West Texas A&M University Advising Services Degree Checklist 2019-2020

(For assistance completing this form, contact Advising Services at 806-651-5300)

NAME:	WT ID:	DATE:	
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Chemistry Option II—General Chemistry Chemistry and Physics

CORE CURRICULUM COURSES: 42 HOURS	Chemistry and Physics Bldg. (301 26 th St.) (80	6)651	-2940
ENGL 1301 Introduction to Academic Writing and Argumentation COMM 1315, 1318, or 1321 See University Core Requirements below (5) Life and Physical Sciences (Code 30) See University Core Requirements below (6) Language, Philosophy and Culture (Code 40) ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*, or 2371 Choose 1 Creative Arts (Code 50) ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310 Choose 1 American History (Code 60) HIST 1301, 1302, 2301, 2381 Choose 2 6 Government/Political Science (Code 70) POSC 2305 and 2306 Social and Behavioral Sciences (Code 80) AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1 Component Area Option (Code 90) See University Core Requirements below (6) CHEMISTRY—OPTION II (GENERAL CHEMISTRY) MAJOR REQUIREMENTS: 63-69 HOURS A grade of "C" or better must be earned in all courses required for major. UNIVERSITY CORE REQUIREMENTS: 15 HOURS * CORE 20 CHEM 1411*[3] Chemistry I CORE 30 CHEM 1411*[3] Chemistry II GORE 30 CHEM 1411*[3] Chemistry II GORE 30 CHEM 1411*[3] Chemistry II GORE 30 CHEM 1411*[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1] GENERAL CHEMISTRY (OPTION II): 48-54 HOURS CHEM 2423*, 2423L Organic Chemistry I CHEM 2425*, 2425L Organic Chemistry I CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry I CHEM 3421*, 3421L Physical Chemistry I CHEM 3421*, 3421L Physical Chemistry I CHEM 3421*, 3421L Physical Chemistry II CHEM 411*, 4411*, Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14	CORE CURRICULUM COURSES: 42 HOURS ◆	HRS	
Argumentation 3 COMM 1315, 1318, or 1321 3 Mathematics (Code 20) See University Core Requirements below (6) Life and Physical Sciences (Code 30) See University Core Requirements below (6) ANTH 2351, ENIGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*, or 2371 Choose 1 Creative Arts (Code 50) ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310 Choose 1 American History (Code 60) HIST 1301, 1302, 2301, 2381 Choose 2 6 Government/Political Sciences (Code 70) POSC 2305 and 2306 6 Social and Behavioral Sciences (Code 80) AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1 Component Area Option (Code 90) See University Core Requirements below (6) CHEMISTRY—OPTION II (GENERAL CHEMISTRY) MAJOR REQUIREMENTS: 63-69 HOURS A grade of "C" or better must be earned in all courses required for major. UNIVERSITY CORE REQUIREMENTS: 15 HOURS * CORE 20 CORE 20 CHEM 1411*[3] Chemistry II GORE 30 CHEM 1411*[3] Chemistry II GORE 30 CHEM 1411*[3] Chemistry II GORE 30 CHEM 1411*[1], 1412L[1] AND 1DS 1071[1], MATH 2412[1], or 2413[1] GENERAL CHEMISTRY (OPTION II): 48-54 HOURS CHEM 2425*, 2425L Organic Chemistry I CHEM 3421*, 3421L Physical Chemistry I CHEM 4323* and 4223L Biochemistry I / Biochemistry I CHEM 4411*, 4411L Instrumental Analysis CHEM 44323* and 4223L Biochemistry I / Biochemistry I CHEM 4411*, 4411L Instrumental Analysis CHEM 44323* and 4223L Biochemistry I / Biochemistry I Laboratory 12-14	Communication (Code 10)		
Mathematics (Code 20) See University Core Requirements below		3	
See University Core Requirements below		3	
Life and Physical Sciences (Code 30)		T	
See University Core Requirements below		(3)	
Language, Philosophy and Culture (Code 40)		(6)	
ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*, or 2371 Choose 1 Creative Arts (Code 50) ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310 Choose 1 American History (Code 60) HIST 1301, 1302, 2301, 2381 Choose 2 6 Government/Political Science (Code 70) POSC 2305 and 2306 6 6 Social and Behavioral Sciences (Code 80) AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1 Component Area Option (Code 90) See University Core Requirements below (6) CHEMISTRY—OPTION II (GENERAL CHEMISTRY) MAJOR REQUIREMENTS: 63-69 HOURS A grade of "C" or better must be earned in all courses required for major. UNIVERSITY CORE REQUIREMENTS: 15 HOURS + CORE 30 CHEM 1411*[3] Chemistry I CORE 30 CHEM 1412*[3] Chemistry II CORE 90 ENGL 1302* or 2311* CORE 90 CHEM 2423*, 2423L Organic Chemistry I CHEM 2425*, 2425L Organic Chemistry II CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry I CHEM 3511*, 3511L Analytical Chemistry I CHEM 3421*, 3421L Physical Chemistry I CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4412*, 3421L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4423* and 4223L Biochemistry I / Biochemistry I Laboratory 12-14	· · · · · · · · · · · · · · · · · · ·	(0)	
