# The University of Texas RioGrande Valley

## **Bachelor of Science (BS)** Chemistry

	! H	А	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3		Choose 1	Communication (Core)		010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	See General Education Core for more details Options: ENGL 1301 <b>or</b> ENGL 1387 (H)
FALL	3		CHEM 1311	General Chemistry I		030	MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 1388, MATH 2412, MATH 2413, or MATH 2487 with a grade of "C" or higher."	
ЕV	1		CHEM 1111	General Chemistry I Lab			Credit/registration in CHEM 1311	
	4		MATH 2413	Calculus I		020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	
AR	3		Choose 1	Social and Behavioral Sciences (Core)				See General Education Core for course options.
Ц Ц			UNIV 1301	Learning Framework				Only if required, based on ACT/SAT and high school rank.
	14	(0)	Semester Total Hours					
FIRS	3		Choose 1	Communication (Core)		010	For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	See General Education Core for more details Options: ENGL 1302 <b>or</b> ENGL 1388 (H) <b>or</b> ENGL 1305
Ċ	3		CHEM 1312	General Chemistry II		030	CHEM 1311.	
SPRING	1		CHEM 1112	General Chemistry II Lab		090	Credit/registration in CHEM 1312.	
PR	4		MATH 2414	Calculus II			MATH 2413 (or MATH 2487) with a grade of 'C' or better.	
S	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.
	15	(0)	Semester Total Hours					
	! H	А	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	3		CHEM 2323	Organic Chemistry I			Credit in CHEM 1312/1112	
	1		CHEM 2123	Organic Chemistry I Lab			Credit/registration in CHEM 2323.	
	4		PHYS 1401	General Physics I		090	MATH 1414 or MATH 1314.	One hour Integrative & Experiential Learning
	3		Choose 1	Language, Philosophy & Culture (Core)				See General Education Core for course options.
	3		Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST 1388 or HIST/MASC 2328
	14	(0)	Semester Total Hours	1				
3	3		CHEM 2325	Organic Chemistry II			Credit in CHEM 2323/2123	
Ľ	1		CHEM 2125	Organic Chemistry II Lab			CHEM 2123.	
Ű S	4		PHYS 1402	General Physics II			PHYS 1401.	
a la	3		Choose 1	Integrative/Experiential Learning Option (	Core	090		See General Education Core for course options.
SPRING	3		Choose 1	Creative Arts (Core)				See General Education Core for course options.
	14	(0)	Semester Total Hours					
		1-7						

CORE: The 2017-2019 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 Language Proficiency Requirement: Student is required to demonstrate language 060 - American History; 070 - Government/Political Science; 080 - Social and Behavioral minimum of six credits. Sciences; 090 - Computer Application; 090 - Interdisciplinary ;090 - Science Labs; 090 -

# 2017-2018

- Life and Physical Sciences; 040 - Language, Philosophy & Culture; 050 - Creative Arts; proficiency in a language other than English at the undergraduate level equivalent to a

