

Bachelor of Science (BS) Chemistry

2018-2019

Focus: 7th - 12th Grade UTeach Certification

	! 	1	Course #	Course Title	Min.		Prerequisite	Additional Notes
T	·		Course #	Course ritte	Grade		For all 010 courses: Satisfactory scores on ENGL portion of ACT test or	
	3	3	Choose 1	Communication (Core)	С	010	TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade	See General Education Core for more details
							of "C" or better in ENGL 1301/1387.	Options: ENGL 1301 or ENGL 1387 (H)
	3		CHEM 1311	General Chemistry I		030	MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 1388, MATH	
		<u> </u>	CHEWITSTI	General Chemistry I		030	2412, MATH 2413, or MATH 2487 with a grade of "C" or higher."	
	1	L	CHEM 1111	General Chemistry I Lab		090	Credit/registration in CHEM 1311	
1 L	3	3	Choose 1	Government/Political Science (Core)		070		See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
	4	ı	MATH 2413	Calculus I	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
	1		UTCH 1101	Inquiry Approaches to Teaching	С		Criminal background check and TB vaccine. Must be a Mathematics or Science Major	
			UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
Γ	15	Semes	ter Total Hours					
							For all 010 courses: Satisfactory scores on ENGL portion of ACT test or	Con Consent Education Cons for many datation
	3	3	Choose 1	Communication (Core)	С	010	TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade	See General Education Core for more details Options: ENGL 1302 or ENGL 1388 (H) or ENGL 1305
	_						of "C" or better in ENGL 1301/1387.	Options. ENGL 1302 of ENGL 1308 (II) of ENGL 1303
L	3	3	CHEM 1312	General Chemistry II		030	CHEM 1311.	
	1	L	CHEM 1112	General Chemistry II Lab		090	Credit/registration in CHEM 1312.	
	4		MATH 2414	Calculus II		020	MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
	3	3	Choose 1	Government/Political Science (Core)		060		See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
	3	3	Choose 1	Creative Arts (Core)		050		See General Education Core for course options.
	1		UTCH 1102	Inquiry-Based Lesson Design	С		UTCH 1101 with a grade of "C" or better or concurrent enrollment with UTCH 3301.	
	18	3 Semes	ter Total Hours					
	! H	1	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	3	CHEM 2323	Organic Chemistry I			Prerequisite: CHEM 1312	
	1	L	CHEM 2123	Organic Chemistry I Lab			Prerequisite: CHEM 1112	
	3	3	Choose 1	Language, Philosophy & Culture (Core)		040		See General Education Core for course options.
	3	3	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST 1387 or HIST/MASC 2327
	1		Choose 1	Integrative/Experiential Learning Option (Core)		090		See General Education Core for course options.
	3	3	UTCH 3301	Knowing and Learning in Mathematics and Science	С		UTCH 1101 and UTCH 1102 with a grade of "C" or better or concurrent enrollment with UTCH 1102.	
H	14	Semes	ter Total Hours					
	3		CHEM 2325	Organic Chemistry II			CHEM 2323	
	1	_	CHEM 2125	Organic Chemistry II Lab			CHEM 2325	
	3	+	Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST 1388 or HIST/MASC 2328
	"			Integrative/Experiential Learning Option (Core)		090		See General Education Core for course options.
	3	3	Choose 1	integrative, Experiential Economic Option (core)				
	-		PHYS 4392	Research Methods				
	3	3						

CORE: The 2018-2019 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core www.utrgv.edu/core

Symbols Key

Critical ('!'): sequence sensitive course.

Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.

General Education Core (GEC) Sections: 010 - Communication; 020 - Mathematics; 030 - Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative demonstrate language proficiency in a language other than English at Arts; 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral Sciences; 090 - Applied Communication and Literacies; 090 - Humanities; 090 - Leadership; 090 - Science Labs; 090 - Interdisciplinary; 090 - Technologies; 090 -Language Diversity & Writing.

Language Proficiency Requirement: Student is required to the undergraduate level equivalent to a minimum of six credits.

