

## FIRST YEAR

Choose 1  
BIOL 1406 General Biology I  
MATH 1314 College Algebra  
Choose 1  
Creative Arts  
Choose 1  
Government/Political Science  
UNIV 1301 Learning Framework  
Choose 1  
Communication  
BIOL 1407 General Biology II  
CHEM 1311 General Chemistry I  
CHEM 1111 General Chemistry I Lab  
Choose 1  
Government/Political Science

## SECOND YEAR

CHEM 1312 General Chemistry II  
CHEM 1112 General Chemistry II Lab  
MARS 2310 Marine Processes and Ecosystem Dynamics  
Choose 1  
American History  
PHIL 1366 Philosophy & History of Science & Tech.  
Choose 1  
Social and Behavioral Sciences  
CHEM 2323 Organic Chemistry I  
CHEM 2123 Organic Chemistry I Lab  
BIOL 3413 Genetics  
Choose 1  
American History  
Integrative/Experiential Learning

## THIRD YEAR

BIOL 3409 Ecology  
MATH 1343 Introduction to Biostatistics  
CHEM 2325 Organic Chemistry II Lab  
CHEM 2125 Organic Chemistry II Lab  
34XX-44XX Marine Biology Elective  
BIOL 3301 Biological Evolution  
PHYS 1401 General Physics I  
MARS 3320 Marine Biogeochemistry  
ENVR 3405 Oceanography  
MARS 41XX Major Advanced Elective

## FOURTH YEAR

Choose 1  
BIOL 3415 Molecular Biology or  
BIOL 3412 Cell Biology  
MARS 3430 Field Methods and Analysis  
in Marine Biology  
33XX-43XX Marine Biology Elective  
33XX-43XX Marine Biology Elective  
34XX-44XX Biology Major Advanced Elective  
MARS 4401 Marine Biology Seminar  
33XX-43XX Marine Biology Elective  
34XX-44XX Marine Biology Elective  
Integrative/Experiential Learning

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 General Education Core or the degree plan for this major: [www.utrgv.edu/degreeplans](http://www.utrgv.edu/degreeplans).

### 2019-2020 ACADEMIC PLAN

UTRio Grande Valley

BLUE  
PRINT

**MARINE BIOLOGY (BS)**  
**Catalog: 2019-20**  
**COLLEGE OF SCIENCES**

### Degree Info

The School of Earth, Environmental, and Marine Sciences offers a B.S. in Marine Biology, which is designed to prepare students who are seeking a career or graduate studies in marine biology and related marine science disciplines. Undergraduates in this major will develop an understanding of the biology of marine organisms and the biological and physical processes that affect these organisms, their populations, and their coastal and oceanic ecosystems. The curriculum takes full advantage of the Rio Grande Valley's unique physical location at the intersection of temperate and tropical climatic divides, and proximity to the Gulf of Mexico. Unifying laboratory/field courses with the unique environments of South Texas directly engage students in the discovery process and in analyzing and interpreting data. The Marine Biology program requires 120 hours of coursework including a major-specific marine biology core and supporting courses aimed at interrelating the principles of physics, geology and geophysics, mathematics, chemistry, and biology to the marine environment. Upper-level electives include Coral Reef Ecology, Marine Zoology, Ichthyology, Marine Animal Field Studies, as well as supervised independent research courses.

### Contact Info

Director- School of Earth,  
Environmental, and Marine Sciences  
Dr. David Hicks  
[David.Hicks@utrgv.edu](mailto:David.Hicks@utrgv.edu)

Associate Director- School of Earth,  
Environmental, and Marine Sciences  
Dr. Hudson DeYoe  
[Hudson.Deyoe@utrgv.edu](mailto:Hudson.Deyoe@utrgv.edu)

Marine Biology Coordinator  
Leticia Contreras  
[Leticia.contreras01@utrgv.edu](mailto:Leticia.contreras01@utrgv.edu)

Department Contact:  
956-882-5040

### Additional Info

- Pay attention to prerequisites and course sequences. Some of the major foundational courses are offered only once per year.
- To graduate, students must have an overall GPA of 2.0 AND a 2.5 GPA as a Marine Biology major.
- College Algebra is a hidden prerequisite, required before taking Physics. Students should consider taking this course in the summer after their first or second year.

