

MATH 1310:002 INTRODUCTION TO UNIVERSITY MATH

TR 8:00– 9:15 in ACR 205

LECTURER: ROBBIE RAY: robbier@sulross.edu Telephone 837-8725
Office hours in FH210 Office Hours MWF 8:30-9:00; MW 11:00-12:00; TR 7:30-8:00 and
2:00-3:00; also by appointment.

COURSE DESCRIPTION: University Math is about "...keeping an open mind to all possibilities – even those that first appear impossible; understanding simple things deeply; exploiting our insights; searching for patterns; and breaking up difficult tasks into many easy ones." [Your authors Starbird and Burger] Another way to describe an open mind, a mind open to opportunity is the word "Shoshin," from Zen philosophy and means "beginner's mind." "In the beginner's mind are many possibilities; in the expert's few." [Suzuki-roshi]

TEXT: You are required to buy *and read* the textbook: *The Heart of Mathematics*, 2nd Edition, Burger, Starbird. We will work in Chapters 1, 2, 3, 4, 6 and 7.

GRADES EARNED: In order to earn an A, you will need 90-100% of the contribution points available, 80-89% will earn a B, 70-79% a C, 60-69% a D and below 60% an F. Contribution points will accrue as follows:

- 60% 3 exams, worth 20% each. See below for exam schedule.
- 20% Homework assignments, due every 2 weeks. 1st assignment due September 1, second due September 15, etc.
- 20% Contributions to class discussion (read text!) and group collaboration.

EXAMS: (3) exams scheduled; your final exam may be substituted for any exam grade.

MID-TERM 1: Thursday, September 24

MID-TERM 2: Tuesday, November 3

FINAL EXAM: Thursday, December 10 at 8:00 a.m.

HOMEWORK: Homework assignments will be similar to class exercises, assigned throughout the semester, and due every other week, on Tuesdays. Homework will be graded on presentation and math content, (see rubric below). Each will be posted in class and on Blackboard. Homework will be collected at the beginning of class; any submitted at the end of class or later will not be graded. Tutors are available to help you in FH213, and I am available in FH210 (you can an appointment or attend office hours as posted above). You will need a cheap calculator.

CLASS CONTRIBUTION: Contributions in class will earn points two ways: (1) discussion of reading assignments; and (2) math exercises completed collaboratively. During the final few minutes of a class in which collaboration is due, exercises may be discussed and/or answered. Reading assignments are due once or twice weekly, announced in class or on Blackboard. Check Blackboard for reading assignments, if I don't make one in class.

ATTENDANCE POLICY: University policy requires me to request your drop with grade F, at your 9th hour of absence. On a TR format, classes count as 1½ hour, so you may not miss 6 classes without being dropped. Makeup exams must be scheduled prior to your absence, and be "explained" according to university policy. There are no "excused" absences, but explained absences are posted to me from Campus Activities. If you are ill, a doctor's note will constitute "explained." If you have a family emergency, contact

Dean of Student Life 837-8037 and her office will notify your professors. If you participating in a campus activity, submit your homework before you leave or send it with a classmate on the Tuesday its due. Check Blackboard and get your assignments in before you leave!

OBJECTIVES/EXPECTED OUTCOMES: (1) Discuss and complete “puzzles” introducing classic number, infinities, geometry, and probability theory; (2) explain and demonstrate concepts and theories of real numbers; (3) demonstrate practical geometry such as Pythagorean and Art Gallery theorems; (4) demonstrate methods of counting numbers and infinities; (5) explore and discuss fractals; and (6) solve problems of risk and probability .

SUL ROSS STATE UNIVERSITY POLICY provides reasonable accommodation to students with disabilities. If you would like to request such accommodation because of a physical, mental, or learning disability, please contact the ADA Coordinator, Joyce Sesters, UC 211, 837-8178.

Good luck in Math 1310! -R. Ray

CONTRACT ON CLASSROOM BEHAVIOR

Most students exhibit appropriate behavior in class, but at times, a consumer culture creeps into the classroom, with students perceiving faculty as employees hired to serve them. This is not an appropriate comparison. Instead, you have paid for the opportunity to listen to what we have to say about learning. Learning is an active process, and the behavior of each person in class in some way or other affects the learning outcomes of others. If we keep these guidelines in mind, the classroom experience will be better for everyone.

Rules (check each off as you read):

_____ Class begins promptly at _____. You should be in your seat and ready to start participating at that time. The same rule applies to me.

_____ Bring your textbook to class because you will need them.

_____ If you come into class after an assignment has already been returned, do not ask for yours until after class is over. I'll be happy to catch you up on any matter, *after class*.

_____ Don't bring a cell phone to class. This means you can't use your phone as a calculator on tests. If your phone rings anyway, leave the room and take your books. I'll see you next time.

_____ Take care of your personal needs before you come to class. If you leave to go to the toilet, take your books. I'll see you next time. If you have an emergency, go - of course - and explain later.

_____ Please don't call me “Miss.” Mrs. Ray or “Ma'am” is an appropriate address to me.

_____ I need your full attention and focus for the entire class period. This means you should avoid conversations with people sitting around you unless we break into groups

for class exercises or experiments. When the class is discussing a topic together, only one person speaks at a time, and you give him or her or me your full attention. Even whispering is distracting because you can be seen and probably heard.

_____ If you know that you need to leave before the class is over, sit as close to the door as possible so as not to disrupt others. Similarly, if you arrive in class late, slip in quietly and take the first seat available. Explain later.

_____ Turn in assignments on time. If you have a campus activity which explains an absence, bring the assignment in *before* the due date. Keep in close touch with the class on Blackboard because I will not grade or credit late homework. See syllabus for test makeup policy.

_____ Announcements, assignments, grades and other messages are posted on Blackboard. You are responsible for keeping up with all of these items. However, if you want extra help or need to discuss anything about the class or assignment, you are welcome in my office during my office hours, by arrangement or when I am there.

Dated:_____

Dated:_____

HOMework RUBRIC

Homework will be graded on presentation *and* math content (see below). It is due every 2nd Tuesday, beginning September 4, *at the beginning* of the Tuesday class period and any homework submitted at the end of class or later will not be graded. Here are some suggestions for getting full credit for your homework.

- 1 At the beginning of *each* section of homework submitted, write your name, the due date, the Section Number and a list of exercises assigned. For example:

Robbie Ray
September 4, 2000
Sec. 1.4, #8, 9 and 11
- 2 Please submit your homework in one column of work only. Feel free to write on both sides of the paper but don't place exercises side by side in two columns.
- 3 Your homework should be prepared as a study guide for a test. Therefore, please write out each question. Or, you could answer in complete sentences, such as "The first 10 Fibonacci numbers are 1, 1, 2, 3, 5, 8, 13, 21, 34, 55. You may also abbreviate or paraphrase when an exercise is "wordy," which they often are in Burger and Starbird.
- 4 Other points of presentation are readability and completeness.
- 5 Points of math content also include completeness, boldness and the courage of your convictions. Other points for math content will depend on whether you have the correct answer. If you aren't sure if your answer matches the author's answer, defend yours with an explanation.