

Department/School: School of Earth, Environmental, and Marine Sciences
Vision: Pending
Mission: The mission of the School of Earth, Environmental, and Marine Sciences (SEEMS) is to provide students a unique integrative education and training experience that prepares them to meet the challenges and opportunities in the multiple dimensions of contemporary coastal, environmental, and earth sciences. This experience includes providing research opportunities for undergraduate and graduate students that generates new knowledge and formulates effective solutions for a sustainable Rio Grande Valley and beyond. The School promotes collaborative, multi-disciplinary research and seeks participation of other sciences and disciplines interested in applying interdisciplinary perspectives to understanding of earth-environmental systems and their interactions with society (i.e., integrating biological, chemical, physical, and geospatial sciences with engineering, socio-economics, law and policy).

PROFILE

<p>Majors:</p> <p>BS Marine Biology BS Environmental Science BS Sustainable Agriculture and Food Systems</p> <p>Minors:</p> <p>Minor in Environmental Science Minor in Geographic Information Systems Minor in Geology and Earth Science</p>
<p>Graduate Programs:</p> <p>MS Ocean, Coastal, and Earth Science MS Agricultural, Environmental, and Sustainability Science</p>
<p>Students</p> <ul style="list-style-type: none"> • Number of Students: >200 undergraduate majors in SEEMS undergraduate programs and 67 graduate majors • Characteristics: (e.g., graduate, undergraduate): More than 50% of graduate majors from out-of-state
<p>Faculty</p> <ul style="list-style-type: none"> • Number of Faculty: 31 • Ranks: Professors: 5; Associate Prof.: 9; Assistant Prof.: 13; Lecturers: 4
<p>Campus Program Offering (<i>face-to-face, online, hybrid, or ITV</i>)</p> <ul style="list-style-type: none"> • Marine Biology: 100% of the degree plan offered in BRW; 85% offered in ED • Environmental Science: 66% of the degree plan offered in BRW; 100% offered in ED • Sustainable Agriculture and Food Systems: PENDING

- Ocean, Coastal, and Earth Sciences: 100% of the degree plan offered in BRW; 100% offered in ED
- Agricultural, Environmental, and Sustainability Sciences: 100% of the degree plan offered in BRW; 100% offered in ED

Stats & Highlights:

- Multi-disciplinary approach to sustainable environment, natural resource management and energy development
- SEEMS is the only academic unit in the COS that did not formerly exist in the two legacy institutions
- New Sustainable Agriculture and Food Systems BS Program started in Fall 2018
- Soil Science Certificate (15 credit hours)
- Student organizations: Marine Biology Club, Geology Club, and Environmental Science Club
- Campuses in Port Isabel and South Padre Island
- Coastal Studies Lab Museum and Collections with over 3000 specimens including shells, taxidermy marine mammal and sea turtle mounts, and algae presses
- Inshore and offshore vessel fleet
- R/V Ridley Floating Classroom program
- Five-acre botanical preserve on South Padre Island featuring native dune habitat surrounding the Coastal Studies Lab
- Coastal Studies Lab maintains partnerships with Sea Turtle Inc. and TX Marine Mammal Stranding Network for wildlife reporting and response

Success Stories/“Bragging:”

- SEEMS #1 in COS extramural funding since 2015 surpassing \$5 million in FY 2019-2020
- Leaders in involving undergraduates in research
- Over 31 undergraduate students presented at regional, state, or national level conferences in 2019
- 11 Engaged Scholar Awards to SEEMS undergraduates
- Leaders in Engaged Scholarship
- Leaders in Community engagement
- Cross sectors partners – international, federal and state level
- NSF funded SHIP-GEO project ([link](#)) provides more than 60 scholarships, and career training/opportunities for future workforce in Earth, Environmental, and Ocean Sciences.
- NOAA Center for Coastal and Marine Ecosystems Scholars program supports 6 graduate students and 5 undergraduate students each academic year
- USDA funded project ‘Training, Research, and Education in Soil Science’ provides soil science courses, research experiences, and off-campus internship opportunities in the field of soil science
- Coastal Studies Lab serves ~3000 public visitors, ~5000 k-12 students, and trains dozens of volunteers for their Marine Mammal Response and Red Tide Ranger Programs
- Host Annual Agroecology Professional Development Institute professional development workshops (to date have reached 87 middle/high school STEM teachers to integrate agriculture into science classrooms)
- Faculty/Staff Awards:
 - Dr. Chu-Lin Cheng: UTRGV Major Faculty Achievements 2018, 2019
 - Dr. Christopher Gabler: UTRGV President’s Faculty Fellow in Sustainability
 - Dr. Brendan Lavy: Fellow, Enabling the Next Generation of Hazards and Disasters Fellowship Program, University of Colorado Natural Hazards Center (funded by the National Science Foundation grant number CMMI1921157) (2020-2021)
 - 2 USDA E. Kika de la Garza Science Fellows in SEEMS - Dr. Joanne Rampersad (2017) and Dr. Alex Racelis (2018)

Dr. Alex Racelis – American Association for the Advancement of Sciences Alan T. Leshner Public Engagement Fellow (2018); University of Texas Regents Outstanding Teacher Award (2016)
Dr. MD Saydur Rahman: Student Belonging Award, Fall 2019

Traditions:

- Earth Day Festival
- GIS Day
- Port Isabel/South Padre Island Lighted Boat Christmas Parade
- Marine Biology Freshmen Orientation aboard the R/V Ridley
- Discovery Island
- Winter Seminar Series at the Coastal Studies Lab
- HESTEC
- Summer Science Camps at the Coastal Studies Lab
- Coastal Studies Lab Shark Week Family Programs
- Adopt-A-Beach Cleanups
- Winter Outdoor Wildlife Expo – SPI Birding Center
- Coastal Expo – Edinburg Scenic Wetland & Birding Center
- Environmental Sciences Meet & Greet
- Student Geology Club (since 1964)

Mantra/Slogan:

Integrative science for an integrated world