

Department of Chemistry
Major in Chemistry (C 51), for Fall 2007 Advising

Name: _____ CSUID: _____ Expected Graduation: _____

Local Address: _____ City/State: _____ / _____ Zip: _____ Tel.: _____

Undergraduate Key Advisor: Lisa Dysleski Room B113F Chemistry Tel. 491-0722 e-mail: ldysl@lamar.colostate.edu**All University Core Curriculum**

Core Courses _____ Credits _____

1. Basic Competencies

____ A. Written Communication 3

____ B. Mathematics (MATH 160, Calculus for Physical Scientists I) 4

2. Additional Communication

____ A. Oral Communication 3

OR

____ B. Advanced Writing 3

3. Foundations and Perspectives____ A. Biological/Physical Sciences 7
(BZ 104/105, BZ 110/111, BZ 120, or LIFE 102; and PH 141)

____ B. Arts/Humanities 6

____ C. Social/Behavioral Sciences 3

____ D. Historical Perspectives 3

____ E. Global and Cultural Awareness 3

4. Depth and Integration 8See required classes for 4A, 4B, and 4C belowMajor in Chemistry-Grades of "C-" or higher are required in the following classes.

<u>COURSE</u>	<u>TITLE (semesters offered)</u>	<u>CREDITS</u>	<u>AUCC</u>	<u>PREREQUISITES</u>
<u>Freshman Year:</u>				
____ CHEM 117 and CHEM 192	General Chemistry I (F)	4		MATH 118 or placement in MATH 124 or higher
OR				
____ CHEM 111	General Chemistry I (F,S,SS)	4		MATH 118 or placement in MATH 124 or higher
____ CHEM 112	General Chemistry Laboratory I (F,S,SS)	1		CHEM 111 or concurrent registration
____ CHEM 113	General Chemistry II (F,S,SS)	3		CHEM 107 or CHEM 111; MATH 124
____ CHEM 114	General Chemistry Laboratory II (F,S,SS)	1		CHEM 112; CHEM 113 or concurrent registration
____ MATH 160	Calculus for Physical Scientists I (F,S,SS)	4	1B	MATH 126; MATH 124 or concurrent registration
____ MATH 161	Calculus for Physical Scientists II (F,S,SS)	4	1B	MATH 124; MATH 160
____	Biological Science - choose 4 credits including lab: BZ 104/105, BZ 110/111, BZ 120, LIFE 102 (F,S,SS)	4	3A	none
<u>Sophomore year:</u>				
____ CHEM 261	Fundamentals of Inorganic Chemistry (S)	3		CHEM 113
____ CHEM 345	Organic Chemistry I (F)	4		CHEM 113, CHEM 114
____ CHEM 346	Organic Chemistry II (S)	4		CHEM 345
OR				
____ CHEM 341	Modern Organic Chemistry (F,S)	3		CHEM 113, CHEM 114
____ CHEM 343	Modern Organic Chemistry II (F,S)	3		CHEM 341 or CHEM 245 or CHEM 345
____ CHEM 344	Modern Organic Chemistry Lab (F,S)	2		CHEM 343 or CHEM 346 or concurrent registration
____ PH 141	Physics for Scientists and Eng. I (F,S,SS)	5	3A	MATH 160
____ PH 142	Physics for Scientists and Eng. II (F,S)	5	3A	PH 141; MATH 161 or concurrent registration
____ MATH 261	Calculus for Physical Scientists III (F,S,SS)	4		MATH 161
____	Additional Math - 300 level MATH, CS, or STAT (varies)	3		(varies)
<u>Junior year:</u>				
____ CHEM 335	Introduction to Analytical Chemistry (F)	3	4A	CHEM 113; <u>concurrent registration in CHEM 332</u>
____ CHEM 332	Quantitative Analysis Laboratory (F)	2		CHEM 114; <u>concurrent registration in CHEM 335</u>
____ CHEM 474	Physical Chemistry I (F)	3		CHEM 113; MATH 261; PH 142
____ CHEM 476	Physical Chemistry II (S)	3	4B	CHEM 474
<u>Senior year:</u>				
____ CHEM 493	Senior Seminar (varies)	2	4C	CHEM 474
____ CHEM 462	Inorganic Chemistry Laboratory (S)	2		CHEM 461 or concurrent registration
OR				
____ CHEM 440	Advanced Organic Chemistry Laboratory (F)	2	4B	CHEM 344 or CHEM 346
____ CHEM 431	Instrumental Analysis (F)	4		CHEM 332 or CHEM 334; CHEM 474 or CHEM 471 or concurrent registration
OR				
____ CHEM 478	Physical Chemistry Laboratory (S)	2		CHEM 474 or CHEM 471 or CHEM 472; CHEM 332 or CHEM 334 or CBE 333;
____	Upper level science electives (varies)	6 - 8		(to make total of 10 when combined with choice of CHEM 431 or CHEM 478)
____	Upper level electives (any discipline)	6		(to reach the total of 42 required by the university)