Applied Discrete Mathematics
(MATH 3361-01, CRN 18953)

**Time:** Aug 26, 2019 - Dec 12, 2019, 10:45 pm - 1:15 pm F

**Location:** EMAGC 1.208

**Instructor:** Professor Dr. Paul-Hermann Zieschang

**Phone:** 956-665-7063

**Email:** paulhermann.zieschang@utrgv.edu

**Office Hours:** 3:00 pm - 5:00 pm MW

**Office Location:** EMAGC 3.734

**Textbook and/or Resource Material:** No textbook is required, notes will be provided.

**Course Description and Prerequisites:** Topics include maps, sums and mathematical induction, basic arithmetic, binomial coefficients, integral divisibility, prime numbers, Mersenne and Fermat primes, the mod function, arithmetic functions, Fibonacci numbers, graphs, the Friendship Theorem, the Prim algorithm, networks. Prerequisites: MATH-2318 with a grade of C or better.

**Learning Objectives/Outcomes for the Course:** After completing this course students will be able to understand basic techniques in Discrete Mathematics, to read and understand elementary proofs on subjects in Discrete Mathematics, and to apply techniques from Discrete Mathematics to some real world problems.

**Grading Policies:** UTRGV's grading policy is to use straight letter grades (A, B, C, D, or F). Oral participation and homework: 40%, midterm(s): 30%, final examination: 30%. Late work will be not considered.

**Important dates relative to the academic calendar:** The UTRGV academic calendar can be found at https://my.utrgv.edu/home at the bottom of the screen, prior to login. Some important dates for Fall 2019 include:

- August 26 First day of classes
- August 29 Last day to add a course or register for Fall 2019
- September 2 Labor Day Holiday  NO classes
- November 13 Last day to drop a course; will count toward the 6-drop rule
November 28 - 29 Thanksgiving Holiday  NO classes
December 5 Study Day  NO classes
December 6 - 12 Final Exams
December 13 - 14 Commencement Exercises

**UTRGV Policy Statements:** The UTRGV disability accommodation, mandatory course evaluation statement and sexual misconduct statement are required on all syllabi. Additional policy statements are optional, such as those covering attendance, academic integrity, and course drop policies.

**Students with Disabilities:** Required on all syllabi. Do not modify. Students with a documented disability (physical, psychological, learning, or other disability which affects academic performance) who would like to receive academic accommodations should contact Student Accessibility Services (SAS) as soon as possible to schedule an appointment to initiate services. Accommodations can be arranged through SAS at any time, but are not retroactive. Students who experience a broken bone, severe injury, or undergo surgery during the semester are eligible for temporary services.

**Pregnancy, Pregnancy-related, and Parenting Accommodations:** Title IX of the Education Amendments of 1972 prohibits sex discrimination, which includes discrimination based on pregnancy, marital status, or parental status. Students seeking accommodations related to pregnancy, pregnancy-related condition, or parenting (reasonably immediate postpartum period) are encouraged to contact Student Accessibility Services for additional information and to request accommodations.

**Student Accessibility Services:** Brownsville Campus: Student Accessibility Services is located in 1.107 in the Music and Learning Center building (BMSLC) and can be contacted by phone at (956) 882-7374 or via email at ability@utrgv.edu.

**Edinburg Campus:** Student Accessibility Services is located in 108 University Center (EUCTR) and can be contacted by phone at (956) 665-7005 or via email at ability@utrgv.edu.

**Mandatory Course Evaluation Period:** Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades. Online evaluations will be available on or about November 14th.
Scholastic Dishonesty: As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism (including self-plagiarism), and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to Student Rights and Responsibilities.

Sexual Misconduct and Mandatory Reporting: In accordance with UT System regulations, your instructor is a Responsible Employee for reporting purposes under Title IX regulations and so must report to the Office of Institutional Equity and Diversity (oie@utrgv.edu) any instance, occurring during a student's time in college, of sexual misconduct, which includes sexual assault, stalking, dating violence, domestic violence, and sexual harassment, about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect that is free from sexual misconduct, discrimination, and all forms of violence. If students, faculty, or staff would like confidential assistance, or have questions, they can contact OVAVP (Office for Victim Advocacy and Violence Prevention) at 665-8287, 882-8282, or OVAVP@utrgv.edu.

Course Drops: According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the 3-peat rule and the 6-drop rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.
Student Services: Students who demonstrate financial need have a variety of options when it comes to paying for college costs, such as scholarships, grants, loans and work-study. Students should visit the Students Services Center (U Central) for additional information. U Central is located in BMAIN 1.100 (Brownsville) or ESSBL 1.145 (Edinburg) or can be reached by email (ucentral@utrgv.edu) or telephone: (888) 882-4026. In addition to financial aid, U Central can assist students with registration and admissions.

Students seeking academic help in their studies can use university resources in addition to an instructors office hours. University Resources include the Advising Center, Career Center, Counseling Center, Learning Center, and Writing Center. The centers provide services such as tutoring, writing help, critical thinking, study skills, degree planning, and student employment. Locations are:

Center Name Brownsville Campus Edinburg Campus Advising Center Academic Advising@utrgv.edu

BMAIN 1.400 (956) 665-7120 ESWKH 101 (956) 665-7120 Career Center CareerCenter@utrgv.edu

BCRTZ 129 (956) 882-5627 ESSBL 2.101 (956) 665-2243 Counseling Center Counseling@utrgv.edu EUCTR 109 (956) 665-2574 BSTUN 2.10 (956) 882-3897

Learning Center LearningCenter@utrgv.edu

BMSLC 2.118 (956) 882-8208 ELCTR 100 (956) 665-2585 Writing Center WC@utrgv.edu

BUBLB 3.206 (956) 882-7065 ESTAC 3.119 (956) 665-2538