

## **Bachelor of Science (BS) Biomedical Sciences**

	!	Н	Course #	Course Title	Min. Grade	GEC	C Prerequisite	Additional Notes
					Grade		For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI	See General Education Core for more details
		3	Choose 1	Communication (Core)	С	010	reading/writing exams or ENGL 0301. For ENGL 1302/1388, a grade of "C" or better in ENGL 1301/1387.	Options: ENGL 1301 or ENGL 1387 (H)
		3	CHEM 1311	General Chemistry I	С	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	<b>CHEM 1111</b>	General Chemistry I Lab	С	090	Credit/Registration in CHEM 1311	
-	ALL	1	<b>BMED 1101</b>	Introductory Medical Biochemistry	С		Departmental approval	Mission 1
Í	<b>▼</b>	1	BMED 1103	Introductory Cell Biology	С		Departmental approval	Mission 2
		1	BMED 1104	Introductory Molecular Biology	С		Departmental approval	Mission 1
		1	BMED 2102	Molecules, Cells and Tissues	С		Departmental approval	Mission 2
A R		1	BMED 1102	Introduction to Biomedical Laboratory I	С		Departmental approval	
Œ.		-	UNIV 1301	Learning Framework	+		Separation and approve	Only if required, based on ACT/SAT and High School rank.
Ë		12.5	Semester Tota					only if required, based on Actysal and right school fank.
RS		120	Jennester Tota	otal Hours	$\overline{}$		For all 010 courses: Satisfactory scores on ENGL portion of ACT test or TSI	
Œ		3	Choose 1	Communication (Core)	С	010	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 or ENGL 1388 (H)
		3	CHEM 1312	General Chemistry II	С	030	CHEM 1311.	
<u>c</u>	פ	1	CHEM 1112	General Chemistry II Lab	С	090	Credit/registration in CHEM 1312.	
ONIGGS	¥	3	Choose 1	Spanish Elective				
ď	מ	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
		1	BMED 1109	Evolutionary Medicine	С		Departmental approval	Mission 3
		14 S	Semester Tota					
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	CHEM 2323	Organic Chemistry I	С			
		1	CHEM 2123	Organic Chemistry I Lab	С		Credit/registration in CHEM 2323.	
		2	Choose 1	Creative Arts (Core)		050		PHIL 1330 Strongly Recommended
		3	CHOOSE I	Creative Arts (Core)				
		1	BMED 1108	Introductory Medical Neuroscience	С		Departmental approval	Mission 5
		1			C		Departmental approval  Departmental approval	Mission 5 Mission 5
	ALL	1 1 1	BMED 1108	Introductory Medical Neuroscience				
144	FALL	1 1 1	BMED 1108 BMED 3104	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary	С		Departmental approval	Mission 5
IR TALL	LAFF	1 1 1 1	BMED 1108 BMED 3104 BMED 3108	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal	C C		Departmental approval  Departmental approval	Mission 5 Mission 5
EAR	FALL	1 1 1 1 1	BMED 1108 BMED 3104 BMED 3108 BMED 1110	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology	C C		Departmental approval Departmental approval Departmental approval	Mission 5 Mission 7
YEAR	LAFF	1 1 1 1 1 1 1	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy	C C C		Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 7
YEAR		1 1 1 1 1 1 1	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I	C C C C		Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 7
ECOND YEAR		1 1 1 1 1 1 1	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121 Semester Total	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  II Hours	C C C C		Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 7
OND YEAR		1 1 1 1 1 1 1 14 S	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I	C C C C		Departmental approval Departmental approval Departmental approval Departmental approval Departmental approval	Mission 5 Mission 7
OND YEAR		1 1 1 1 1 1 1 14 S	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121  Semester Total	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  al Hours Organic Chemistry II Organic Chemistry II Lab	C C C C C	020	Departmental approval Credit/Registration in CHEM 2325	Mission 5 Mission 7
OND YEAR		1 1 1 1 1 1 1 14 S	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121 Semester Tota CHEM 2325 CHEM 2125 MATH 1342	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  Al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods	C C C C C C	020	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 7
SECOND YEAR		1 1 1 1 1 1 1 14 S	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121 Semester Tota CHEM 2325 CHEM 2125	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  Al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology	C C 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 7
SECOND YEAR		1 1 1 1 1 1 1 14 S	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121 Semester Tota CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  AI Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology Language, Philosophy & Culture (Core)	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 7 Mission 7 Mission 7  Mission 8  ENGL 2331 Strongly Recommended
OND YEAR		1 1 1 1 1 1 1 14 S	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121 Semester Total CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  Al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology	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 7 Mission 7
SECOND YEAR		1 1 1 1 1 1 1 14 S	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121  Semester Tota CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1 BMED 3105	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  Al Hours Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology Language, Philosophy & Culture (Core) Integrated Body Systems II: Gastrointestinal Systems	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	Mission 5 Mission 7 Mission 7 Mission 7  ENGL 2331 Strongly Recommended Mission 6
SECOND YEAR		1 1 1 1 1 1 1 14 S	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121 Semester Tota CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1 BMED 3105 BMED 3106 BMED 3107	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  Al Hours  Organic Chemistry II Organic Chemistry II Lab Elementary Statistical Methods General Psychology Language, Philosophy & Culture (Core) Integrated Body Systems II: Gastrointestinal Systems Integrated Body Systems III: Renal, Fluid and Electrolytes Integrated Body Systems IV:Endocrine and Reproduction	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 7 Mission 7 Mission 7  ENGL 2331 Strongly Recommended Mission 6  Mission 6
SECOND YEAR	SPRING	1 1 1 1 1 1 1 1 3 3 1 3 3 1 1 1 1	BMED 1108 BMED 3104 BMED 3108 BMED 1110 BMED 2101 BMED 1111 BMED 3121 Semester Tota CHEM 2325 CHEM 2125 MATH 1342 PSYC 2301 Choose 1 BMED 3105 BMED 3106	Introductory Medical Neuroscience Integrated Body Systems I: Cardiovascular and Pulmonary Integrated Body Systems V: Dermatology, Hematology and Muscoskeletal Introductory Medical Physiology Gross Anatomy Introduction to Biomedical II Lab Independent Research I  Al Hours  Organic Chemistry II  Organic Chemistry II Lab Elementary Statistical Methods General Psychology Language, Philosophy & Culture (Core) Integrated Body Systems II: Gastrointestinal Systems Integrated Body Systems III: Renal, Fluid and Electrolytes Integrated Body Systems IV:Endocrine and Reproduction Independent Research II	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	Mission 5 Mission 7 Mission 7 Mission 7  ENGL 2331 Strongly Recommended Mission 6  Mission 6

