

Bachelor of Science (BS)
Biomedical Science

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'

| 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 | | | | | | | | | | | |
| Credit for MATH 1314/1414 are recommended prior to initiating program (MATH exam available). | | | | | | | | | | | |
| Year | Semester | Credit Hours | Campus | Course Number | Course Title | Minimum Grade | Core | Prerequisite | Additional Notes | | |
| 1 | Fall | 3 | B/E/O | 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 | | |
| 1 | Fall | 3 | B/E/O | Choose 1 | American History | | 060 | | See General Education Core for more details. Options: HIST 1301 or HIST 2327 | | |
| 1 | Fall | 3 | B/E/O | 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 | Fall | 1 | B/E | CHEM 1111 | General Chemistry I Lab | C | 090 | Credit/Registration in CHEM 1311 | | | |
| 1 | Fall | 3 | B/E | BMED 1301 | Introduction to Biomedical Sciences I | C | | Departmental approval | | | |
| 1 | Fall | 1 | B/E | BMED 1102 | Introduction to Biomedical Sciences I Lab | C | | Departmental approval | | | |
| 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 | 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 | | |
| 1 | Spring | 3 | B/E/O | Choose 1 | American History | | 060 | | See General Education Core for more details. Options: HIST 1302 or HIST 2328 | | |
| 1 | Spring | 3 | B/E | CHEM 1312 | General Chemistry II | C | 030 | CHEM 1311. | | | |
| 1 | Spring | 1 | B/E | CHEM 1112 | General Chemistry II Lab | C | 090 | Credit/registration in CHEM 1312. | | | |
| 1 | Spring | 3 | B/E | BMED 1302 | Introduction to Biomedical Sciences II | C | | Departmental approval | | | |
| 1 | Spring | 1 | B/E | BMED 1112 | Introduction to Biomedical Sciences II Lab | C | | Departmental approval | | | |
| 1 | Spring | 14 | Semester Total Hours | | | | | | | | |
| Year | Semester | Credit Hours | Campus | Course Number | Course Title | Minimum Grade | Core | Prerequisite | Additional Notes | | |
| 2 | Fall | 3 | B/E | CHEM 2323 | Organic Chemistry I | | | CHEM 1312. | | | |
| 2 | Fall | 1 | B/E | CHEM 2123 | Organic Chemistry I Lab | | | Credit/registration in CHEM 2323. | | | |
| 2 | Fall | 3 | B/E/O | MATH 1342 | Elementary Statistical Methods | C | | College Ready TSI status in Mathematics | | | |
| 2 | Fall | 3 | B/E/O | Choose 1 | Creative Arts | | 050 | | PHIL 1330 Strongly Recommended | | |
| 2 | Fall | 3 | B/E | BMED 2301 | Integrated Body Systems I | C | | Departmental approval | | | |
| 2 | Fall | 1 | B/E | BMED 2111 | Integrated Body Systems Lab I | C | | Departmental approval | | | |
| 2 | Fall | 1 | B/E | BMED 3121 | Independent Research I | | | Departmental approval | | | |
| 2 | Fall | 15 | Semester Total Hours | | | | | | | | |
| 2 | Spring | 3 | B/E | CHEM 2325 | Organic Chemistry II | | | CHEM 2323. | | | |
| 2 | Spring | 1 | B/E | CHEM 2125 | Organic Chemistry II Lab | | | Credit/Registration in CHEM 2325 | | | |
| 2 | Spring | 3 | B/E/O | PSYC 2301 | General Psychology | | 080 | | | | |
| 2 | Spring | 3 | B/E/O | Choose 1 | Language, Philosophy & Culture | | 040 | | ENGL 2331 Strongly Recommended | | |
| 2 | Spring | 3 | B/E | BMED 2302 | Integrated Body Systems II | C | | Departmental approval | | | |
| 2 | Spring | 1 | B/E | BMED 2112 | Integrated Body Systems Lab II | C | | Departmental approval | | | |
| 2 | Spring | 1 | B/E | BMED 3122 | Independent Research II | | | BMED 3121. | | | |
| 2 | Spring | 15 | Semester Total Hours | | | | | | | | |

