	Selected Advanced Topics
CHEM 474	Protein Techniques Laboratory
CHEM 477	Biochemical Pharmacology
CHEM 481	Inorganic Chemistry
CHEM 484	Inorganic Chemistry Laboratory
CHEM 485	Cooperative Education Experience <sup>5</sup>
CHEM 495	Cooperative Education Experience <sup>5</sup>
SCM 302/ENGR 322	The Learn by Doing Lab Teaching Practicum

#### LIST B

BIO/CHEM 308 <sup>9</sup>	or CHEM 349 <sup>9</sup>	or ENVE 324 <sup>9</sup>	or SCM 335 <sup>9</sup>	or SCM 360 <sup>9</sup>
BIO 351	Principles of Genetics			
BIO 361	Principles of Physiology			
BIO 405	Developmental Biology			
BIO 406	Neuroscience			
BIO 407	Endocrinology			
BIO 408	Cardiorespiratory Physiology			
BIO 409	Muscle and Locomotion			
BIO 410	Functional Histology			
BIO 426	Immunology			
BIO 452	Cell Biology			
MCRO 402	General Virology			
MCRO 423	Medical Microbiology			
MCRO 424	Microbial Physiology			
STAT 312	Statistical Methods for Engineers			

### POLYMERS AND COATINGS CONCENTRATION

CHEM 444	Polymers & Coatings I	3
CHEM 445	Polymers & Coatings II	3
CHEM 446	Surface Chemistry of Materials	3
CHEM 447	Polymers and Coatings Laboratory I	2
CHEM 448	Polymers and Coatings Laboratory II	2
CHEM 450	Polymers and Coatings III	3
Select one course from the following:		2
CHEM 449 Polymers and Coatings Internship		
CHEM 451 Polymers & Coatings Laboratory III		
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