

FIRST YEAR

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| CHOOSE 1 | Communication |
| CHM 1311 | General Chemistry I Lab |
| CHM 1111 | General Chemistry I Lab |
| BMED 1101 | Introductory Medical Biochemistry |
| BMED 1103 | Introductory Cell Biology |
| BMED 1104 | Introductory Molecular Biology |
| BMED 2102 | Molecules, Cells and Tissues |
| BMED 1102 | Introduction to Biomedical Lab. I |
| UNIV 1301 | Learning Framework |
| CHOOSE 1 | Communication |
| CHEM 1312 | General Chemistry II |
| CHEM 1112 | General Chemistry II Lab |
| CHOOSE 1 | Spanish Elective |
| BMED 1105 | Introductory Medical Genetics |
| BMED 1106 | Introductory Medical Microbiology |
| BMED 1107 | Introductory Immunology |
| BMED 1109 | Evolutionary Medicine |

SECOND YEAR

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| CHEM 2323 | Organic Chemistry I |
| CHEM 2123 | Organic Chemistry I Lab |
| CHOOSE 1 | Creative Arts |
| BMED 1108 | Introductory Medical Neuroscience |
| BMED 3104 | Integrated Body Systems I: Cardiovascular and Pulmonary |
| BMED 3108 | Integrated Body Systems V: Dermatology, Hematology and Musculoskeletal |
| BMED 1110 | Introductory Medical Physiology |
| BMED 2101 | Gross Anatomy |
| BMED 1111 | Introduction to Biomedical II Lab |
| BMED 3121 | Independent Research I |
| CHEM 2325 | Organic Chemistry II |
| CHEM 2125 | Organic Chemistry II Lab |
| MATH 1342 | Elementary Statistical Methods |
| PSYC 2301 | General Psychology |
| CHOOSE 1 | Language, Philosophy & Culture |
| BMED 3105 | Integrated Body Systems II: |
| BMED 3106 | Gastrointestinal Systems |
| BMED 3107 | Integrated Body Systems III: Renal, Fluid and Electrolytes |
| BMED 3122 | Endocrine and Reproduction |
| BMED 3122 | Independent Research II |

THIRD YEAR

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| CHOOSE 1 | American History |
| PHYS 1401 | General Physics I |
| BMED 3102 | Neurochemistry |
| BMED 4280 | Advanced Medical Neuroscience |
| BMED 3103 | Human Behavior |
| BMED 3123 | Independent Research III |
| MATH 2413 | Calculus I |
| CHOOSE 1 | American History |
| PHYS 1402 | General Physics II |
| BMED 4310 | Medical Biochemistry |
| BMED 4250 | Advanced Cell Biology |
| BMED 4260 | Advanced Molecular Biology |
| BMED 3124 | Independent Research IV |
| CHOOSE 1 | Advanced Elective |

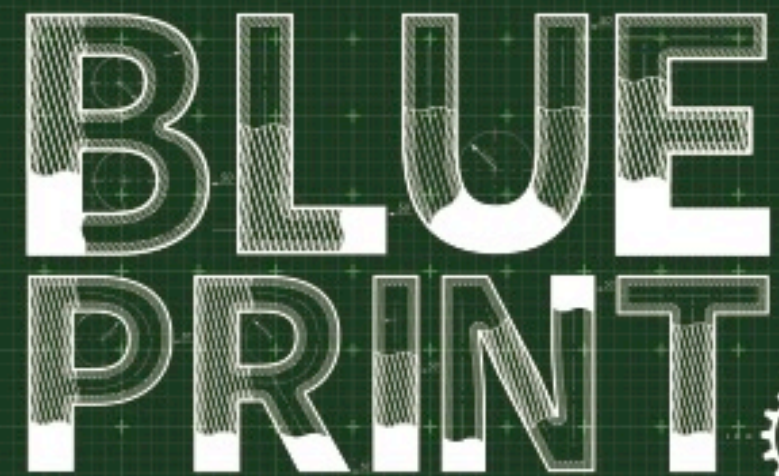
FOURTH YEAR

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| CHOOSE 1 | Government/Political Science |
| STAT 3301 | Applied Statistics for Science, |
| BMED 4440 | Medical Microbiology |
| BMED 4290 | Medical Immunology |
| BMED 4230 | Human Genetics and Medical Genomics |
| BMED 4220 | Medical Bioinformatics, Genomics, and Systems Biology |
| CHOOSE 1 | Government/Political Science |
| CHOOSE 1 | Integrative and Experiential Learning |
| CHOOSE 1 | Integrative and Experiential Learning |
| BMED 4295 | Pathophysiology |
| BMED 3101 | Pathobiology and Host Defense |
| BMED 3109 | Medical Syndromes |
| BMED 4270 | Introduction to Complementary and Alternative Medicine |

Courses in red are part of the General Education Core Curriculum (GEC).

