

Algebra Courses at Idaho State University Prerequisites and Placement

Algebra is a prerequisite for all other mathematics courses at Idaho State University, including those that fulfill Goal 3, and it is a prerequisite for many courses in other departments. As a result, most students take some algebra during their time here. It is important for students to start planning early and to anticipate the mathematics courses that they will need, including prerequisite algebra courses. The general rule is, “Get started on your mathematics early.” Many students, having postponed mathematics until late in their academic careers, find that they have to take algebra before even entering the mathematics course they need to graduate, and as a result their graduation can be delayed. Planning requires (1) understanding the prerequisite chain, and (2) proper placement.

Prerequisites. The table below gives the lower-level mathematics courses and the prerequisites for each. Starting with a target mathematics course—one that you intend to take eventually—work backward through the table to determine the chain of prerequisite courses that you will have to take or place out of. (See the next section for placement methods.) The asterisks for MATH 015 and 025 indicate that the credits for those courses do not count toward graduation.

Course	Prerequisite
MATH 015, Arithmetic/Pre-algebra, 3 cr.*	None
MATH 025, Elementary Algebra, 3 cr.*	MATH 015
MATH 108, Intermediate Algebra, 3 cr.	MATH 025
MATH 123, Mathematics in Modern Society, 3 cr.	MATH 025
MATH 127, The Language of Mathematics, 3 cr.	MATH 025
MATH 130, Finite Mathematics, 4 cr.	MATH 108
MATH 143, College Algebra, 3 cr.	MATH 108
MATH 144, Trigonometry, 2 cr.	MATH 143
MATH 147, Precalculus, 5 cr.	MATH 108
MATH 157, Arithmetic for Elementary School Teachers, 3 cr.	MATH 143
MATH 160, Brief Calculus, 4 cr.	MATH 143
MATH 170, Calculus I, 4 cr.	MATH 143 and 144, or MATH 147
MATH 230, Introduction to Linear Algebra, 2 cr.	MATH 143
MATH 253, Introduction to Statistics, 3 cr.	MATH 108

Notes:

1. Students must pass a course with a grade of C- or better before using that course as a prerequisite for another mathematics course. This does not apply to MATH 015 or 025 as prerequisite courses, since they are graded S/U.
2. MATH 147 contains exactly the material of MATH 143 and 144 together. Students who need both College Algebra and Trigonometry, such as those continuing to MATH 170, usually take MATH 147 rather than spreading the material over two semesters, but both routes work the same for all university purposes. A student may *not* earn credit for both MATH 147 and 143, however,

- nor for both 147 and 144. One who takes MATH 143, for instance, and later takes MATH 147 earns no credit for the former course; taking MATH 147 erases the credit. For this reason, students should determine early on whether they need trigonometry and plan accordingly.
3. Some degree programs require MATH 160, and others require MATH 170. Students may *not* earn credit for both; taking one erases any credit previously earned for the other. It is therefore important to decide which of these one needs, if any, and plan accordingly.

Placement. Accurate placement is the key to successful progress through the mathematics curriculum. The three main placement methods that the university uses are:

1. Completion of coursework or transfer equivalents with a grade of C- or better,
2. Satisfactory ACT or SAT scores, or
3. Satisfactory scores on the Compass Mathematics exam.

A student may place into a course by *any* of these methods. One who has a sufficient ACT score, for example, but not a sufficient Compass score *can* take the course.

Note: For placement purposes, prerequisite courses or placement tests *must have been taken within the last seven years*. Coursework older than that continues to count toward graduation, but it cannot be used for placement purposes.

The first method is to pass the prerequisite courses or have transfer coursework that the Admissions Office has explicitly identified as being equivalent to those courses. Transfer students should beware that a course entitled “Intermediate Algebra” at another university does not necessarily transfer as MATH 108 at Idaho State; it might transfer as MATH 025, say, or, if not equivalent to an ISU course, only as unspecified MATH credits, in which case it would toward graduation but have no effect on placement.

Students may also place into a course on the basis of their scores on the quantitative part of the ACT or SAT exam, as follows:

Course	ACT at Least:	SAT at Least:
MATH 015	No prerequisite	No prerequisite
MATH 025	12	250
MATH 108	18	430
MATH 123	19	460
MATH 127	19	460
MATH 130	23	540
MATH 143	23	540
MATH 144	27	620
MATH 147	23	540
MATH 157	27	620
MATH 160	27	620
MATH 170	29	650
MATH 230	27	620
MATH 253	23	540

Finally, students may place into a course on the basis of their scores on the Compass Mathematics exam. The Compass exam, a computer-delivered exam, is available to walk-ins at the Counseling and Testing Center in Graveley Hall on the Pocatello campus, and by appointment through the Student Services desk at the Bennion Student Union on the Idaho Falls campus. It is free and takes about 40 minutes. Students receive a printout of their scores, and an electronic copy is posted that automatically removes registration blocks from the appropriate courses. Depending on performance, students receive scores on one or more of the four areas of the exam: Pre-algebra, Algebra, College Algebra, and Trigonometry.

The table below summarizes placement by means of the Compass Mathematics exam.

Course	Pre-Algebra	Algebra	College Algebra	Trigonometry
MATH 015	No prerequisite	No prerequisite	No prerequisite	No prerequisite
MATH 025	46			
MATH 108		40		
MATH 123		45		
MATH 127		45		
MATH 130		61		
MATH 143		61		
MATH 144			51	
MATH 147		61		
MATH 157			51	
MATH 160			51	
MATH 170				51
MATH 230			51	
MATH 253		61		

There are two other methods—the CLEP Mathematics Exam and Advanced Placement Exams—that allow students to *earn credit* for mathematics courses, as opposed to just placing out of them. See the *Undergraduate Catalog* for details.