CORE: The 2018-2019 list of core courses can be found at: www.utrgv.edu > Academics > Undergraduate > General Education Core www.utrgv.edu/core

## Symbols Key

	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
		3	Choose 1	American History (Core)	Grade	060		See General Education Core for more details.
		4	PHYS 1401	General Physics I		030	MATH 1414 or MATH 1314.	Options: HIST 1301 or HIST 1387 or HIST/MASC 2327
		1	BMED 3102	Neurochemistry	С			Mission 8
		2	BMED 4280	Advanced Medical Neuroscience			Departmental approval	Mission 8
	FALL	1	BMED 3103	Human Behavior	С		Departmental approval	Mission 9
		1	BMED 3123	Independent Research III			Departmental approval	
YEAR		ļ.					MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by	
		4		Calculus I	С	020	the Department of Mathematics.	
THIRD		16 Semester Total Hours						See General Education Core for more details.
푬		3	Choose 1	American History (Core)		060		Options: HIST 1302 or HIST 1388 or HIST/MASC 2328
		4	PHYS 1402	General Physics II		030	PHYS 1401.	
	<b>(D</b>	3	BMED 4310	Medical Biochemistry			Departmental approval	Mission 10
		2	BMED 4250	Advanced Cell Biology			Departmental approval	Mission 11
	SPRING	2	BMED 4260	Advanced Molecular Biology			Departmental approval	Mission 12
		1	BMED 3124	Independent Research IV	С		BMED 3123.	
		3	Choose 1	Advanced Elective				See Degree Plan for course options.
		18	Semester Tota	al Hours				
			Comincotor rott	ai 110010				
	!	Н	Course #	Course Title	Min. Grade	GEC	Prerequisite	Additional Notes
	'				Min. Grade	GEC 070	Prerequisite	Additional Notes See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
	!	Н	Course #	Course Title	Min. Grade		Prerequisite	See General Education Core for more details
	!	3	Course # Choose 1	Course Title Government/Political Science (Core)			Prerequisite  Departmental approval	See General Education Core for more details
	FALL	3	Course # Choose 1 STAT 3301 BMED 4440	Course Title Government/Political Science (Core) Applied Statistics for Science, Engineering and Medical Science				See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)
	FALL	3 3 4	Course # Choose 1 STAT 3301 BMED 4440	Course Title  Government/Political Science (Core)  Applied Statistics for Science, Engineering and Medical Science  Medical Microbiology			Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16
		3 3 4 2	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290	Course Title Government/Political Science (Core) Applied Statistics for Science, Engineering and Medical Science Medical Microbiology Medical Immunology			Departmental approval  Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 17
YEAR		3 3 4 2 2 2	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290 BMED 4230	Course Title  Government/Political Science (Core)  Applied Statistics for Science, Engineering and Medical Science  Medical Microbiology  Medical Immunology  Human Genetics and Medical Genomics  Medical Bioinformatics, Genomics, and Systems Biology			Departmental approval  Departmental approval  Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 17  Mission 18
YEAR		3 3 4 2 2 2	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290 BMED 4230 BMED 4220	Course Title  Government/Political Science (Core)  Applied Statistics for Science, Engineering and Medical Science  Medical Microbiology  Medical Immunology  Human Genetics and Medical Genomics  Medical Bioinformatics, Genomics, and Systems Biology			Departmental approval  Departmental approval  Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 17  Mission 18  Mission 19  See General Education Core for more details
YEAR		3 3 4 2 2 2 2	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290 BMED 4230 BMED 4220 Semester Total	Course Title  Government/Political Science (Core)  Applied Statistics for Science, Engineering and Medical Science  Medical Microbiology  Medical Immunology  Human Genetics and Medical Genomics  Medical Bioinformatics, Genomics, and Systems Biology  al Hours		070	Departmental approval  Departmental approval  Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 17  Mission 18  Mission 19