# BLUEPRINT EXPERIENCES

## FIRST YEAR

## SECOND YEAR

## THIRD YEAR

## FOURTH YEAR AND BEYOND

## CAREERS

### 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.
- Aim for a GPA of 2.5.
- Take MATH 1343 in your first 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.

### 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.

### 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, Earth Day, or Beach Clean-up).
- Attend a departmental program such as an OCES graduate student thesis defense.
- Join a student organization! Consider looking into Gorgas Science Society or visit VLink (utrgv.edu/vlink) for options.

### LIFE AFTER GRADUATION

- Create a résumé and set up your profile on the Career Connection 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 the Career Center portal!
- Check your UTRGV email for the daily Messenger- locate and attend one student workshop.

- Aim for a GPA of 2.5.
- Complete major foundation classes, such as MARS 2310 and BIOL 3413.
- Complete 30 credit hours.

- 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

- To find undergraduate research opportunities, visit the Engaged Scholarship & Learning Office.
- Consider attending the LeaderShape Institute or attend the Engaged Scholar Symposium.

- Look at study abroad opportunities! Consider going to Belize to study Coral Reef Ecology!
- Check out a cultural campus or community event such as HESTEC or FESTIBA.
- Join another student organization. Perhaps the Environmental Awareness Club or the American Association of University Women in STEM or visit VLink for options.
- Check out a campus event that offers free lunch- bring a friend!

- Update your resume in Career Connection 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.
- Explain to someone how your academic program aligns with your strengths and interests.

- Aim for a GPA of 2.5.
- Complete 30 credit hours, including major foundation classes, such as BIOL 3409, MARS 3320, BIOL 3301, and ENVR 3405.
- Have you landed an internship or acquired research experience? This is the year to make it happen.

- Seek out research opportunities within your major and join a professional organization such as The American Fisheries Society or the Oceanography Society.
- 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.

- Go show off your research, service-learning or creative works at the Engaged Scholar Symposium!
- Sharpen your writing skills! Visit the Writing Center or become the secretary for your organization.

- Consider serving on a campus life/community committee or become a student leader and make a difference. Visit 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.

- Check out the SEEMS website and the UTRGV Marine and Coastal Sciences Facebook page 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!

- Aim for a GPA of 2.5.
- "I have a plan for after graduation." If this describes you, great! If not, visit your Faculty Advisor or Career Center!
- Register for your Senior Seminar course: MARS 4401.
- Complete at least 30 credit hours to graduate, including major foundations classes MARS 3430 and BIOL 3412 or BIOL 3415.
- Submit your application(s) for graduate school, an apprenticeship, or for fulltime employment.

- Engage in an independent study project or an academic internship to complement your major, such as the Texas Parks and Wildlife Department, Sea Turtle, Inc., or the National Oceanographic and Atmospheric Administration.
- 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.

- Continue to present research or creative works at the Engaged Scholar Symposium or at the College of Sciences Annual Conference.
- Set up an informational interview with an individual (especially an alumnus or alumna) currently in the field you aspire to work in.

- 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.

- 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.

- Marine Biology/Biological Oceanography
- Ecology and evolution
- Conservation
- Consulting
- Environmental protection/Regulation
- Environmental remediation/Compliance
- Fisheries management
- Marine biotechnology
- Molecular biology
- Marine policy/Law
- Mariculture/Aquaculture
- Hatchery operations management
- Aquarium operations management
- Natural resource management
- Technical writing
- Wildlife management
- Research
- Coastal/Wetland restoration
- Veterinary medicine

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