The University of Texas RioGrande Valley

Bachelor of Science (BS)

| QGI | randeVal | LIEY Chemistry | | | |
|------|---------------------|--|-----|--|--|
| ! H | Course # | Course Title Min. Gradu | GEC | Prerequisite | Additional Notes |
| 3 | Choose 1 | Communication (Core) | 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 | CHEM 1311 | General Chemistry I (Core) | 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) | 090 | Credit/registration in CHEM 1311 | |
| 3 | Choose 1 | MATH course | | | Satisfies Major-Specific Requirement MATH 1314, MATH 1414, MATH 1342, MATH 1343 |
| 3 | Choose 1 | Social and Behavioral Sciences (Core) | 080 | | See General Education Core for course options. |
| | UNIV | 1301 Learning Framework 1101 Academic and Career Success 1001 Living and Working by Design | | | As required, based on credit hours earned, TSI status, Hig school rank, major declaration |
| 13 S | Semester Total Hour | rs | | | |
| 3 | Choose 1 | Communication (Core) | 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 or ENGL 1305 |
| 3 | CHEM 1312 | General Chemistry II (Core) | 030 | CHEM 1311. | See General Education Core for course options. |
| 1 | CHEM 1112 | General Chemistry II Lab (Core) | 090 | Credit/registration in CHEM 1312. | |
| 4 | MATH 2412 | PreCalculus | | Undergraduate level MATH 1314 Minimum Grade of C or Undergraduate level MATH 1440 Minimum Grade of C or Undergraduate level MATH 1340 Minimum Grade of C or Undergraduate level MATH 1414 Minimum Grade of C | Satisfies Major-Specific Requirement. |
| 3 | Choose 1 | American History (Core) | 060 | | See General Education Core for more details. Options: HIST 1301 or HIST/MASC 2327 |
| 14 S | Semester Total Hour | | | | |
| ! H | Course # | Course Title Min. Grad | GEC | Prerequisite | Additional Notes |
| 3 | CHEM 2323 | Organic Chemistry I | | Prerequisite: CHEM 1312 | Satisfies Major-Specific Requirement. |
| 1 | CHEM 2123 | Organic Chemistry I Lab | | Prerequisite: CHEM 1112 | Satisfies Major-Specific Requirement. |
| 4 | PHYS 1401 | General Physics I (Core) | 090 | MATH 1414, MATH 1314, MATH 2412, or MATH 2413 | One hour Integrative & Experiential Learning |
| 4 | MATH 2413 | Calculus I (Core) C | 020 | MATH 2412 with a grade of 'C' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics. | Satisfies Major-Specific Requirement. |
| 3 | Choose 1 | Language, Philosophy & Culture (Core) | 040 | | See General Education Core for course options. |
| 3 | Choose 1 | American History (Core) | 060 | | See General Education Core for more details. Options: HIST 1302 or HIST/MASC 2328 |
| 18 S | Semester Total Hour | rs | | | |
| 3 | CHEM 2325 | Organic Chemistry II | | Prerequisite: CHEM 2323 | Satisfies Major-Specific Requirement. |
| 1 | CHEM 2125 | Organic Chemistry II Lab | | Prerequisite: CHEM 2325 | Satisfies Major-Specific Requirement. |
| 4 | PHYS 1402 | General Physics II | | PHYS 1401. | Satisfies Major-Specific Requirement. |
| 4 | MATH 2414 | Calculus II | | MATH 2413 with a grade of 'C' or better. | Satisfies Major-Specific Requirement. |
| 3 | Choose 1 | Integrative/Experiential Learning Option (Core) | 090 | | See General Education Core for course options. |
| 15 9 | Semester Total Hour | rs | | | |

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.