“Choose 1” indicates course options. If options are not listed, please review the 2018-19 General Education Core or the degree plan for this major: www.utrgv.edu/degreeplans.

UTRio Grande Valley



BIOMEDICAL SCIENCES (BS)
Catalog: 2018-19
COLLEGE OF HEALTH AFFAIRS

Degree Info

The degree explores the application of powerful modern bioscience approaches such as molecular cell biology, molecular genetics and genomics, as well as anatomy, physiology, and neuroscience to human health. It is a preparatory degree for tomorrow's health care professionals and leaders and thus prepares students for successful admission to professional schools in medicine, dentistry, veterinary medicine, pharmacy, physical therapy, and physician assistant programs as well as graduate studies in biomedical sciences.

Contact Info

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 BRHP 1.101

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Additional Info

Admission requirements
 1. Secondary application
<http://www.utrgv.edu/hbs/undergraduate-programs/bs-bmed-hybrid/bmed-application-instructions/index.htm>
 2. Departmental admissions committee approval and selection into program.

Progression requirements
 An overall GPA of 3.0 or better has to be maintained in BMED and non-BMED courses to obtain Departmental approval and stay in the program.

Graduation requirements
 A grade of 'C' or better in Biomedical Sciences (Section B1) and in MATH 2413 (of MATH 2487 Honors) is required for graduation.
 *Note: All are subject to change pending departmental and curricular committee advisories.

BLUEPRINT EXPERIENCES

FIRST YEAR

SECOND YEAR

THIRD YEAR

FOURTH YEAR AND BEYOND

MILESTONES

- UTRGV has a Writing Center and a Learning Center. Make it a point to visit them!
- Complete your core English classes (section 010) during your first year.
- Complete 30 credit hours every year in order to graduate in 4 years.
- Shoot for a GPA of 3.5 or higher.
- Take MATH 1314 in your first year.

- Shoot for a GPA of 3.5 or higher.
- Complete 30 credit hours.
- Apply to the Honors College and Summer Internships program. The deadline is usually early spring.
- You should have finished your first program mandatory diagnostic assessment by start of second year.

- Shoot for a GPA of 3.5 or higher.
- Complete 30 credit hours.
- Have you landed an internship or acquired research experience? This is the year to make it happen.
- You should have finished your second program mandatory diagnostic assessment by start of third year.

- Shoot for a GPA of 3.5 or higher.
- "I have a plan for after graduation." If this describes you, great! If not, visit your Faculty Advisor or Career Center!
- Register for your Capstone/senior/portfolio project: BMED 3124.
- You should have finished your third program mandatory diagnostic assessment by start of fourth year.

ADVICE & SUPPORT

- Meet with your academic advisor and bring your orientation folder with you to every session!
- Choose a major with confidence- Visit my.UTRGV.edu and check out MyMajors.
- Visit a faculty member during their office hours and ask a question about class.
- Classes fill up fast. When registration opens, be sure to register on the first day for your group.
- Cold or flu getting you down? We have Student Health Services on campus with free office visits.

- Want to explore different careers? Check out MyMajors!
- Come ready with course suggestions and questions when you visit your academic advisor.
- Visit the Communication Hauser Lab for help with your speeches.
- Trouble making your tuition payment? The Financial Aid Office can help. Payment plans and emergency loans are also available

- Seek out research opportunities within your major and join a professional organization such as American Medical Student Association.
- Check DegreeWorks to make sure you are on track for graduation next year.
- Apply for internship and/or job shadowing opportunities. Discuss this with your advisor, faculty mentor, or Career Center.
- Visit Writing Center to improve your writing skills.

- Discuss future plans with your faculty mentor or advisor that includes employment, finances, and other life goals.
- Apply for graduation one semester prior to your anticipated date. Visit the Academic Advising Center to ensure you are on track.
- Set up an informational interview with an individual (especially an alumnus) currently in the field you aspire to work in.

