

Bachelor of Science (BS) Biomedical Sciences

		Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
П	3	Choose 1	Communication (Core)	С	010	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	CHEM 1311	General Chemistry I (Core)	С	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 (Core)	С	090	Credit/Registration in CHEM 1311	
	1	BMED 1101	Introductory Medical Biochemistry	С		Departmental approval	Mission 1
FALL	1	BMED 1103	Introductory Cell Biology	С		Departmental approval	Mission 2
E .	1	BMED 1104	Introductory Molecular Biology	С		Departmental approval	Mission 1
	1	BMED 2102	Molecules, Cells and Tissues	С		Departmental approval	Mission 2
¥	1	BMED 1102	Introduction to Biomedical Laboratory I	С		Departmental approval	
KOI IEA		UNIV	1301 Learning Framework 1101 Academic and Career Success 1001 Living and Working by Design				As required, based on credit hours earned, TSI status, High school rank, major declaration
	12	Semester Tot	al Hours				
	3	Choose 1	Communication (Core)	С	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
	_		General Chemistry II (Core)	С	030	CHEM 1311.	
စ္	1	CHEM 1112	General Chemistry II Lab (Core)	С	090	Credit/registration in CHEM 1312.	
SPRING	3	Choose 1	Spanish Elective				Spanish placement exam available
Ø	1	BMED 1105	Introductory Medical Genetics	С		Departmental approval	Mission 3
	1	BMED 1106	Introductory Medical Microbiology	С		Departmental approval	Mission 4
	1	BMED 1107	Introductory Immunology	С		Departmental approval	Mission 4
	_		Evolutionary Medicine	С		Departmental approval	Mission 3
	14 H	Semester Total	Course Title	Min.	GEC	Prerequisite	Additional Notes
			000.00 11.00	Grade	020	1 Total district	Additional Notes
	2	CHEM 2222	Organic Chamistry I	Grade			
	-		Organic Chemistry I	Grade		C. International Company	
	1	CHEM 2123	Organic Chemistry I Lab	Grade	050	Credit/registration in CHEM 2323.	DHII 1230 Strongly Recommended
	1 3	CHEM 2123 Choose 1	Organic Chemistry I Lab Creative Arts (Core)		050		PHIL 1330 Strongly Recommended Mission 5
-	1 3	CHEM 2123 Choose 1 BMED 1108	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience	C	050	· -	PHIL 1330 Strongly Recommended Mission 5 Mission 5
FALL	1 3 1 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary	C	050	Departmental approval	Mission 5 Mission 5
FALL	1 3 1 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal	C C C	050	Departmental approval Departmental approval Departmental approval	Mission 5 Mission 5 Mission 5
FALL	1 3 1 1 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary	C	050	Departmental approval Departmental approval	Mission 5 Mission 5
FALL	1 3 1 1 1 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology	C C C C	050	Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 5 Mission 5
FALL	1 3 1 1 1 1 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I	C C C C	050	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 5 Mission 5
FALL	1 3 1 1 1 1 1 1 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111 BMED 3121 Semester Tot	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I	C C C C	050	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 5 Mission 5
FALL	1 3 1 1 1 1 1 1 13 3	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111 BMED 3121 Semester Tot CHEM 2325	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours	C C C C	050	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 5 Mission 5
FALL	1 3 1 1 1 1 1 1 1 1 3 3 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111 BMED 3121 Semester Tot CHEM 2325 CHEM 2125	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours Organic Chemistry II	C C C C	050	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 5 Mission 5
FALL	1 3 1 1 1 1 1 1 1 1 3 3 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111 BMED 3121 Semester Tot CHEM 2325 CHEM 2125 MATH 1342	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours Organic Chemistry II Organic Chemistry II Lab	C C C C	050	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Credit/Registration in CHEM 2325 College Ready TSI status in Mathematics.	Mission 5 Mission 5 Mission 5
SECOND LEAN	1 3 1 1 1 1 1 1 1 1 1 3 3 1 3	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111 BMED 3121 Semester Tot CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods	C C C C		Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Credit/Registration in CHEM 2325 College Ready TSI status in Mathematics.	Mission 5 Mission 5 Mission 5
SECOND TEAK	1 3 1 1 1 1 1 1 1 1 3 3 1 3 3 3	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111 BMED 3121 Semester Tot CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology (Core)	C C C C	080	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Credit/Registration in CHEM 2325 College Ready TSI status in Mathematics.	Mission 5 Mission 5 Mission 5 Mission 7
SPRING FALL FALL	1 3 1 1 1 1 1 1 1 1 3 3 1 3 3 3 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 1111 BMED 3121 Semester Tot CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1 BMED 2101	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology (Core) Language, Philosophy & Culture (Core)	C C C C C	080	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Credit/Registration in CHEM 2325 College Ready TSI status in Mathematics.	Mission 5 Mission 5 Mission 7 Mission 7 ENGL 2331 Strongly Recommended
SECOND TEAK	1 3 1 1 1 1 1 1 1 3 3 1 3 3 3 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 3121 Semester Tot CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1 BMED 2101 BMED 3105	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology (Core) Language, Philosophy & Culture (Core) Gross Anatomy	C C C C C C	080	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Credit/Registration in CHEM 2325 College Ready TSI status in Mathematics.	Mission 5 Mission 5 Mission 5 Mission 7 ENGL 2331 Strongly Recommended Mission 7
	1 3 1 1 1 1 1 1 1 1 3 3 1 3 3 1 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 3121 Semester Tot CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1 BMED 3105 BMED 3105 BMED 3106	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology (Core) Language, Philosophy & Culture (Core) Gross Anatomy Integrated Body Systems II: Gastrointestinal Systems	C C C C C C	080	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Credit/Registration in CHEM 2325 College Ready TSI status in Mathematics. Departmental approval Departmental approval	Mission 5 Mission 5 Mission 5 Mission 7 ENGL 2331 Strongly Recommended Mission 7 Mission 6
	1 3 1 1 1 1 1 1 1 3 3 1 3 3 1 1 1 1 1 1	CHEM 2123 Choose 1 BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 3121 Semester Tot CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1 BMED 3105 BMED 3106 BMED 3106 BMED 3107	Organic Chemistry I Lab Creative Arts (Core) Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Introduction to Biomedical II Lab Independent Research I al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology (Core) Language, Philosophy & Culture (Core) Gross Anatomy Integrated Body Systems II: Gastrointestinal Systems Integrated Body Systems III: Renal, Fluid and Electrolytes	C C C C C C C C	080	Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval Credit/Registration in CHEM 2325 College Ready TSI status in Mathematics. Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 5 Mission 5 Mission 7 ENGL 2331 Strongly Recommended Mission 7 Mission 6 Mission 6