ARTS 1303, ARTS 1304; DANC 2303; MUSI 1306, MUSI 1307, MUSI 1310; or THRE 1310 Choose 1 American History (Code 60) HIST 1301, 1302, 2301, 2381 Choose 2 6 Government/Political Science (Code 70) POSC 2305 and 2306 6 Social and Behavioral Sciences (Code 80) AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1 Component Area Option (Code 90) See University Core Requirements below (6) CHEMISTRY—OPTION II (GENERAL CHEMISTRY) MAJOR REQUIREMENTS: 63-69 HOURS A grade of "C" or better must be earned in all courses required for major. UNIVERSITY CORE REQUIREMENTS: 15 HOURS + CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3] 3 CORE 30 CHEM 1411*[3] Chemistry I 3 CORE 30 CHEM 1412*[3] Chemistry II 3 CORE 90 ENGL 1302* or 2311* 3 CORE 90 ENGL 1302* or 2311* 3 GORE 90 ENGL 1302* or 2311* 4 CORE 90 ENGL 1302* or 2413[1] 4 CHEM 2423*, 2423L Organic Chemistry I 4 CHEM 2423*, 2425L Organic Chemistry I 4 CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry I 5 Take three courses from: CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry I CHEM 4411*, 3411L Instrumental Analysis CHEM 44323* and 4223L Biochemistry I Biochemistry I Laboratory 12-14	ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*, or 2371	3	
1307, MUSI 1310; or THRE 1310	<u> </u>		
HIST 1301, 1302, 2301, 2381	1307, MUSI 1310; or THRE 1310 Choose 1	3	
POSC 2305 and 2306 6			
POSC 2305 and 2306 Social and Behavioral Sciences (Code 80)		6	
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AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1 Component Area Option (Code 90) See University Core Requirements below (6) CHEMISTRY—OPTION II (GENERAL CHEMISTRY) MAJOR REQUIREMENTS: 63-69 HOURS A grade of "C" or better must be earned in all courses required for major. UNIVERSITY CORE REQUIREMENTS: 15 HOURS • CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3] 3 CORE 30 CHEM 1411*[3] Chemistry I CORE 30 CHEM 1412*[3] Chemistry II CORE 90 ENGL 1302* or 2311* CORE 90 CHEM 1411L[1], 1412L[1] AND IDS 1071[1], MATH 2412[1], or 2413[1] GENERAL CHEMISTRY (OPTION II): 48-54 HOURS CHEM 2423*, 2423L Organic Chemistry I CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry Take three courses from: CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry I CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14		6	
CHEMISTRY—OPTION II (GENERAL CHEMISTRY) MAJOR REQUIREMENTS: 63-69 HOURS A grade of "C" or better must be earned in all courses required for major.	AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 Choose 1	3	
CHEMISTRY—OPTION II (GENERAL CHEMISTRY) MAJOR REQUIREMENTS: 63-69 HOURS			
REQUIREMENTS: 63-69 HOURS A grade of "C" or better must be earned in all courses required for major.	See University Core Requirements below	(6)	
CORE 20 MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3] 3	REQUIREMENTS: 63-69 HOURS		or.
MATH 1314*, 1316*, 1324*, 2412*[3], or 2413*[3] 3	UNIVERSITY CORE REQUIREMENTS: 15 HOURS •		
CHEM 1411*[3] Chemistry I 3 3 CHEM 1412*[3] Chemistry II 3 3 CHEM 1412*[3] Chemistry II 3 3 CORE 90 ENGL 1302* or 2311* 3 CORE 90 CHEM 1411L[1], 1412L[1] AND 3 IDS 1071[1], MATH 2412[1], or 2413[1] 3 CHEM 2423*, 2423L Organic Chemistry I 4 4 CHEM 2425*, 2425L Organic Chemistry II 4 4 CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry 1 CHEM 3511*, 3511L Analytical Chemistry I CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14		3	
CHEM 1412*[3] Chemistry II 3		3	
Section		3	
CHEM 1411L[1], 1412L[1] AND 3 IDS 1071[1], MATH 2412[1], or 2413[1] GENERAL CHEMISTRY (OPTION II): 48-54 HOURS CHEM 2423*, 2423L Organic Chemistry I 4 CHEM 2425*, 2425L Organic Chemistry II 4 CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry 1 CHEM 3511*, 3511L Analytical Chemistry 5 Take three courses from:	ENGL 1302* or 2311*	3	
CHEM 2423*, 2423L Organic Chemistry I CHEM 2425*, 2425L Organic Chemistry II 4 CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry 1 CHEM 3511*, 3511L Analytical Chemistry 5 Take three courses from: CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14	CHEM 1411L[1], 1412L[1] AND	3	
CHEM 2425*, 2425L Organic Chemistry II 4 CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry 1 CHEM 3511*, 3511L Analytical Chemistry 5 Take three courses from: CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14	GENERAL CHEMISTRY (OPTION II): 48-54 HOURS		
CHEM 3201* Chemical Literature 2 CHEM 4103* Seminar in Chemistry 1 CHEM 3511*, 3511L Analytical Chemistry 5 Take three courses from: CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14	CHEM 2423*, 2423L Organic Chemistry I	4	
CHEM 4103* Seminar in Chemistry CHEM 3511*, 3511L Analytical Chemistry 5 Take three courses from: CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14	CHEM 2425*, 2425L Organic Chemistry II	4	
CHEM 3511*, 3511L Analytical Chemistry 5 Take three courses from: CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14	CHEM 3201* Chemical Literature	2	
Take three courses from: CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14	CHEM 4103* Seminar in Chemistry	1	
CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory 12-14		5	
Laboratory CHEM 4431*, 4431L Inorganic Chemistry	CHEM 3421*, 3421L Physical Chemistry I CHEM 3422*, 3422L Physical Chemistry II CHEM 4411*, 4411L Instrumental Analysis CHEM 4323* and 4223L Biochemistry I/ Biochemistry I Laboratory CHEM 4324* and 4224L Biochemistry II/ Biochemistry II Laboratory	12-14	