		3 3 4 2 2 2 2 16	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290 BMED 4230 BMED 4220 Semester Total	Course Title  Government/Political Science (Core)  Applied Statistics for Science, Engineering and Medical Science  Medical Microbiology  Medical Immunology  Human Genetics and Medical Genomics  Medical Bioinformatics, Genomics, and Systems Biology  al Hours  Government/Political Science (Core)		070	Departmental approval  Departmental approval  Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 17  Mission 18  Mission 19  See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
FOURTH YEAR	/4 -	3 3 4 2 2 2 16 3 3	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290 BMED 4230 BMED 4220 Semester Total Choose 1 Choose 1	Course Title  Government/Political Science (Core)  Applied Statistics for Science, Engineering and Medical Science  Medical Microbiology  Medical Immunology  Human Genetics and Medical Genomics  Medical Bioinformatics, Genomics, and Systems Biology  al Hours  Government/Political Science (Core)  Integrative and Experiential Learning (Core)		070	Departmental approval  Departmental approval  Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 17  Mission 18  Mission 19  See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)
FOURTH YEAR	/4 -	3 3 4 2 2 2 16 3 3	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290 BMED 4230 BMED 4220 Semester Tota Choose 1 Choose 1 Choose 1	Course Title  Government/Political Science (Core)  Applied Statistics for Science, Engineering and Medical Science  Medical Microbiology  Medical Immunology  Human Genetics and Medical Genomics  Medical Bioinformatics, Genomics, and Systems Biology  al Hours  Government/Political Science (Core)  Integrative and Experiential Learning (Core)  Integrative and Experiential Learning (Core)		070	Departmental approval Departmental approval Departmental approval Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 17  Mission 18  Mission 19  See General Education Core for more details Options: POLS 2306 or POLS 2386 (H) See General Education Core for course options.
FOURTH YEAR		3 3 4 2 2 2 16 3 3	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290 BMED 4230 BMED 4220 Semester Total Choose 1 Choose 1 Choose 1 BMED 4295	Government/Political Science (Core)  Applied Statistics for Science, Engineering and Medical Science  Medical Microbiology  Medical Immunology  Human Genetics and Medical Genomics  Medical Bioinformatics, Genomics, and Systems Biology  al Hours  Government/Political Science (Core)  Integrative and Experiential Learning (Core)  Integrative and Experiential Learning (Core)  Pathophysiology	C	070	Departmental approval  Departmental approval  Departmental approval  Departmental approval  Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 17  Mission 18  Mission 19  See General Education Core for more details Options: POLS 2306 or POLS 2386 (H)  See General Education Core for course options.  Mission 13
FOURTH YEAR	/4 -	3 3 4 2 2 2 16 3 3	Course # Choose 1 STAT 3301 BMED 4440 BMED 4290 BMED 4230 BMED 4220 Semester Total Choose 1 Choose 1 Choose 1 BMED 4295 BMED 3101	Course Title Government/Political Science (Core) Applied Statistics for Science, Engineering and Medical Science Medical Microbiology Medical Immunology Human Genetics and Medical Genomics Medical Bioinformatics, Genomics, and Systems Biology al Hours Government/Political Science (Core) Integrative and Experiential Learning (Core) Integrative and Experiential Learning (Core) Pathophysiology Pathobiology and Host Defense	C	070	Departmental approval  Departmental approval  Departmental approval  Departmental approval  Departmental approval  Departmental approval  Departmental approval	See General Education Core for more details Options: POLS 2305 or POLS 2385 (H)  Mission 16  Mission 18  Mission 19  See General Education Core for more details Options: POLS 2306 or POLS 2386 (H) See General Education Core for course options.  Mission 13  Mission 13

## **Graduation Requirements**

In addition to the graduation requirements listed in the UTRGV 2018-2019 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.

## 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.

120 TOTAL HOURS (42) TOTAL ADVANCED HOURS

Approved: Wednesday, March 28, 2018

Revised: Monday, July 2, 2018

Mission notation desecribes co-requisite requirements. Couses within a mission cannot be dropped induvidually, and must be taken together.

Credit for MATH 1314/1414 should be received prior to initiating program (MATH exam available)

BMED 2103 - Legal Med & Ethics - Strongly Recommended