CORE: The 2021-2022 list of core courses can be found in the 2021-2022 Undergraduate Catalog: www.utrgv.edu/catalog > See 'Core Curriculum'

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 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 Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1301 or HIST/MASC 2327
	Π.	4 PHYS 1401	General Physics I			MATH 1414 or MATH 1314.	
FALL		1 BMED 3102	Neurochemistry	С			Mission 8
		2 BMED 4280	Advanced Medical Neuroscience			Departmental approval	Mission 8
F#		1 BMED 3103	Human Behavior	С		Departmental approval	Mission 9
		1 BMED 3123	Independent Research III			BMED 3122	
YEAR		4 MATH 2413	Calculus I (Core)	С	020	MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.	Prerequiste 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.
IRD \	16 Semester Total Hours						
픋		3 Choose 1	American History (Core)		060		See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328
	.	4 PHYS 1402	General Physics II			PHYS 1401.	
		3 BMED 4310	Medical Biochemistry			Departmental approval	Mission 10
SPRING		2 BMED 4250	Advanced Cell Biology			Departmental approval	Mission 11
SPR		2 BMED 4260	Advanced Molecular Biology			Departmental approval	Mission 12
		1 BMED 3124	Independent Research IV			BMED 3123.	
		3 Choose 1	Advanced Elective				See Degree Plan for course options. Choose 3 advanced hours from BMED, PSYC, BIOL, CHEM, MATH, PHYS, HPRS, or CSCI.
	1	8 Semester To	al Hours				
	! !	H Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	:	3 POLS 2305	U.S. Federal Government & Politics (Core)		070		See General Education Core for course options.
		3 STAT 3301	Applied Statistics for Science, Engineering and Medical Science	С			
_,		4 BMED 4440	Medical Microbiology			Departmental approval	Mission 16
FALI	:	2 BMED 4290	Medical Immunology			Departmental approval	Mission 17
œ		2 BMED 4230	Human Genetics and Medical Genomics			Departmental approval	Mission 18
YEA		2 BMED 4220	Medical Bioinformatics, Genomics, and Systems Biology			Departmental approval	Mission 19
픋	1	6 Semester To	al Hours				
OUF		3 POLS 2306	Texas Government & Politics (Core)		070		See General Education Core for course options.
		3 Choose 1	Integrative and Experiential Learning (Core)		090		See General Education Core for course options.
(1)		1 Choose 1	Integrative and Experiential Learning (Core)		090		
SPRING		2 BMED 4295	Pathophysiology			Departmental approval	Mission 13
S		1 BMED 3101	Pathobiology and Host Defense	С		Departmental approval	Mission 13
		1 BMED 3109	Medical Syndromes	С		Departmental approval	Mission 14
			Introduction to Complementary and Alternative Medicine			Departmental approval	Mission 15
	1	3 Semester To	al Hours				

120 TOTAL HOURS

(42) Advanced minimum credit hours

Approved: Monday, October 11, 2021 Revised: Sunday, October 3, 2021

Mission notation describes co-requisite requirements. Courses within a mission cannot be dropped individually, and must be taken together.

Credit for MATH 1314/1414 are recommended prior to initiating program (MATH exam available)

BMED 2103 - Legal Med & Ethics - Strongly Recommended; A GPA of 3.0 must be maintained for progression in the program.