1. **Course Number**: MATH 2303 (13164)
2. **Course Title**: Properties of the Real Numbers
3. **Credit Hours**: 3
4. **Term**: Fall 2009
5. **Course Meetings**: MW 1200-1320 Education 301
6. **Prerequisites**: MATH 1319, or MATH 1320, MATH 1508, or TCCN MATH 1314, or an acceptable score on a placement examination
7. **Course Fee**: None
8. **Instructor**: Dr. Don Collins
9. **Office location**: 404b Classroom Building
10. **Contact Information**: E-mail---- dwcollins2@utep.edu
11. **Office Hours**: MW 10:30-11:30 and 13:50-14:50
13. **Catalog Description**: A study of the arithmetic structure of the real numbers from an advanced point of view. Relations with concepts of set theory, rings, and fields will be included. Prerequisite: MATH 1319, or MATH 1320, MATH 1508, or TCCN MATH 1314, or an acceptable score on a placement examination
14. **Course Objectives**: Students will
   a. Critically examine the basic operations involving whole numbers
   b. Develop strategies for teaching these operations
   c. Examine numeration and the use of place value
   d. Revisit the Fundamental Theorem of Arithmetic and learn of its role in teaching mathematics today
   e. Be introduced to the basic concepts of probability and data analysis
   f. Extend their knowledge of the rational numbers, that is fractions, decimals and per cents and examine computation with numbers expressed in these forms
   g. Study and learn how to apply the various problem solving strategies
15. **Course Activities/Assignments**: To be given in class
16. **Course Schedule**: Chapters 3, 11, 7, 17, and 22
17. **Grading policy**: 2 Quizzes 20% each, Assignments 20%, Class Journal 20%, Final Exam 20% The usual grading scale of 90-100%=A, 80-89%=B, 70-79%=C and so on
18. **Make up policy**: All work can be made up if done in a timely manner
19. **Attendance Policy**: A deduction will be made in a student’s score for more than 3 absences