		! H	А	Course #	Course Title	Min. Grade	GEC	Prerequisite
		3	(3)	CHEM 3303	Biochemistry I	Grade		CHEM 2323.
		1	(1)	CHEM 3103	Biochemistry I Lab	_		Credit in CHEM 2123. Credit/registration in CHEM 3303.
		3	(-)	CHEM 2301	Analytical Chemistry	_		Credit in CHEM 1312
	-	1		CHEM 2101	Analytical Chemistry Lab			CHEM 2301. Credit in CHEM 1112.
	FALL	3		Choose 1	Government/Political Science (Core)		070	
		4	(4)	34XX-44XX	Advanced Elective			
æ		15	<u> </u>	Semester Total Hours				
EAR		3	(3)	CHEM 3301	Inorganic Chemistry			12 hours of chemistry, including CHEM 2323.
Y		1	(1)	CHEM 3101	Inorganic Chemistry Lab			Credit/registration in CHEM 3301.
Ω	()	3	(3)	CHEM 4304	Instrumental Analysis			CHEM 2301 and CHEM 2101.
HIRD	ž	1	(1)	CHEM 4104	Instrumental Analysis Lab			CHEM 4304.
É	SPRING	3		Choose 1	Government/Political Science (Core)		070	
		4	(4)	34XX-44XX	Advanced Elective	_		
		15		Semester Total Hours				
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	S	0	(0)	Semester Total Hours				
		! H	A	Course #	Course Title	Min. Grade	GEC	Prerequisite
						Grade		PHYS 1402; MATH 2413 (or MATH 2487) with a grade of
		3	(3)	CHEM 3304	Physical Chemistry I			better and registration in MATH 2414 (or MATH 2488).
		1	(1)	CHEM 3104	Physical Chemistry I Lab	_		Credit/registration in CHEM 3304.
			. ,			_		MATH 2414 (or MATH 2488) and MATH 2318 with a grad
	ALI	3	(3)	MATH 3341	Differential Equations			or better.
	F	3	(3)	CHEM 4305				Senior standing
								Contor orang
				CHEM 33XX-43XX	Major Advanced Elective	_		
œ		3	(3)	CHEM 33XX-43XX 33XX-43XX	Major Advanced Elective			
EAR		3 3	(3) (3)	33XX-43XX	Major Advanced Elective Advanced Elective			
YEAR		3 3 <b>16</b>	(3) (3) (16)	33XX-43XX Semester Total Hours	Advanced Elective			
ΥE		3 3 <b>16</b> 3	(3) (3) (16) (3)	33XX-43XX Semester Total Hours CHEM 3305	Advanced Elective Physical Chemistry II			CHEM 3304
ΥE	()	3 3 <b>16</b> 3 1	(3) (3) (16) (3) (1)	33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105	Advanced Elective Physical Chemistry II Physical Chemistry II Lab			CHEM 3304 Credit/registration in CHEM 3305.
ΥE	NG	3 3 <b>16</b> 3 1 2	(3) (3) (16) (3) (1) (2)	33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105 CHEM 4201	Advanced Elective Physical Chemistry II Physical Chemistry II Lab Chemistry Problems I			CHEM 3304
	RING	3 3 16 3 1 2 3	(3) (3) (16) (3) (1) (2) (3)	33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105 CHEM 4201 CHEM 33XX-43XX	Advanced Elective Physical Chemistry II Physical Chemistry II Lab Chemistry Problems I Major Advanced Elective			CHEM 3304 Credit/registration in CHEM 3305.
ΥE	SPRING	3 3 <b>16</b> 3 1 2 3 3 3	(3) (3) (16) (3) (1) (2)	33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105 CHEM 4201 CHEM 33XX-43XX 33XX-43XX	Advanced Elective Physical Chemistry II Physical Chemistry II Lab Chemistry Problems I Major Advanced Elective Advanced Elective			CHEM 3304 Credit/registration in CHEM 3305.
ΥE	SPRING	3 3 <b>16</b> 3 1 2 3 3 3 2	(3) (3) (16) (3) (1) (2) (3)	33XX-43XX           Semester Total Hours           CHEM 3305           CHEM 3105           CHEM 4201           CHEM 33XX-43XX           33XX-43XX           12XX-42XX	Advanced Elective         Physical Chemistry II         Physical Chemistry II Lab         Chemistry Problems I         Major Advanced Elective         Advanced Elective         Free Elective			CHEM 3304 Credit/registration in CHEM 3305.
