# college-level math courses

alternatives to College Algebra

MATH 1332 (College Mathematics)	MATH 1314 (College Algebra)
more reasoning, less algebra	more algebra, less reasoning
more abstract, less practical	more abstract, less practical
very good reading and writing skills	good reading and writing skills
more conceptual/"big picture", less details	conceptual/"big picture" and details
MATH 1342 (Elementary Statistics)	MATH 1324 (Math for Business and Economics)
more reasoning, less algebra	more algebra, less reasoning
more practical	very practical
excellent reading and writing skills	good reading and writing skills
conceptual/"big picture" and details	more details, less conceptual

## College Mathematics (ACC's MATH 1332) (UT's M302) \*\*

<u>Goal</u>: To broaden the students' repertoire of mathematical problem-solving techniques past algebraic techniques. This course covers a variety of mathematical topics such as set theory, logic, and probability. Students learn basic college-level techniques in a variety of mathematical areas and learn what types of problems can be solved with each technique. The algebra prerequisite for the course reflects the need for the students to have an understanding of the conceptual aspects of mathematics rather than a need for them to remember the details of how to solve all the types of algebra problems encountered in high school algebra. Students with weaker algebraic manipulative skills should still be able to complete this course successfully.

### Elementary Statistics (ACC's MATH 1342) (UT's M316 or UT's STA309) \*\*

<u>Goal</u>: To teach the student to do basic statistical analyses and to enable the student to be an "intelligent user" of standard statistical arguments.

The focus of this course is on using conceptual mathematical skills to solve a particular type of applications problems. Algebraic manipulation is not a major part of this course; however, students will be required to use formulas extensively. (A "pretest" indicating the level of skill expected is available from the mathematics department.) Enough explanation will be given that students who once learned algebra, but have forgotten many of the details, will be able to handle the algebraic aspects of the course easily.

## Math for Business & Economics (ACC's MATH 1324) (UT's M303D, Texas State's M 1319) \*\*

<u>Goal</u>: To teach the student some applications of algebra to business and economics problems and to provide a minimal level of algebraic foundation for the first semester of business calculus.

The focus of this course is on the applications problems, with algebra skills from the first two years of high school algebra used as necessary. Students who are not able to demonstrate all the skills from high school Algebra II just before beginning the course will probably find this course very difficult.

### College Algebra (ACC's MATH 1314) (UT's M301, Texas State's M 1315) \*\*

Goal: To provide the student with the algebraic foundation for calculus.

The student is expected to be currently confident and skilled in <u>all topics</u> from the first two years of high school algebra or from MATD 0390, Intermediate Algebra, and the new material will build on that foundation with little or no review. Students who are not able to demonstrate all the skills from high school Algebra II just before the beginning of the course will probably find this course very difficult.