| | • н | Course # | Course Title Min. GEC Grade | Prerequisite | Additional Notes |
|---------------------|---|--|---|--|---|
| | 3 | CHEM 3303 or CHEM 3387 | Biochemistry I or Biochemistry I Honors | | Satisfies Major-Specific Requirement. |
| | 1 | CHEM 3103 | Biochemistry I Lab | Prerequisite: Credit/registration in CHEM 3303. | Satisfies Major-Specific Requirement. |
| | 3 | CHEM 2301 | Analytical Chemistry | Prerequisite: CHEM 1312 and CHEM 1112 | Satisfies Major-Specific Requirement. |
| FAL | 1 | CHEM 2101 | Analytical Chemistry Lab | Prerequisite: CHEM 2301. | Satisfies Major-Specific Requirement. |
| | 3 | POLS 2305 | U.S. Federal Government & Politics (Core) 070 | | See General Education Core for more details |
| EAR | 4 | 34XX-44XX | Advanced Science Elective | | ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. |
| RD YI | 15 : | Semester Total Hours | 3 | | |
| Ŧ | 3 | CHEM 3301 | Inorganic Chemistry | 12 hours of chemistry, including CHEM 2323. | Satisfies Major-Specific Requirement. |
| | 1 | CHEM 3101 | Inorganic Chemistry Lab | Credit/registration in CHEM 3301. | Satisfies Major-Specific Requirement. |
| NG | 3 | CHEM 4304 | Instrumental Analysis | CHEM 2301 and CHEM 2101. | Satisfies Major-Specific Requirement. |
| SPRI | 1 | CHEM 4104 | Instrumental Analysis Lab | CHEM 4304. | Satisfies Major-Specific Requirement. |
| | 3 | POLS 2306 | Texas Government & Politics 070 | | See General Education Core for more details |
| | 4 | 34XX-44XX | Advanced Science Elective | | ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. |
| | | Semester Total Hours | | | |
| | 15 | Semester Total Hours | | | |
| | 15 : H | Course # | M | Prerequisite | Additional Notes |
| | | | | Prerequisite PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH | Additional Notes Satisfies Major-Specific Requirement. |
| | ' H | Course # | Course Title Min. Grade GEC | | |
| | [,] H 3 | Course # CHEM 3304 | Course Title Min. GEC Physical Chemistry I | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH | Satisfies Major-Specific Requirement. |
| FALL | • H 3 1 | Course # CHEM 3304 CHEM 3104 | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM |
| FALL | H 3 1 3 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. |
| TH YEAR FALL | H 3 1 3 2 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. |
| DURTH YEAR FALL | H 3 1 3 2 3 3 3 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) 050 Advanced Science Elective | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, |
| FOURTH YEAR FALL | H 3 1 3 2 3 3 3 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) 050 Advanced Science Elective | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, |
| FOURTH YEAR FALL | H 3 1 3 2 3 3 15 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) 050 Advanced Science Elective | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. |
| FOURTH YEAR FALL | H 3 1 3 2 3 3 15 3 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours CHEM 3305 | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) 050 Advanced Science Elective Physical Chemistry II | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. CHEM 3304 | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. |
| FOURTH YEAR FALL | H 3 1 3 2 3 3 15 3 3 1 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105 | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) 050 Advanced Science Elective Physical Chemistry II | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. CHEM 3304 Credit/registration in CHEM 3305. | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. |
| FOURTH YEAR FALL | H 3 1 3 2 3 15 3 1 3 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105 CHEM 4305 | Course Title Min. Grade GEC Physical Chemistry I Physical Chemistry I Lab Advanced Chemistry Elective Chemistry Problems I Creative Arts (Core) 050 Advanced Science Elective Physical Chemistry II Physical Chemistry II Chemistry Capstone | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. CHEM 3304 Credit/registration in CHEM 3305. | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. |
| FOURTH YEAR FALL | H 3 1 3 2 3 3 15 3 3 3 3 3 2 | Course # CHEM 3304 CHEM 3104 CHEM 43XX-43XX CHEM 4201 Choose 1 33XX-43XX Semester Total Hours CHEM 3305 CHEM 3105 CHEM 4305 CHEM 4305 | Course Title Min. Grade GEC Physical Chemistry I Image: State St | PHYS 1402; MATH 2413 with a grade of 'C' or better and registration in MATH Credit/registration in CHEM 3304. Chemistry major with junior standing or consent of instructor. CHEM 3304 Credit/registration in CHEM 3305. | Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. Satisfies Major-Specific Requirement. See Degree for CHEM course options. Satisfies Major-Specific Requirement. See General Education Core for course options. ASTR, BENG, BIOL, CHEM, EEMS, ENVR, GEOG, GEOL, MARS, MATE, MATH, PHYS, PSCI, SAFS, STAT. Satisfies Major-Specific Requirement. Satisfies M |

120 TOTAL HOURS

(42) Advanced minimum credit hours

Approved: Monday, October 18, 2021

Revised: Sunday, October 3, 2021