

Bachelor of Science (BS)
Biology
7-12 Teacher Certification

The 2026-2027 list of core courses can be found in the 2026-2027 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Bachelors Degree Program Regulations'

Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
Symbols Key										
Campus: B - Offered in Brownsville; E - Offered in Edinburg; O - Offered Online; T - Travel Required										
Bolded Course Number*: Program Admission Requirement										
Min Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.										
Core: 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;										
Core: 090 - Applied Communication and Literacies; Humanities; Leadership; Science Labs; Interdisciplinary; Technologies; Language Diversity & Writing										
1	Fall	3	B/E/O	Choose 1	Communication	C	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	See General Education Core for more details Options: ENGL 1301	
1	Fall	4	B/E	BIOL 1406	General Biology I	C	090		Satisfies Major-Specific Requirement. (One hour lab - Integrative & Experiential Learning in the General Education Core)	
1	Fall	3	B/E/O	MATH 1314, 1414, 2412, or 2413	College Algebra, Precalculus or Calculus I	C	020	MATH 1314 or MATH 1414: College Ready TSI status in Mathematics. MATH 2412: MATH 1314 or MATH 1414 with a grade of 'C' or better; or passing the College Algebra Exemption Test administered by the Department of Mathematics. MATH 2413: MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.		
1	Fall	3	B/E/O	Choose 1	Social and Behavioral Sciences		080			
1	Fall	1	B/E	UTCH 1101	Inquiry Approaches to Teaching	C			Must be in a College of Sciences or BS Integrated Health Sciences majors.	
1	Fall		B/E/O	UNIV	1301 Learning Framework 1101 Academic and Career Success 1001/1300 Living and Working by Design				As required, based on a number of factors such as credit hours earned, TSI status, high school rank, major declaration, etc.	
1	Fall	14	Semester Total Hours							
1	Spring	3	B/E/O	Choose 1	Communication	C	010	Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.	See General Education Core for more details Options: ENGL 1302 or ENGL 1305	
1	Spring	4	B/E	BIOL 1407	General Biology II	C		BIOL 1406 or BIOL 1487.	Satisfies Major-Specific Requirement.	
1	Spring	3	B/E/O	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.		
1	Spring	1	B/E	CHEM 1111	General Chemistry I Lab		090	Credit/registration in CHEM 1311.		
1	Spring	3	B/E/O	MATH 1342 or MATH 1343	Elementary Statistical Methods or Introduction to Biostatistics			College Ready TSI status in Mathematics.	Satisfies Major-Specific Requirement.	
1	Spring	1	B/E	UTCH 1102	Inquiry-Based Lesson Design	C		UTCH 1101 with a grade of "C" or better or concurrent enrollment with UTCH 3301 and College of Sciences major.	Satisfies Major-Specific Requirement.	
1	Spring	15	Semester Total Hours							
2	Fall	3	B/E	CHEM 1312	General Chemistry II		030	CHEM 1311.		
2	Fall	1	B/E	CHEM 1112	General Chemistry II Lab		090	Credit/registration in CHEM 1312.		
2	Fall	3	B/E/O	POLS 2305	U.S. Federal Government and Politics		070		See General Education Core for more details.	
2	Fall	3	B/E/O	Choose 1	Creative Arts		050		See General Education Core for course options.	
2	Fall	3	B/E	BIOL 3301	Ecology and Evolution			Grade of 'C' or better in BIOL 1406 and BIOL 1407	Satisfies Major-Specific Requirement.	
2	Fall	2	B/E	BIOL 3201	Techniques in Ecology and Evolutionary Biology Laboratory			Grade of 'C' or better in BIOL 1406 and BIOL 1407	Satisfies Major-Specific Requirement.	
2	Fall	15	Semester Total Hours							
2	Spring	3	B/E	CHEM 2323	Organic Chemistry I			CHEM 1312.	Satisfies Major-Specific Requirement.	
2	Spring	1	B/E	CHEM 2123	Organic Chemistry I Lab			CHEM 1112.	Satisfies Major-Specific Requirement.	
2	Spring	3	B/E/O	POLS 2306	Texas Government and Politics		070		See General Education Core for more details	
2	Spring	4	B/E	BIOL 2401	Anatomy and Physiology I				Satisfies Major-Specific Requirement.	
2	Spring	3	O	UTCH 3301	Knowing and Learning in Mathematics and Science	C		UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with UTCH 1102.	Satisfies Major-Specific Requirement.	
2	Spring	3	B/E/O	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1301 or HIST 2327	
2	Spring	17	Semester Total Hours							
Student must apply to Teacher Education Program.										

Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
3	Fall	3	B/E	BIOL 3315	Cell and Molecular Biology			Grade of "C" or better in the following: BIOL 1406 and BIOL 1407.	Satisfies Major-Specific Requirement.	
3	Fall	2	B/E	BIOL 3215	Cellular, Molecular, and Genetics Lab			Grade of "C" or better in the following: BIOL 1406 and BIOL 1407.	Satisfies Major-Specific Requirement.	
3	Fall	3	B/E	BIOL 3313	Genetics			Grade of "C" or better in the following: BIOL 1406 and BIOL 1407.	Satisfies Major-Specific Requirement.	
3	Fall	3	B/E	UTCH 3302	Classroom Interactions	C		(a) An institutional grade point average of at least 2.75, (b) UTCH 1102 with a grade of 'C' or better, (c) UTCH 3301 with a grade of 'C' or better, and (d) admission to the Teacher Education Program.	Satisfies Major-Specific Requirement.	
3	Fall	3	B/E/O	Choose 1	Integrative/Experiential Learning Option		090		See General Education Core for course options.	
3	Fall	3	B/E/O	Choose 1	Language, Philosophy, and Culture		040		See General Education Core for course options.	
3	Fall	17	Semester Total Hours							
3	Spring	1	B/E/O	Choose 1	Free Electives					
3	Spring	3	B/E/O	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1302 or HIST 2328	
3	Spring	3	B/E	PHIL 3317	Perspectives on Science and Mathematics			Credit of "C" or better or registration in UTCH 3302.	Satisfies Major-Specific Requirement.	
3	Spring	2	B/E	BIOL 3230	Biology Data Analysis and Informatics			BIOL 1406 and BIOL 1407	Satisfies Major-Specific Requirement.	
3	Spring	4	B/E/O	BIOL 34XX-44XX	Prescribed Advanced Electives				See Degree Plan for course options.	
3	Spring	13	Semester Total Hours							
3	Summer	3	B/E	BIOL 4392	Research Methods in the Science and Mathematics Classroom (UTeach)			Grade of 'C' or better in the following: BIOL 1406, BIOL 1407; or CHEM 1111, CHEM 1112, CHEM 1311, CHEM 1312; or MATH 1314 or MATH 1414; or PHYS 1401, PHYS 1402 or PHYS 2425, PHYS 2426 or PHYS 2411, PHYS 2412; and UTCH 1101, UTCH 1102 or consent of instructor.	Satisfies Major-Specific Requirement.	
3	Summer	3	B/E	BIOL 4315	Inquiry-Based Science and Laboratory Techniques			Grade of 'C' or better in BIOL 1406, BIOL 1407, and UTCH 3301 or consent of instructor.	Satisfies Major-Specific Requirement.	
3	Summer	6	Semester Total Hours							
Year	Semester	Credit Hours	Campus	Course Number	Course Title	Minimum Grade	Core	Prerequisite	Additional Notes	
4	Fall	3	B/E	UTCH 3303	Project-Based Instruction	C		UTCH 3302 with a grade of 'C' or better. Must be officially admitted to the Educator Preparation Program.	Satisfies Major-Specific Requirement.	
4	Fall	3	B/E/O	READ 4305	Disciplinary Literacy in the Classrooms				Satisfies Major-Specific Requirement.	
4	Fall	4	B/E/O	BIOL 34XX-44XX	Prescribed Advanced Electives				See Degree Plan for course options.	
4	Fall	4	B/E/O	BIOL 14XX-44XX	Prescribed Elective				See Degree Plan for course options.	
4	Fall	14	Semester Total Hours							
4	Spring	3	B/E	UTCH 4301	Apprentice Teaching Seminar	C		UTCH 3303 with a grade of 'C' or better and admission to clinical teaching.	UTeach requirement	
4	Spring	6	B/E	UTCH 4601	Apprentice Teaching	C		UTCH 3303 with a grade of 'C' or better.	Satisfies Major-Specific Requirement.	
4	Spring	9	Semester Total Hours							
		120	TOTAL HOURS							
		(42)	Advanced minimum credit hours							