ΥE	SPRING	3 3 16 3 1 2 3 3 3 2 3 3	<ul> <li>(3)</li> <li>(16)</li> <li>(3)</li> <li>(1)</li> <li>(2)</li> <li>(3)</li> <li>(3)</li> </ul>	33XX-43XX           Semester Total Hours           CHEM 3305           CHEM 3105           CHEM 4201           CHEM 33XX-43XX           33XX-43XX           12XX-42XX           13XX-43XX	Advanced Elective Physical Chemistry II Physical Chemistry II Lab Chemistry Problems I Major Advanced Elective Advanced Elective			CHEM 3304 Credit/registration in CHEM 3305.
ΥE		3 3 <b>16</b> 3 1 2 3 3 3 2	<ul> <li>(3)</li> <li>(16)</li> <li>(3)</li> <li>(1)</li> <li>(2)</li> <li>(3)</li> <li>(3)</li> </ul>	33XX-43XX           Semester Total Hours           CHEM 3305           CHEM 3105           CHEM 4201           CHEM 33XX-43XX           33XX-43XX           12XX-42XX	Advanced Elective         Physical Chemistry II         Physical Chemistry II Lab         Chemistry Problems I         Major Advanced Elective         Advanced Elective         Free Elective			CHEM 3304 Credit/registration in CHEM 3305.
ΥE		3 3 16 3 1 2 3 3 3 2 3 3	<ul> <li>(3)</li> <li>(16)</li> <li>(3)</li> <li>(1)</li> <li>(2)</li> <li>(3)</li> <li>(3)</li> </ul>	33XX-43XX           Semester Total Hours           CHEM 3305           CHEM 3105           CHEM 4201           CHEM 33XX-43XX           33XX-43XX           12XX-42XX           13XX-43XX	Advanced Elective         Physical Chemistry II         Physical Chemistry II Lab         Chemistry Problems I         Major Advanced Elective         Advanced Elective         Free Elective			CHEM 3304 Credit/registration in CHEM 3305.
ΥE		3 3 16 3 1 2 3 3 3 2 3 3	<ul> <li>(3)</li> <li>(16)</li> <li>(3)</li> <li>(1)</li> <li>(2)</li> <li>(3)</li> <li>(3)</li> </ul>	33XX-43XX           Semester Total Hours           CHEM 3305           CHEM 3105           CHEM 4201           CHEM 33XX-43XX           33XX-43XX           12XX-42XX           13XX-43XX	Advanced Elective         Physical Chemistry II         Physical Chemistry II Lab         Chemistry Problems I         Major Advanced Elective         Advanced Elective         Free Elective			CHEM 3304 Credit/registration in CHEM 3305.
ΥE		3 3 16 3 1 2 3 3 3 2 3 3	<ul> <li>(3)</li> <li>(16)</li> <li>(3)</li> <li>(1)</li> <li>(2)</li> <li>(3)</li> <li>(3)</li> </ul>	33XX-43XX           Semester Total Hours           CHEM 3305           CHEM 3105           CHEM 4201           CHEM 33XX-43XX           33XX-43XX           12XX-42XX           13XX-43XX	Advanced Elective         Physical Chemistry II         Physical Chemistry II Lab         Chemistry Problems I         Major Advanced Elective         Advanced Elective         Free Elective			CHEM 3304 Credit/registration in CHEM 3305.
ΥE	SUMMER SPRING	3 3 16 3 1 2 3 3 3 2 3 3	(3) (16) (3) (1) (2) (3) (3) (12)	33XX-43XX           Semester Total Hours           CHEM 3305           CHEM 3105           CHEM 4201           CHEM 33XX-43XX           33XX-43XX           12XX-42XX           13XX-43XX	Advanced Elective         Physical Chemistry II         Physical Chemistry II Lab         Chemistry Problems I         Major Advanced Elective         Advanced Elective         Free Elective			CHEM 3304 Credit/registration in CHEM 3305.

Graduation Requirements

In addition to the graduation requirements listed in the UTRGV 2017-2019 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.

120 TOTAL HOURS

(48) TOTAL ADVANCED HOURS

	Additional Notes
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	See General Education Core for more details Options: POLS 2305 <b>or</b> POLS 2385 (H)
	CHEM, BIOL, PHYS, MATH, ENGR
	See General Education Core for more details
	Options: POLS 2306 <b>or</b> POLS 2386 (H) CHEM, BIOL, PHYS, MATH, ENGR
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Approved: Revised: Monday, March 20, 2017