



Bachelor of Science (BS) Biomedical Science

2025-2026

Credit for MATH 1314/1414 are recommended prior to initiating program (MATH exam available).								
H		Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
FIRST YEAR	FALL	3	Choose 1	Communication	C	010	For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Options: ENGL 1301
		3	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1301 or HIST 2327
		3	CHEM 1311	General Chemistry I	C	030	MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 2412, MATH 2413 with a grade of "C" or higher."	
		1	CHEM 1111	General Chemistry I Lab	C	090	Credit/Registration in CHEM 1311	
		3	BMED 1301	Introduction to Biomedical Sciences I	C		Departmental approval	
		1	BMED 1102	Introduction to Biomedical Sciences I Lab	C		Departmental approval	
			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.
	14 Semester Total Hours							
	SPRING	3	Choose 1	Communication	C	010	For all 010 courses: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. For ENGL 1302, a grade of "C" or better in ENGL 1301.	See General Education Core for more details Options: ENGL 1302
		3	Choose 1	American History		060		See General Education Core for more details. Options: HIST 1302 or HIST 2328
		3	CHEM 1312	General Chemistry II	C	030	CHEM 1311.	
		1	CHEM 1112	General Chemistry II Lab	C	090	Credit/registration in CHEM 1312.	
		3	Choose 1	Language Elective				Medical Spanish or ASL recommended
		3	BMED 1302	Introduction to Biomedical Sciences II	C		Departmental approval	
		1	BMED 1112	Introduction to Biomedical Sciences II Lab	C		Departmental approval	
	17 Semester Total Hours							
H		Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes	
SECOND YEAR	FALL	3	CHEM 2323	Organic Chemistry I			CHEM 1312.	
		1	CHEM 2123	Organic Chemistry I Lab			Credit/registration in CHEM 2323.	
		3	MATH 1342	Elementary Statistical Methods	C		College Ready TSI status in Mathematics	
		3	Choose 1	Creative Arts		050		PHIL 1330 Strongly Recommended
		3	BMED 2301	Integrated Body Systems I	C		Departmental approval	
		1	BMED 2111	Integrated Body Systems Lab I	C		Departmental approval	
		1	BMED 3121	Independent Research I			Departmental approval	
	15 Semester Total Hours							
	SPRING	3	CHEM 2325	Organic Chemistry II			CHEM 2323.	
		1	CHEM 2125	Organic Chemistry II Lab			Credit/Registration in CHEM 2325	
		3	PSYC 2301	General Psychology		080		
		3	Choose 1	Language, Philosophy & Culture		040		ENGL 2331 Strongly Recommended
		3	BMED 2302	Integrated Body Systems II	C		Departmental approval	
		1	BMED 2112	Integrated Body Systems Lab II	C		Departmental approval	
		1	BMED 3122	Independent Research II			BMED 3121.	
	15 Semester Total Hours							

The 2024-2026 list of core courses can be found in the 2024-2026 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Bachelors Degree Program Regulations'

Symbols Key

Minimum Grade: A - Excellent; B - Good; C - Satisfactory; D - Below Average; CR - Credit; P - Passing; S - Satisfactory.
Bolded Course #: Program Admission Requirement

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
THIRD YEAR	FALL	4	PHYS 1401	General Physics I			MATH 1414, MATH 1314, MATH 2412, or MATH 2413.	
		2	BMED 4250	Advanced Cell Biology			Departmental approval	
		2	BMED 4260	Advanced Molecular Biology			Departmental approval	
		3	BMED 4310	Medical Biochemistry			Departmental approval	
		2	Choose 1	BMED 3223 Experiential Learning in Biomedical Sciences I or BMED 3225 Recent Advances in Biomedical Sciences			BMED 3122	
	13 Semester Total Hours							
	SPRING	4	MATH 2413	Calculus I	C	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	Prerequisite for 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.
		3	BMED 4380	Medical Neuroscience and Neurochemistry			Departmental approval	
		4	BMED 4440	Medical Microbiology			Departmental approval	
		2	BMED 4220	Medical Bioinformatics, Genomics, and Systems Biology			Departmental approval	
		2	BMED 4230	Human Genetics and Medical Genomics			Departmental approval	
		2	Choose 1	BMED 3224 Experiential Learning in Biomedical Sciences II or BMED 3226 Topics in Biomedical Sciences			Departmental approval	
17 Semester Total Hours								
		H	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
FOURTH YEAR	FALL	3	POLS 2305	U.S. Federal Government & Politics		070		See General Education Core for course options.
		3	STAT 3301	Applied Statistics			MATH 2413 with a grade of 'C' or better.	
		2	BMED 4270	Introduction to Complementary and Alternative Medicine			Departmental approval	
		2	BMED 4290	Medical Immunology			Departmental approval	
		1	BMED 3103	Human Behavior			Departmental approval	
	4	PHYS 1402	General Physics II			PHYS 1401.		
	15 Semester Total Hours							
	SPRING	3	POLS 2306	Texas Government & Politics		070		See General Education Core for course options.
		3	Choose 1	Integrative and Experiential Learning		090		See General Education Core for course options.
		1	Choose 1	Integrative and Experiential Learning		090		
		3	Choose 1	Advanced Elective				See Degree Plan for course options. Choose 3 advanced hours from PSYC, BIOL, CHEM, MATH, PHYS, HPRS, or CSCI.
		3	BMED 4395	Advanced Pathophysiology			Departmental approval	
1		BMED 3109	Medical Syndromes			Departmental approval		
14 Semester Total Hours								

120 TOTAL HOURS

(42) Advanced minimum credit hours

Revised: Tuesday, February 18th, 2025