

## Sample Course Sequence for the 5-year BS Natural Science with a Polymer Chemistry Concentration and MS in Polymer Science

Year One					
Fall Semester		Spring Semester		Summer Semester	
Prin of Chem I 3150:151	3	Prin of Chem II 3150:153	3	Org Lec I 3150:263	3
Prin of Chem I Lab 3150:152	1	Qual Anal 3150:154	2	Org Lab I 3150:265	2
Calc I 3450:221	4	Eng Comp II 3300:112 or Tech Report writing 2020:222	3	Org Lec II 3150:264	3
Eng Comp I 3300:111	4	Soc. Sci from Honors distribution electives	3	Org Lab II 3150:266	2
Intro Pub Speak 7600:105	3	Phys Ed from Honors distribution electives	1		
Soc. Sci. from Honors distribution electives	3	Calc II 3450:222	4		
	18		16		10
Year 2					
Fall Semester		Spring Semester		Summer Semester	
Anal Chem I 3150: 423	3	Anal II 3150:424	3	Human West Trad 3400:210	4
Adv Lab I 3150:380	2	Adv Lab II 3150:381	2	Area Studies from Honors distribution electives	2
Physics I 3650:291	4	Physics II 3650:292	4	Humanities from Honors distribution electives	3
Calc III 3450:223	4	Intro to Ordinary Diff. Eqns 3450:335	3	Honors Proj. in Polym. Sci. 9871:497	2
Area studies from Honors distribution electives	2	Polym. Res. 9871:499	2		
Polym. Res. 9871:499	2	Elective	3		
Honors colloquium	2	Honors colloquium	2		
	19		19		14
Year 3					
Fall Semester		Spring Semester		Summer	
Phys Chem I 3150:313	3	Phys Chem II 3150:314	3	MS Thesis research	
Humanities from Honors Distribution	3	Honors colloquium	2		
Biochem I 3150:401	3	Intro to Plastics 9871:402	3		
Adv Inorg 3150:472	3	Honors Proj. in Polym. Sci. 9871:497	2		
Intro to Elastomers 9871:401	3	Elective	3		
Honors Proj. in Polym. Sci. 9871:497	2	Elective	3		
	17	Elective	3		
			19		

Year 4					
Polym. Concept 9871:601	2		Polymer Synthesis 9871:602	2	MS Thesis research
Physical Properties of Polymers I 9871:631	2		Polym. Sci. Lab 9871:613	3	
Polym. Structure & Characterization 9871:674	2		Elective	2-3	
Polym. Technology I9871:701	2		Elective	2-3	
	8			9-11	
Year 5					
Elective	2-3		Elective	2-3	
Polymer MS Thesis Research			Polymer MS Thesis Research		Polymer MS Thesis research

## Curriculum Requirements for the BS Natural Science - Polymer Chemistry

### The Honors Distribution – 38 credits

#### Chemistry credits

- 3150:151 Principles of Chem I 3
- 3150:152 Principles of Chem I Lab 1
- 3150:153 Principles of Chem II 3
- 3150:154 Qualitative Analysis 2
- 3150:263 Organic Chem Lec I 3
- 3150:264 Organic Chem Lec II 3
- 3150:265 Organic Chem Lab I 2
- 3150:266 Organic Chem Lab II 2
- 3150:313 Physical Chem I 3
- 3150:314 Physical Chem II 3
- 3150:423 Analytical Chem I 3
- 3150:424 Analytical Chem II 3
- 3150:380 Advanced Lab I 2
- 3150:381 Advanced Lab II 2
- 3150:401 Biochemistry Lecture I 3
- 3150:472 Advanced Inorganic 3

#### Mathematics

- 3450:149 Pre-Calculus 4
- 3450:221 Calculus I 4
- 3450:222 Calculus II 4
- 3450:223 Calculus III 4
- 3450:335 Intro to Ordinary Diff Eqns 3

#### Physics

- 3650:291 Class and Elem Physics I 4
- 3650:292 Class and Elem Physics II 4

**Polymer Science**

- 9871:401 Intro to Elastomers 3
- 9871:402 Intro to Plastics 3
- 9871:499 Rsch Prob in Polymer Sci 10

Or

- 9871:497 Honors Proj in Polymer Sci 10

**Electives – 8 credits from the following**

- 3100:111 Principles of Biology I 4
- 3100:112 Principles of Biology II 4
- 3100: 211 General Genetics 3
- 3100:3xx Any two 300 level Biology 6
- 3650: 301 Elementary Modern Physics 3
- 3650:340 Thermal Physics 3
- 3650:350 Modeling and Simulation 3
- 3650: 441 Quantum Physics 3
- 3650:470 Intro to solid-state Physics 3
- 3150:480 Advanced Lab III 2
- 3150: 463 Advanced Organic Chem 3
- 3150:402 Biochemistry Lecture II 3
- 3470:461 Applied Statistics 4
- 3460:209 Intro to Computer Programming
- 3460:126 Intro to Visual Basic Programming
- 9871:407 Intro to Polymer Science 4