The University of Texas Rio Grande Valley

Bachelor of Science (BS)

Chemistry

2020-2021	
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Focus: 7th - 12th Grade Teacher Certification Course # Course Title For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing See General Education Core for more details 3 Choose 1 Communication (Core) С 010 exams or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301. Options: ENGL 1301 MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 2412, MATH 2413 with a grade 3 CHEM 1311 030 General Chemistry I of "C" or higher." 1 CHEM 1111 General Chemistry I Lab 090 Credit/registration in CHEM 1311 3 POLS 2305 Government/Political Science (Core) 070 See General Education Core for more details MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test 4 MATH 2413 Calculus I С 020 administered by the Department of Mathematics. С UTCH 1101 Inquiry Approaches to Teaching Criminal background check and TB vaccine. Must be a Mathematics or Science Major 1 1301 Learning Framework As required, based on credit hours earned, TSI status, High UNIV 1101 Academic and Career Success school rank, major declaration 1001 Living and Working by Design 15 Semester Total Hours See General Education Core for more details For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing 3 С 010 Communication (Core) Choose 1 exams or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301. Options: ENGL 1302 or ENGL 1305 3 CHEM 1312 General Chemistry II 030 CHEM 1311. CHEM 1112 General Chemistry II Lab 090 Credit/registration in CHEM 1312. 1 4 MATH 2414 Calculus II MATH 2413 with a grade of 'C' or better. 3 POLS 2306 Government/Political Science (Core) 070 See General Education Core for more details 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 Semester Total Hours** Course # Course Title GEC Prerequisite Additional Notes 3 CHEM 2323 Organic Chemistry I Prerequisite: CHEM 1312 Organic Chemistry I Lab 1 CHEM 2123 Prerequisite: CHEM 1112 3 Choose 1 Language, Philosophy & Culture (Core) 040 See General Education Core for course options. See General Education Core for more details. 060 3 Choose 1 American History (Core) Options: HIST 1301 or HIST/MASC 2327 4 PHYS 1401 General Physics I MATH 1414 or MATH 1314, MATH 2412 or MATH 2413 Knowing and Learning in Mathematics UTCH 1101 and UTCH 1102 with a grade of "C" or better or concurrent enrollment with 3 С UTCH 3301 and Science UTCH 1102 17 Semester Total Hours 3 **CHEM 2325** Organic Chemistry II CHEM 2323 CHEM 2125 Organic Chemistry II Lab CHEM 2325 1 See General Education Core for more details. 3 American History (Core) 060 Choose 1 Options: HIST 1302 or HIST/MASC 2328 Integrative/Experiential Learning Option 3 Choose 1 090 See General Education Core for course options. (Core) 3 BIOL/PHYS/MATE 4392 Research Methods Grade C or better in the following: MATH 2413 and UTCH 1102. BIOL/PHYS 3330 or MATE Functions and Modeling 3 A grade of 'C' or better in the following: MATH 2413 and UTCH 1102. 3321 16 Semester Total Hours Must apply to Teacher Education Program.

CORE: The 2020-2021 list of core courses can be found in the 2020-2021 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Core Curriculum'

Symbols Key

Critical ('I'): 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 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.

	· H	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 and CHEM 1112.	
FAL	1	CHEM 2101	Analytical Chemistry Lab			CHEM 2301	
	4	PHYS 1402	General Physics II			PHYS 1401.	
	3	Choose 1	Social and Behavioral Sciences (Core)		080		See General Education Core for course options.
	15	Semester Total Hours					
rear	3	CHEM 3301	Inorganic Chemistry			12 hours of chemistry, including CHEM 2323.	
THIRD	1	CHEM 3101	Inorganic Chemistry Lab			Credit/registration in CHEM 3301.	
	3	CHEM 4304	Instrumental Analysis			CHEM 2301 and CHEM 2101.	
o	1	CHEM 4104	Instrumental Analysis Lab			CHEM 4304.	
SPRINC	3	CHEM 3304	Physical Chemistry I			PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH 2414	
	1	CHEM 3104	Physical Chemistry I Lab			Credit/registration in CHEM 3304.	
	3	READ 4305	Content Area Literacy				
	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						
	· H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3	CHEM 3305	Physical Chemistry II			CHEM 3304	
	1	CHEM 3105	Physical Chemistry II Lab			Credit/registration in CHEM 3305.	
-	3	CHEM 4305	Chemistry Capstone			Chemistry major with senior standing or consent of instructor	
YEAR FAI	2	CHEM 4201	Chemistry Problems I			Chemistry major with junior standing or consent of instructor.	
DURTH	3	PHIL/MATE 3317	Perspectives in Mathematics and Science			UTCH 1101, UTCH 1102	
5	3	UTCH 3303	Project-Based Instruction			(a) An institutional grade point average ot at least 2.75, (b) UTCH 3302 with a grade of "C" or better	
	15	Semester Total Hours					
ő	6	UTCH 4601	Apprentice Teaching			(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 TExES examinations	
SPRIN	1	UTCH 4101	Apprentice Teaching Seminar			(a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, co-requisite: UTCH 4601,	
Note	7	Semester Total Hours					

Note

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.

Major Admissions Requirements

1. Admission requirements required for this program beyond university admission requirements.

Admission to the Teacher Education Program at the Office of Educator Preparation and Accountability is required for completion of teacher certification requirements with the undergraduate degree. All admission requirements are in accordance to Texas Administrative Code rules §227.10 and the HEA Title II accountability requirements. All applicants must meet the current certification requirements in effect at the time of application, regardless of the catalog year of degree plan.

Major Progression requirements

Teacher Education Program progression requirements include GPA, course grades, certification courses, benchmarks/key assessments and testing.

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.

121 TOTAL HOURS

Approved: Wednesday, February 3, 2021 Revised: Wednesday, October 14, 2020