

ARE YOU TRYING TO DECIDE WHETHER TO TAKE MATH 141?

Tacoma Community College

Quantitative Skills Requirement Options

- **Math 107** is a survey course designed for liberal arts majors and is probably the least difficult option for students who find algebra challenging.
- **Math 146**, our introductory statistics course, has the broadest use.

These first two courses are highly recommended for students who do not have a particular reason for taking one of the math courses targeted to specific majors or areas of study.

- **Math 170 and Math 171** are for those who plan to be elementary school teachers.
- **The Math 147-148 sequence** for business and economics majors *or* other majors requiring only a one-quarter calculus course (i.e. Math 148). *Some majors may just require Math 147—a one-quarter pre-calculus course.*
- *For science, math, and engineering majors who need two or more quarters of calculus, the two-quarter pre-calculus sequence of **Math 141 and 142** is needed **before** beginning the **engineering calculus sequence: Math 151, 152, 153, 254;***

Math 141 is the beginning of a sophisticated level of mathematics requiring a significantly higher level of dedication to logical, mathematical thinking.

Qualities of Successful Math 141 Students

1. **Mastery of elementary and intermediate level algebra is essential** for success. Successful Math 141 students have usually had these courses recently and have retained all of the main skills learned. A high grade in Math 90 and Math 99 is one indicator of these skills; the ability to work hard on math, use logic, and enjoy that work is also part of the picture.
2. **The level of study skills needed is high.** Successful Math 141 students, in addition to doing homework problems based on class lecture, must also be able to read and understand a technical textbook. These are students that seldom miss class, are diligent about doing their homework even if it is not collected, and who are consistent about interacting with the material until they do understand it.
3. **Students who do well in Math 141 possess a curiosity and interest in how the math works and enjoy challenging new problems** that may not have a single example in the text. Math 141 students need to be able to formulate and ask questions about a problem more than merely, “I don’t understand.” They have persistence to keep working on the problems and getting help if needed.
4. **These students make sure they have the necessary time to do all the needed study**—often three hours a day or more out of class. The work needed often involves forming study groups and getting help from the instructor or from other students who are more advanced, such as student tutors.

These same skills and attitudes are critical for success in calculus as well. Sometimes students remember a favorite teacher from a pre-college-level math course and think, “If only that teacher were teaching Math 141, it would be easier.” It is important to note that regardless of who is teaching the pre-calculus course, if it is going to prepare the student for calculus, it will be a challenging course.