## Prerequisites for Calculus

There are two calculus sequences at ACC (and at most colleges) -- Business Calculus and Calculus. The prerequisite sequence is different for these. Depending on background, students may start the prerequisite sequence at different places

| Intermediate Algebra (MATD 0390) | Intermediate Algebra (MATD 0390) |  |
| :---: | :---: | :---: |
| $\downarrow$ | $\downarrow$ | $\downarrow$ |
| College Algebra** | (MATH 1314) |  |
| $\downarrow$ | Eco | College |
|  | Algebra |  |
| *Trigonometry (MATH 1316) | (MATH 1324) | (MATH 1314) |
| $\downarrow$ | $\downarrow$ | $\downarrow$ |
| Precalculus (MATH 2412) | Business Calculus I (MATH 1425) |  |
| $\downarrow$ |  |  |
| $\downarrow$ |  |  |
| Calculus I (MATH 2413) | Business Calculus II (MATH 1426) |  |
| $\downarrow$ |  |  |
| Calculus II (MATH 2414) |  |  |
| $\downarrow$ |  |  |
| Calculus III (MATH 2415) |  |  |

Where to start: The only way that students may skip courses in a sequence is to begin higher in the sequence, based on current knowledge of material from high school courses.

1. A student who needs a review of high school Algebra II will start in Intermediate Algebra (or below.)
2. A student who completed high school Algebra II, but no higher, and whose assessment test score indicates that he/she remembers that algebra, will start in College Algebra or Math for Business \& Economics. A substantially higher assessment test score enables the student to start in Trigonometry.
3. A student who completed some precalculus, elementary analysis, or trigonometry in high school, and whose assessment test score indicates that he/she remembers algebra, is eligible to start higher in the sequence than College Algebra. Check the catalog or the math web page. ${ }^{* * *}$

* The material in the Trigonometry course requires that students are quite adept with the skills from high school Algebra II (Intermediate Algebra). Some students will achieve that level of skill in the College Algebra course if their placement score is high enough, while others need an additional semester of work on algebra that is done in two courses, Intermediate Algebra and College Algebra.
** Some students who are very successful in College Algebra are tempted to skip either Trigonometry or Precalculus and enroll in Calculus I. That is not acceptable. Trigonometry topics are essential to success in Calculus, and while it is true that the topic list for Precalculus has only a few additions from the topic list for College Algebra, the level of sophistication of the presentation and the problems on all topics is greater in Precalculus. That increased sophistication is necessary for an adequate background for the Calculus sequence. ${ }^{* * *}$

Notes about the Business sequence: Texas State University requires Math for Business and Economics and Business Calculus I. Students who will attend the UT College of Business must complete the entire Business Calculus sequence before transferring. For more information, including requirements for UT economics students, see
http://www.austincc.edu/mthdept2/notes/1425.html
*** For additional information, including advising and prerequisite review sheets for most courses, see http://www.austincc.edu/math/