Bachelor of Arts Degree BA.CHEM (104)

MATH 1316* (111) Plane Trigonometry OR MATH 2412* (1348) Pre-Calculus (if not taken to satisfy Core 20)	0-4					
MATH 2413* Calculus I	4					
MATH 2414* Calculus II	4					
PHYS 1401*, 1401L General Physics I AND PHYS 1402*, 1402L General Physics II OR PHYS 2425*, 2425L Calculus Physics I AND PHYS 2426*, 2426L Calculus Physics II	8					
CHEM 4370* (MPS 4370) Senior Investigations OR MPS 4393* Math/Physical Science/Engineering Technology Honors	3					
ADVANCED ELECTIVES: 15-17 HOURS—SEE NOTE II						
ADVANCED ELECTIVES Additional advanced (3000- or 4000-level) hours to provide a minimum of 39 hours selected from chemistry, mathematics, biology, computer science, physics, environmental science or geology.	15-17					
BACHELOR OF ARTS REQUIREMENTS: 12 HOURS	OP	TION				
Six hours of foreign language.	(6-8)					
Six hours chosen from art, English, history, modern languages, music, philosophy and theatre.	6					
ELECTIVE						
ELECTIVE	0-1					
MINIMUM HOURS REQUIRED TO COMPLETE DEGREE						
MINIMOM HOOKS REQUIRED TO COMIL LETE DECKEE	120					

- moved to the major as an elective or a major requirement and stay within the 120-hour requirement or approved total submitted to the Coordinating Board for degree requirements. Some majors specify particular courses to meet core curriculum requirements when options are available.
- * Indicates prerequisites—see catalog for more information.
 ** Or an equivalent course (second year, second semester) in a foreign language.

