2003-2004

CHEMISTRY MAJOR - Bachel or of Science Degree Department of Chemistry and Biochemistry

Major Requirements	Al ternative sequence	
Course Title Hrs Tr UD	Course Title Hrs Tr UD	
CHM 117 Gen Chem Majors 4	CHM 113 Gen Chem 4	
CHM 118 Gen Chem Majors 4 CHM 317 Org Chem Majors 3	<u>CHM 115 Gen Chem (or 116) 5</u> CHM 331 Gen Org Chem 3	
CHM 319 Org Chem Lab Majors 1	CHM 335 Gen Org Chem Lab 1	
CHM 318 Org Chem Majors II 3 CHM 320 Org Chem Lab Maj II 1	CHM 332 Gen Org Chem 3 CHM 336 Gen Org Chem Lab 1	
CHM 320 Org Chem Lab Maj II 1 CHM 240 Intro Phys Chem 3	CHW 550 Gen Org Chem Lau 1	
CHM 325 Analy Chem 3		
CHM 326 Analy Chem Lab 1		
CHM 327 Instr Analysis 3		
CHM 328 Instr Analysis Lab 2		
CHM 345 Phys Chem I 3		
CHM 348 Phys Chem Lab I 1		
CHM 346 Phys Chem II 3		
CHM 349 Phys Chem Lab II 1		
CHM 453 Inorg Chem 3		
CHM 452 Inorg Chem Lab 1		
CHM 460 Biological Chem 3		
CHM elective/choose from list 3	Electives: CHM 302, 392, 424, 431, 471 480, 481, 485	
Related Courses		
MAT 270 Calculus w/Geom.I 4		
MAT 271 Calculus w/Geom. II 4		
MAT 272 Calculus w/Geom.III 4		
PHY 121 Univ. Physics I 3		
PHY 122 Univ. Physics Lab 1		
PHY 131 Univ. Physics II 3		
PHY 132 Univ. Physics Lab II 1		
Major must include minimum of 66 hours, 12 hours upper division at	ASU, "C" minimum in all upper division courses	
University General Studies	College of Liberal Arts & Sciences	
First Year Comp ("C" minimum)	Second Language	
* `	(proficiency through intermediate level, "C" min.)	
Literacy/Critical Inquiry (L)	Humanities (6 hours, upper division, choose from:	
Literacy/Critical Inquiry (upper division satisfied by major)	AFH, CSH, ENG, HPS, HUM, PHI, REL, WSH)	
Mathematical Studies (CS) (satisfied by CHM 240)	All second language literature or civilization courses	
•	Can NOT double count with University General Studies.	
Mathematical Studies (MA) (satisfied by major)		
Humanities/Fine Art (HU)		
(6-9 hours, HU and SB must total 15 hours)	Social Behavioral Sciences (6 hours, upper division	
(0-) hours, 110 and 3D must total 13 hours)	choose from: AFS, ASB, CSS, ECN, GCU, HST/HIS	
	PGS, POS, SOC, WST except for WST 413, 464 and 470)	
	Can NOT double count with University General Studies.	
	Cun 1102 double could with Chiroshy General Statutes.	
Social Behavioral Sciences (SB)		
(6-9 hours, one HU or SB must be upper division)		
· · · · · · · · · · · · · · · · · · ·	Bridge Course (see http://clasdean.la.asu.edu/student/resources/)	
	Natural Science/Mathematics (satisfied by major)	
HU and SB Awareness Areas (must cover all three)	• • •	
Cultural (C) Global (G) Historical (H)		
Required: 120 total hours 45 upper division hours 30 hours in	n residence at ASU 2.00 minimum GPA	

The schedule presented below is a model program of study that includes all the departmental requirements for courses in chemistry and related subjects. It presents a sequence that accommodates prerequisites for the required courses. Students and advisers should recognize that the order of courses in this outline is a model program and many other plans will work as well.

Year 1			
Semester (Fall)	hrs.	Semester (Spr.)	hrs.
CHM 117 Gen. Chem Majors	4	CHM 118 Gen. Chem. – Majors	4
MAT 270 Calculus w/Geom. I	4	MAT 271 Calculus w/Geom. II	4
		PHY 121 Physics	3
ENC 101 Einst Comm	2	PHY 122 Physics Lab	1 3
ENG 101 First-year Comp. *Non-major	3	ENG 102 First-year Comp. *Non-major	3
"Non-major	<u>4-6</u> 15-17	"Non-major	1.5
	15-17		15
Year 2			
Semester (Fall)	hrs.	Semester (Spr.)	hrs.
CHM 317 Org. Chem Majors	3	CHM 318 Org. Chem Majors	3
CHM 319 Org. Chem. Lab - Majors	1	CHM 320 Org. Chem. Lab - Majors	1
PHY 131 Physics	3	CHM 240 Intro Phys. Chem.	3
PHY 132 Physics Lab	1		
MAT 272 Calculus w/Geom.III	4		
*Non-major	<u>3-5</u>	*Non-major	<u>8-10</u>
	15-17		15-17
Year 3			
	1	S(S)	1
Semester (Fall)	hrs.	Semester (Spr.)	hrs.
CHM 325 Analy. Chem.	3	CHM 327 Instr. Analysis	3
CHM 326 Analy. Chem. Lab	1	CHM 327 Instr. Analysis Lab	2
CHM 345 Phys. Chem. I	3	CHM 346 Phys. Chem. II	3
CHM 348 Phys. Chem. Lab I	1	CHM 349 Phys. Chem. Lab II	1
*Non-major	<u>7-9</u>	*Non-major	<u>6-8</u>
J	1 5-1 7	J	1 5-1 7
Year 4			
Semester (Fall)	hrs.	Semester (Spr.)	hrs.
CIDA 450 I	2	CURA ACO DE LA SACI	2
CHM 453 Inorganic Chem.	3	CHM 460 Biological Chem.	3
		CHM 452 Inorg. Chem. Lab @ CHM elective	1 3
JAT .	10.14		-
*Non-major	<u>12-14</u>	*Non-major	<u>9-11</u>
	15-17		15-17

^{*} Non-major courses: Courses that satisfy university general studies and College of Liberal Arts and Sciences graduation requirements and any other interests the student chooses to pursue.

[@] May be taken any semester to complete the chemistry hours requirement. NOTE: only 2 hrs. of credit for CHM elective is required.