

# Mathematics for Business Majors

## Information for Advisors and Students

**What is Math 1810 (Elements of Calculus)?** Calculus is a mathematical framework for understanding how things change. Therefore, calculus is important, for example, in understanding the time value of money. The concepts of marginal cost and marginal revenue are calculus concepts. Calculus is an important tool in optimization problems such as minimizing cost or maximizing profit under fixed constraints. In addition, proficiency with mathematical symbols, language and terminology, and the mathematical modeling skills which are developed in calculus are invaluable to students of business in their study of marketing, economics, finance, operations research, etc.

**Pathways to Math 1810.** The study of calculus does require some prerequisite skills and knowledge. Here is the prerequisite for Math 1810:

ACT-M 25 or higher or MATH 1710 or MATH 1110 or MATH 1730. Students who do not meet this requirement may challenge their placement by taking (at their own expense) the APSU Mathematics Placement Examination

The student’s pathway to Math 1810 will depend on his/her ACT-M score. Students entering APSU with an ACT-M score below 19 are required to enroll in an “e-section” of Math 1010 (Mathematical Thought and Practice) or an “e-section” of Math 1530 (Elements of Statistics). (Math 1530 is the recommended option for prospective business students).

ACT Math Score	Required Course Sequence
18 or below	1) An “e-section” of Math 1530 or an “e-section” of Math 1010 (Math 1530 recommended for prospective business majors.) 2) Math 1110 (Algebraic Problem Solving) or Math 1710 (College Algebra) <sup>1</sup> 3) Math 1810
19-24	1) Math 1110 (Algebraic Problem Solving) or Math 1710 (College Algebra) 2) Math 1810
25 or above	1) Math 1810

**What is the Difference Between Math 1110, Math 1710, and Math 1730?** The primary difference between Math 1710 and Math 1110 is the instructional method employed. Math 1710 is a more traditional lecture-based course. Math 1110 classes involve more hands-on, activity-based learning strategies. Math 1730 has a lot of trigonometry in it and is primarily taken by students who are preparing for majors in science or mathematics.

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<sup>1</sup> Math 1710 was formerly named “Precalculus (Algebra).”