	- !	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	CHEM 3303	Biochemistry I			CHEM 2323.	
		1	CHEM 3103	Biochemistry I Lab			CHEM 3303.	
		3	CHEM 2301	Analytical Chemistry			CHEM 1312	
FALL		1	CHEM 2101	Analytical Chemistry Lab			CHEM 2301	
		4	PHYS 1401	General Physics I			MATH 1414 or MATH 1314, MATH 2412 or MATH 2413	
		3	PHIL 3317	Perspectives on Science and Mathematics			UTCH 1101, UTCH 1102	
8	15 Semester Total Hours							
) YE⊅		3	CHEM 3301	Inorganic Chemistry			12 hours of chemistry, including CHEM 2323.	
THIRE		1	CHEM 3101	Inorganic Chemistry Lab			Credit/registration in CHEM 3301.	
		3	CHEM 4304	Instrumental Analysis			CHEM 2301 and CHEM 2101.	
ی		1	CHEM 4104	Instrumental Analysis Lab			CHEM 4304.	
SPRING		4	PHYS 1402	General Physics II			PHYS 1401.	
σ		3	READ 4305	Content Area Literacy				
		3	3 UTCH 3302	Classroom Interactions	С		(a) An institutional grade point average of at least 2.75, (b) UTCH 1102 with a grade of "C" or better, © UTCH 3301 with a grade of "C" or better, and Admission to Teacher Educator Program	
	18 Semester Total Hours							
		18	Semester Lotal Hours					
		18		Course Title	Min. Grada	GEC	Prerequisite	Additional Notes
Ī			Course #	Course Title Physical Chemistry I	Min. Grada	GEC	Prerequisite PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488).	Additional Notes
		Н	CHEM 3304		Min. Grada	GEC	PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and	Additional Notes
		Н 3	H Course # CHEM 3304 CHEM 3104	Physical Chemistry I	Min. Grade	GEC	PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488).	Additional Notes
	!	3 1	H Course # CHEM 3304 CHEM 3104 CHEM 4305	Physical Chemistry I Physical Chemistry I Lab	Min. Grada	GEC	PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488). Credit/registration in CHEM 3304.	Additional Notes
	!	3 1 3	H Course # CHEM 3304 CHEM 3104 CHEM 4305 CHEM 4201	Physical Chemistry I Physical Chemistry I Lab Chemistry Capstone	Min. Grada	GEC 080	PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488). Credit/registration in CHEM 3304. Chemistry major with senior standing or consent of instructor Chemistry major with junior standing or consent of instructor.	Additional Notes See General Education Core for course options.
YEAR	!	3 1 3	H Course # CHEM 3304 CHEM 3104 CHEM 4305 CHEM 4201 Choose 1	Physical Chemistry I Physical Chemistry I Lab Chemistry Capstone Chemistry Problems I	Min. Grada		PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488). Credit/registration in CHEM 3304. Chemistry major with senior standing or consent of instructor Chemistry major with junior standing or consent of instructor.	
OURTH YEAR FALL	!	3 1 3 2 3	H Course # CHEM 3304 CHEM 3104 CHEM 4305 CHEM 4201 Choose 1	Physical Chemistry I Physical Chemistry I Lab Chemistry Capstone Chemistry Problems I Social and Behavioral Sciences (Core)	Min.		PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488). Credit/registration in CHEM 3304. Chemistry major with senior standing or consent of instructor Chemistry major with junior standing or consent of instructor.	
YEAR	!	3 1 3 2 3	H Course # CHEM 3304 CHEM 3104 CHEM 4305 CHEM 4201 Choose 1 UTCH 3303 Semester Total Hours	Physical Chemistry I Physical Chemistry I Lab Chemistry Capstone Chemistry Problems I Social and Behavioral Sciences (Core)	Min. Granta		PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488). Credit/registration in CHEM 3304. Chemistry major with senior standing or consent of instructor Chemistry major with junior standing or consent of instructor.	
YEAR	!	3 1 3 2 3	H Course # CHEM 3304 CHEM 3104 CHEM 4305 CHEM 4201 Choose 1 UTCH 3303 Semester Total Hours CHEM 3305	Physical Chemistry I Physical Chemistry I Lab Chemistry Capstone Chemistry Problems I Social and Behavioral Sciences (Core) Project-Based Instruction	Min. Gravia		PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488). Credit/registration in CHEM 3304. Chemistry major with senior standing or consent of instructor Chemistry major with junior standing or consent of instructor. (a) An institutional grade point average ot at least 2.75, (b) UTCH 3302 with a grade of "C" or better	
FOURTH YEAR		3 1 3 2 3 15 3	H Course # CHEM 3304 CHEM 3104 CHEM 4305 CHEM 4201 Choose 1 UTCH 3303 Semester Total Hours CHEM 3305 CHEM 3305 CHEM 3305 CHEM 3105	Physical Chemistry I Physical Chemistry I Lab Chemistry Capstone Chemistry Problems I Social and Behavioral Sciences (Core) Project-Based Instruction Physical Chemistry II	Min. Grada		PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488). Credit/registration in CHEM 3304. Chemistry major with senior standing or consent of instructor Chemistry major with junior standing or consent of instructor. (a) An institutional grade point average of at least 2.75, (b) UTCH 3302 with a grade of "C" or better	
YEAR		3 1 3 2 3 1 5 1 6	H Course # CHEM 3304 CHEM 3104 CHEM 4305 CHEM 4201 Choose 1 UTCH 3303 Semester Total Hours CHEM 3305 CHEM 3305 CHEM 3105 UTCH 4601	Physical Chemistry I Physical Chemistry I Lab Chemistry Capstone Chemistry Problems I Social and Behavioral Sciences (Core) Project-Based Instruction Physical Chemistry II Physical Chemistry II Lab	Min. Gravita		PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488). Credit/registration in CHEM 3304. Chemistry major with senior standing or consent of instructor Chemistry major with junior standing or consent of instructor. (a) An institutional grade point average of at least 2.75, (b) UTCH 3302 with a grade of "C" or better CHEM 3304 Credit/registration in CHEM 3305. (a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, (c) successful completion of PPR and content	

This program leads to a profession which requires an occupational license as defined under Texas Occupations Code 58.001. This requires that all applicants seeking to become licensed must undergo a criminal background check prior to licensure. Students in this program should check with the College of Education and P-16 Integration on the requirements for a criminal background check prior to student teaching.

Progression requirements

Admission to the College of Education and P-16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4601, 4101). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 5 advanced hours, as recommended by advisor.

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Graduation Requirements

In addition to the graduation requirements listed in the UTRGV 2018-2019 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV department of Writing and Language Studies, and/or to six credit hours of college-level language coursework.

122 TOTAL HOURS (53) TOTAL ADVANCED HOURS Revised: Monday, July 2, 2018

Approved: Monday, April 9, 2018