

Reflecting on Your Department's Climate & Culture

Department/School: School of Mathematical and Statistical Sciences

Vision: To be developed

Mission: The School of Mathematical and Statistical Sciences supports the College of Sciences and the University of Texas Rio Grande Valley by committing to excellence in advancing student performance, promoting scholarly accomplishment, and providing professional and community service. We aim to establish a mathematical environment with academic freedom to foster students' critical thinking and mathematical problem-solving skills for current and future societal needs, to communicate and appreciate the knowledge of mathematics, and to understand the impact of mathematics in the global economy.

Profile

Majors: Mathematics, Statistics, Mathematics with UTeach, Interdisciplinary Studies. Concentration within the Mathematics major are: Applied Mathematics, Pure Mathematics, Statistics, Secondary School Mathematics, Middle School Mathematics, Science and Engineering, and Economics.

Graduate Programs: Masters graduate program with multiple concentrations: Mathematics, Mathematics Teaching, Industrial and Applied Mathematics, Statistics

Students

- **Number of Students:** Over 350 majoring in Mathematics and Statistics
- **Characteristics:** graduate and undergraduate

Faculty

- **Number of Faculty:** 45 tenured and tenure-track faculty members and ___ lecturers
- **Ranks: Professors** 13 **Associate Prof.** 15 **Assistant Prof.** 17 **Lecturers** 19

Stats & Highlights:

- Some of our students have become K-12 teachers, faculty at community colleges, or have attended graduate school.
- Many of our graduate students opt to conduct research culminating in their thesis project and a peer reviewed journal article..
- We offer 2-3 Math Courses in Spanish
- 15 active grants from funding agencies such as Department of Defense, NSF, and Mathematical Association of America, APLU.
- Interdisciplinary collaborations with researchers in engineering, physics, biology, and the health sciences.
- 3 active student organizations: SACNAS, SIAM, and SPIE.
- Several graduate students each summer participate in exchange programs in Tokyo through the JSPS summer program
- New Statistics Program started in Spring 2019
- Work closely with the Center for Excellence in STEM Education, the UTeach Program and the UTRGV Math & Science Academy, Region 1
- Involved in professional development for local school teachers, including an active Math Teachers' circle funded by the American Institute of Mathematics
- Offer mini-courses to help high school students attain college-readiness; the partnership with Region 1 and local high schools is the only one in the state of Texas that is free of charge for local districts

Success Stories/ Bragging:

- ✓ History of graduates receiving excellent jobs, including current faculty at national labs, corporations, and leading research institutions
- ✓ Recipient of the 2018-2019 Department Excellence Award in Faculty Mentoring
- ✓ Dr. Villalobos awarded the 2019CMD-IT Richard Tapia Achievement Award for Scientific Scholarship, Civic Science, and Diversifying Computing
- ✓ Dr. Qiao, UTRGV Presidential Endowed Professor
- ✓ Dr. Yanev, Carlos and Stephanie Manrique De Lara Endowed Professorship
- ✓ Dr. Timothy Huber, Regents' Outstanding Teaching Award Recipient in 2016
- ✓ Dr. Daniel Riahi named a 2018 Fellow by the Society of Engineering Science.
- ✓ SMSS faculty are active in professional development. For example Ms. Zaena Zamora and Dr. Jacob White were recognized in spring 2019 by the UT System for Completion of Association of College and University Educators (ACUE) "Course in Effective Teaching Practices."

- ✓ New Ph.D. Proposal submitted to the UT system in August 2019.
- ✓ Two new MS degrees under preparation: M.S. in Applied Statistics and Data Science and M.S. in Actuarial Science
- ✓ Free Tutoring from Monday through Friday through the Math Lab and Math Learning Center
- ✓ Colloquia with local, national, and international faculty (7 – 10 presentations per academic year)
- ✓ Hosted 6 conferences in 2019
- ✓ Robust student mentoring to provide them with opportunities in research, to present their work at conferences, to network, to attend summer research opportunities in preparation for graduate studies, and to attend professional development workshops.
- ✓ Active efforts to coordinate critical service courses and implement effective strategies (e.g. PLTL) to increase student success.
- ✓ Increasing student learning in upper level courses by implementing active-learning strategies and flipped pedagogy.
- ✓ Open department culture that encourages the sharing of resources. For instance, we host a repository for faculty to share their curricular materials, including notes, videos, and assessments.

Traditions:

- Student/faculty events or traditions such as the “Pi Day” (throw whipped cream pie at professors, break math-themed pinatas), potlucks at faculty meetings,
- Recognition of student achievement with end-of-the year awards ceremony. This includes awards for students and faculty co-authors, student academic excellence, and awards given by students to faculty who have made a difference in their lives.
- Faculty lead regular sessions for students on graduate school, fellowship and career opportunities
- All majors are required to engage in a semester-long research experience that culminates in a student research conference.
- The school hosts regular teaching workshops where faculty share their teaching strategies with colleagues

Mantra/ Slogan: “A Department That Counts”