Catalog Description  Offered every term. Prereq., MATH 095D or appropriate placement score. An introduction to mathematical ideas and their impact on society. Intended for students wishing to satisfy the general education mathematics requirement.

Class Web Page:  http://www.math.umt.edu/105

Course Coordinator  First person to see with complaints, questions, etc. about this course that cannot be resolved with the instructor.
Lauren Fern. Math 205B. 243-5398 fernl@mso.umt.edu

Learning Goals

1. To attain some degree of mathematical literacy, including an ability to read mathematical material and write using mathematical notation correctly. To develop skills to think and reason mathematically in order to function more effectively in the modern world.

2. To examine ways in which mathematics is used, to follow and understand logical arguments, and to solve applied quantitative problems. This includes learning to formulate a problem precisely, to interpret solutions, and to make critical judgments in the face of competing formulations and solutions.

3. To understand elementary probability concepts and phenomena: including sample spaces with equally likely outcomes, the basic parameters (mean, standard deviation), the normal distribution, and a qualitative view of the Central Limit Theorem.

4. To understand elementary statistical concepts, such as data description, statistical estimation, randomization, and statistical inference.

5. To explore and examine several other aspects of contemporary mathematics. This could include, but is not limited to, management science (e.g. graph models for network problems), social choice and decision making (e.g. elections, voting, fair division, Congress apportionment), or applied geometry (e.g. symmetry, tilings, growth rates).

Note about the course: This course is designed to illustrate several ways in which mathematics is used in the "real world". We will explore some topics of general interest which are not typically taught in a formal mathematics class. The goal is for you to see not only how useful mathematics is, but also how beautiful and elegant it can be.


Academic Honesty  All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

Student Conduct Code  All students need to be familiar with the Student Conduct Code, which is available for review online (the easiest way to find it is to search for “Student Conduct Code” via the “A to Z Index” link on top of the UM home page.)

DSS  Students with disabilities are welcome to discuss accommodations with me.
Add/Drop Policy
The last day to add/drop or change grading option to Audit by Cyberbear is 9/17. The last day to change sections and to change grading options is 10/29. This is also the last day to drop. Changes after this deadline and until 12/7 must be done by Petition to Drop/Add after deadline and approved by me, your advisor and the appropriate Dean. Approval requires genuine extenuating circumstances as listed in the university catalog.

- Missing a substantial number of class days due to illness, accident or family emergency.
- A change in work schedule that makes it impossible to attend class or devote adequate time to the course.
- Registration in the course by error and never attending class.

Reasons that are not satisfactory include forgetting to turn in a drop slip and protecting your grade point average.

Incomplete Grades
To be eligible for an "I", the following conditions must be met:

1. The student must have been in attendance and passing the course up to 3 weeks before the semester ends; and
2. The student is unable to complete the course due to extenuating circumstances, which usually means serious illness or death in the family. Incompletes are not given under any other circumstances and are always given at the discretion of the instructor. See the 2012-2013 catalog for further information.

Important Dates
Aug 27 (Mon): Classes Begin
Sept 3 (Mon): Labor Day Holiday
Sept 17 (Mon): Last day to add/drop on Cyberbear
Oct 29 (Mon): Last day to add/drop by paper form
Nov 12 (Mon): Veterans Day Holiday

Nov 21 (Wed): Travel Day (No classes held)
Nov 22-23 (Thu-Fri): Thanksgiving Vacation
Dec 7 (Fri): Last Regular Class Day
Dec 7 (Fri): Last day to Add/Drop by Petition
Dec 10-14 (Mon-Fri): Finals Week

Grading
Your course grade will be based on quizzes and exams. There will be at 1-2 Homework-quizzes each week as well as group-quizzes and quiz-quizzes regularly. After each unit/chapter we will have an in-class exam. There will be make-ups for missed tests only if scheduled before the test, or under serious extenuating circumstances. There will be an optional cumulative Final Exam during finals week of Dec 10-14.

The final exam can be taken to replace a low exam grade and will not hurt your grade. A final grade check will be given out during the week of December 3rd, and you will need to let me know by December 7th if you will be taking the final.

Your grade will be weighted 30% HW-quizzes, 30% group-and quiz-quizzes, and 40% Exams. Letter grades will correspond to the following percentages:

Grades: Final grades will be assigned as follows: A ≥ 92%, A- ≥ 90%, B+ ≥ 87%, B ≥ 83%, B- ≥ 80%, C+ ≥ 75 %, C ≥ 70%, C- ≥ 65%, D+ ≥ 62, D ≥ 58, D- ≥ 55.

If you are taking this course as a general education requirement, you must take it for a traditional letter grade (not CR/NCR). A grade of “D-” is considered passing and will earn you credit for this course, BUT it will NOT fulfill your general education requirement and you will have to re-take the class. A grade of C or better is needed to fulfill the math literacy requirement.