

Math 107 Exploring and Understanding Data

Catalog Course Description, Content, and Prerequisites

The main purpose of this course is to help students understand, interpret, and represent data in a useful way to prepare students for courses in statistics. The course will provide students with the knowledge of basic mathematical and software tools and concepts which they can utilize to interpret quantitative information they encounter in their daily life. With the knowledge they gain, students will be able to better understand and assess the validity of quantitative information they receive through the web, newspaper, television, etc.

Topics covered include: using Excel (and perhaps calculators) to create various data summaries and descriptive statistics, probability, normal distributions, linear and other regression models, applying techniques to real world data sets.

Math 107 is a 3 credit hour course. Students will meet in person 3 hours per week. Class periods will include some lecture, working with students in groups, working problems in class daily.

Prerequisites: Appropriate Math Placement Level or Proctored/Prep for Calculus 30+ or Proctored/Prep for College Algebra 40+ .

Current – Math 109C/112

- Functions
- Rates of change
- Linear functions
- Systems of equations
- Quadratic functions
- Polynomial, rational, power functions
- Exponential functions
- Logarithmic functions
- Graphing
- Regression models (109C only)
- Applications
- Graphing calculators
- 109C – data analysis focus/Excel
- 112 – more traditional approach

New Course – Math 107

- Functions
- Rates of change
- Linear functions/models
- Systems of linear equations
- Applications with real data sets
- Graphical and tabular displays of data
- Data summaries and descriptive statistics
- Probability
- Normal distributions
- Linear regression models
- Excel

Department of Mathematics Contacts:

- Tina Moore, Math Placement Coordinator, cschustr@math.arizona.edu
Contact for: adding Math 107 as a prereq to a course, adding course to M-Strand, questions about placement/prescheduling
- Tina Deemer, Director of Academic and Support Services deemer@math.arizona.edu
Contact for: course offerings and enrollments, questions about curriculum
- Robert Indik, Associate Head for Instruction, indik@math.arizona.edu

How to add Math 107 to your curriculum?

1. Email Tina Moore, cschustr@math.arizona.edu
2. Contact UA Curriculum Office (Pam Coonan via Advisement Report Clean-up meeting)