NOTE I: This option provides a background for students whose career goals are to enter education or chemistry-related fields.

NOTE II: At least 39 hours of advanced work (3000- or 4000-level courses) for which tuition is paid must be earned at WTAMU, and 30 of the final 36 hours counted toward the degree must be earned at WTAMU. A maximum of six semester hours in religion (RELI) and six semester hours in physical education (PHED) courses can count toward a baccalaureate degree.

Note: This is NOT a degree plan. After completing 30 hours, students are encouraged to request an official degree plan by using the online Degree Plan Request form. Students who have questions about their degree plan should contact the office of the dean of the Paul Engler College of Agriculture and Natural Sciences, which is located in the Happy State Bank Academic & Research Building, Suite 262 (phone 806-651-3570). Students who have completed 45 hours will not be allowed to progress without requesting a degree plan.

Chemistry - Option II-General Chemistry

Chemistry and Physics
Advising Services Bachelor of Arts Degree
BA.CHEM

- 2020 Curriculum Guide

301 26th 651-2940 Degree Plan Total Hours: 120 Major Code: 104

First Ye	First Year							
	Fall		Spring					
н	CORE 10-ENGL 1301	3	Н	CORE 90-ENGL	3			
0			0	1302 or 2311				
u	CORE 20-MATH	3	u	MATH 2413	4			
r	1316 or 2412*		r					
S	CHEM 1411/1411L	4	S	CHEM 1412/1412L	4			
			·					
14	CORE 60-HIST	3	17	CORE 10-COMM	3			
14	1301, 1302, 2301 or 2381		1/	1315, 1318 or 1321				
	CORE 90-IDS 1071**	1		CORE 60-HIST	3			
				1301, 1302, 2301 or 2381				

Secon	Second Year							
	Fall			Spring				
Н	MATH 2414	4	Н	CHEM 2425/2425L	4			
o u	CHEM 2423/2423L	4	o u	CORE 80	3			
r			r	See Checklist for Options				
s	CORE 50	3	s '	BA REQUIREMENT	3			
	See Checklist for Options			See Checklist for Options				
14	CORE 70-POSC	3	13	CORE 70-POSC	3			
14	2305 or 2306		13	2305 or 2306				

Third Y	Third Year						
	Fall			Spring			
Н	CHEM 3511/3511L	5	Н	PHYS	4		
				1402/1402L or 2426/2426L			
o u	PHYS	4	o u	BA REQUIREMENT	3		
r	1401/1401L or 2425/2425L		r	See Checklist for Options			
s	CORE 40	3	S	CHEM ELECTIVE	4		
	See Checklist for Options		ľ	See Checklist for Options			
15	CHEM ELECTIVE	3	15	ADV ELECTIVE	4		
15	See Checklist for Options		13	See Checklist for Options			

Fourth	Fourth Year							
	Fall		Spring					
Н	CHEM ELECTIVE	4	н	ADV ELECTIVE	3			
	See Checklist for Options			See Checklist for Options				
o u	CHEM 4103	1	o u	ADV ELECTIVE	3			
l r	See Checklist for Options		r	See Checklist for Options				
s	ADV ELECTIVE	4	5	BA REQUIREMENT	4			
	See Checklist for Options			Foreign Language				
17	BA REQUIREMENT	4	15	CHEM OR MPS	3			
17	Foreign Language		13	4370 or 4393				
	ADV ELECTIVE	4		CHEM 3201	2			
	See Checklist for Options							

DISCLAIMER: This curriculum guide should be used in conjunction with the corresponding degree checklist for general planning purposes only. The degree checklist (later a student's official degree plan) should be referred to as the comprehensive list of all courses required for the degree. An official degree plan is required after completing 45 hours. Students should always seek the advice of their academic adviser before scheduling classes.

Notes: This option provides a background for students whose career goals are to enter education or chemistry-related fields.

- * MATH 2412 is recommended over MATH 1316 for this degree plan.
- ** MATH 2412 (1) or MATH 2413 (1) can substitute for IDS 1071 (1) if these are used to satisfy CORE 20 requirements.