| Year | Semester | Credit Hours | Campus | Course Number | Course Title | Minimum Grade | Core | Prerequisite | Additional Notes | |
|------|----------|--------------|-----------------------------|---------------|---|---------------|------|---|--|--|
| 3 | Fall | 4 | B/E/O | PHYS 1401 | General Physics I | | | MATH 1414, MATH 1314, MATH 2412, or MATH 2413. | | |
| 3 | Fall | 2 | B/E | BMED 4250 | Advanced Cell Biology | | | Departmental approval | | |
| 3 | Fall | 2 | B/E | BMED 4260 | Advanced Molecular Biology | | | Departmental approval | | |
| 3 | Fall | 3 | B/E | BMED 4310 | Medical Biochemistry | | | Departmental approval | | |
| 3 | Fall | 2 | B/E/O | Choose 1 | BMED 3223 Experiential Learning in Biomedical Sciences I or BMED 3225 Recent Advances in Biomedical Sciences | | | BMED 3122 | | |
| 3 | Fall | 13 | Semester Total Hours | | | | | | | |
| 3 | Spring | 4 | B/E/O | 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 | Spring | 3 | B/E | BMED 4380 | Medical Neuroscience and Neurochemistry | | | Departmental approval | | |
| 3 | Spring | 4 | B/E | BMED 4440 | Medical Microbiology | | | Departmental approval | | |
| 3 | Spring | 2 | B/E | BMED 4220 | Medical Bioinformatics, Genomics, and Systems Biology | | | Departmental approval | | |
| 3 | Spring | 2 | B/E | BMED 4230 | Human Genetics and Medical Genomics | | | Departmental approval | | |
| 3 | Spring | 2 | B/E/O | Choose 1 | BMED 3224 Experiential Learning in Biomedical Sciences II or BMED 3226 Topics in Biomedical Sciences | | | Departmental approval | | |
| 3 | Spring | 17 | Semester Total Hours | | | | | | | |
| Year | Semester | Credit Hours | Campus | Course Number | Course Title | Minimum Grade | Core | Prerequisite | Additional Notes | |
| 4 | Fall | 3 | B/E/O | POLS 2305 | U.S. Federal Government & Politics | | | 070 | See General Education Core for course options. | |
| 4 | Fall | 3 | B/E/O | Choose 1 | Advanced Elective | | | | Choose 3 advanced hours from: ANTH, PSYC, BIOL, CHEM, MATH, PHYS, HPRS, SOCI, NUTR, CSCI, ASLI, FORL, FREN, SPAN, or TRSP. | |
| 4 | Fall | 2 | B/E/O | BMED 4270 | Introduction to Complementary and Alternative Medicine | | | Departmental approval | | |
| 4 | Fall | 2 | B/E | BMED 4290 | Medical Immunology | | | Departmental approval | | |
| 4 | Fall | 1 | B/E | BMED 3103 | Human Behavior | | | Departmental approval | | |
| 4 | Fall | 4 | B/E/O | PHYS 1402 | General Physics II | | | PHYS 1401. | | |
| 4 | Fall | 15 | Semester Total Hours | | | | | | | |
| 4 | Spring | 3 | B/E/O | POLS 2306 | Texas Government & Politics | | | 070 | See General Education Core for course options. | |
| 4 | Spring | 3 | B/E/O | Choose 1 | Advanced Elective | | | | Choose 3 advanced hours from: ANTH, PSYC, BIOL, CHEM, MATH, PHYS, HPRS, SOCI, NUTR, CSCI, ASLI, FORL, FREN, SPAN, or TRSP. | |
| 4 | Spring | 3 | B/E/O | Choose 1 | Integrative and Experiential Learning | | | 090 | See General Education Core for course options. | |
| 4 | Spring | 3 | B/E | STAT 3301 | Applied Statistics | | | MATH 2413 with a grade of 'C' or better. | | |
| 4 | Spring | 1 | B/E/O | Choose 1 | Integrative and Experiential Learning | | | 090 | | |
| 4 | Spring | 3 | B/E | BMED 4395 | Advanced Pathophysiology | | | Departmental approval | | |
| 4 | Spring | 1 | B/E | BMED 3109 | Medical Syndromes | | | Departmental approval | | |
| 4 | Spring | 17 | Semester Total Hours | | | | | | | |

120
(42) **TOTAL HOURS**
Advanced minimum credit hours