APPLY WHAT YOU LEARN

- Look for a service-learning course! For guidance, visit Engaged Scholarship & Learning Office.
- Participate in a campus-sponsored community service project.
- Ask a student in class to study with you.
- Start applying for summer internships at research intensive institutions to get research experience

- MCAT, PCAT, DAT or GRE preparation
- To find undergraduate research opportunities, visit the Engaged Scholarship & Learning Office.
- Start applying for summer internships at research intensive institutions to get research experience
- Engage in Service to community, Research and Clinical Experiences

- MCAT, PCAT, DAT or GRE preparation
- Start applying for summer internships at research intensive institutions to get research experience
- Engage in Service to community, Research and Clinical Experiences
- Go show off your research, service-learning or creative works at the Engaged Scholar Symposium!

- Take the actual MCAT, PCAT, DAT or GRE exams and submit applications for Medical, PA, Dental, Pharmacy or Graduate schools or post-baccalaureate programs
- Continue to present research at the Engaged Scholar Research Symposium or at National conferences such as ABRCMS or SACNAS.

GLOBAL, CAMPUS & COMMUNITY ENGAGEMENT

- Set up your profile on the Engagement Zone through My.UTRGV.edu.
- Attend a diversity based campus or community event (e.g. MLK Day of Service).
- Join a student organization! Consider looking into BSA (Biomedical Student Association), Medical Brigades and others (<http://www.utrgv.edu/hbs/student-engagement/student-organizations/index.htm>) or visit VLink (utrgv.edu/vlink) for options

- Look at study abroad opportunities! Consider going on Medical Brigades missions, VAW etc.
- Check out a cultural campus or community event such as HESTEC or FESTIBA.
- Join another student organization. Perhaps L2S, T4A (<http://www.utrgv.edu/hbs/student-engagement/student-organizations/index.htm>) or visit VLink for options.

- Consider serving on a campus life/community committee or become a student leader and make a difference. Visit (<http://www.utrgv.edu/hbs/student-engagement/student-organizations/index.htm>), VLink or speak with your Student Government Association for more information!
- Travel the world! Look into study abroad opportunities at Office for International Programs & Partnerships.

- Identify employers of interest and seek them out at job fairs, online, at on-campus information sessions, staffing agencies, etc. The Career Center can help.
- Before a job interview, schedule a mock interview with the Career Center or speech coaching with the Communication Hauser Lab.

LIFE AFTER GRADUATION

- Create a résumé and set up your profile on the Handshake icon: (My.UTRGV.edu).
- Got summer plans? Visit Career Center and ask about places to do some job shadowing.
- Research shows that students who work on campus perform better than those who work off campus. Look for a job on Handshake!
- Check your UTRGV email for the daily Messenger- locate and attend one student workshop.

- Update your resume in Handshake and have it reviewed.
- Visit the Career Center site to find a job fair to attend. At the event, approach a recruiter and discuss internships.
- Will a minor expand your career options? We recommend Psychology, Chemistry, Biology, Medical Spanish, Medical Humanities etc.
- Explain to someone how your academic program aligns with your strengths and interests.

- Check out the <http://www.utrgv.edu/hbs/index.htm> website for postings on career/graduate school.
- Think about three people you can ask for letters of recommendation (professors, mentors, advisors, supervisors, etc.). Give them at least two weeks' advance notice!
- When is the deadline for your graduate school application? Visiting the program admissions webpage. Most do not accept late applicants!

- Have you received your acceptance for graduate school or an employment offer? If not, network: talk to faculty, the Career Center, and get on LinkedIn.
- Formulate and implement a strategy for life after graduation: attend career fairs, graduate fairs, apply to fellowships, etc.
- Update your information with Alumni Relations. Enjoy alumni mixers, events and continued access to Career Center services!
- Remember to do your exit loan counseling on studentloans.gov.

CAREERS

- Some areas of Specialization:
 - Biophysics
 - Biochemistry
 - Cellular and molecular biology
 - Genetics
- Immunology
- Pathology
- Pharmacology
- Physiology
- Virology
- Colleges/universities
- Professional schools: colleges of pharmacy, dentistry, medicine, veterinary medicine, & agriculture
- Federal government:
 - National Institutes of Health
 - Centers for Disease Control/Prevention
 - Food and Drug Administration
- State and local public health departments
- Clinics and hospitals
- Private research foundations
- Independent laboratories
- Pharmaceutical companies

For additional info, visit the Career Center website and check out "What Can I Do With This Major?" www.utrgv.edu/careercenter