

Elizabethtown College Mathematics Placement Guidelines

The Department of Mathematical and Computer Sciences endeavors to place incoming students into the most appropriate mathematics course according to aptitude, preparation, and anticipated program of study. Specifically, placement into mathematics courses will be based on high school mathematics courses taken, high school mathematics grades, mathematics SAT score, and intended major. Each incoming student will be assigned a placement level, a recommended first mathematics course to take (and, in some cases, a recommended semester for that course), and a list of courses they may not take. This information will be communicated to the student and the student's first year advisor. If any questions about mathematics placement arise, please contact James Hughes, Chair of Mathematical and Computer Sciences, at hughesjr@etown.edu.

Placement Levels

A summary of the placement levels is given below. Note that for each level, in addition to a list of recommended courses, there is also a list of courses that students in each level may not take, by virtue of being over- or under-qualified. Finally, note that the "recommended first mathematics course to take" (RFMC) for each student is likely to be more specific than what is specified by the placement level alone, due to the additional information of the student's intended major. A grid giving RFMC as a function of placement level and intended major will be made available to first year advisors.

Level 1b

Criteria: Score of 3 or higher (4 or higher for students entering after 2008) on the AP Calculus BC exam, or equivalent college credit.

Recommended course: MA222 in Fall semester of first year.

May not take: MA011, MA105, MA110, MA117, MA121.

Level 1a

Criteria: Score of 3 or higher (4 or higher for students entering after 2008) on the AP Calculus AB exam, or equivalent college credit.

Recommended course: MA122 in Fall semester of first year.

May not take: MA011, MA105, MA110, MA117.

Level 2b

Criteria: Grade of B or better in high school calculus or pre-calculus course that included trigonometric functions (and neither Level 1 criteria fulfilled).

Recommended course: MA121 in Fall semester of first year, or MA251 second year, depending on intended major.

May not take: MA011, MA105, MA110.

Level 2a

Criteria: Passing grade lower than B in high school calculus or pre-calculus course that included trigonometric functions (and neither Level 1 criteria fulfilled), and intended major that requires MA121.

Recommended course: MA121 in Fall semester of first year, with regular tutoring.

May not take: MA011, MA105, MA110.

Level 3b

Criteria: Grade of B or better in high school Algebra II course and $SATM \geq 580$, or passing grade in any high school Calculus course (and neither Level 1 nor Level 2 criteria fulfilled), and intended major that does not require MA121.

Recommended course: MA117 or CS121 in first year, or MA251 in second year.

May not take: MA011, MA105, MA110, MA121.

Level 3a

Criteria: Grade of B or better in high school Algebra II course and $SATM < 580$, or passing grade lower than B in Algebra II and $SATM \geq 500$ (and no high school calculus).

Recommended course: MA105 or CS121 in first year, or MA110 in Fall semester of first year, or MA251 in second year (depending on intended major).

May not take: MA011, MA121.

Level 4b

Criteria: Grade lower than B in high school Algebra II course and $450 \leq SATM < 500$ (and no high school calculus or pre-calculus).

Recommended course: MA011 or MA105 in Fall semester of first year.

May not take: MA121.

Level 4a

Criteria: Grade lower than B in high school Algebra II course and $SATM < 450$ (and no high school calculus or pre-calculus).

Recommended course: MA011 in Fall semester of first year.

May not take: Any other mathematics course until MA011 passed.

Adjusting Placement Level Via Optional Placement Exams

Optional placement exams are offered for those who wish to adjust their placement from Level 3 to Level 2, or from Level 4 to Level 3. No other adjustments are possible by placement exam. In particular, one cannot move to a less challenging placement level via placement exam.

A Note About Difficulty Levels

It is important that advisors understand that course number does not necessarily indicate difficulty level. In particular, MA251 (Probability and Statistics) is *not* the most difficult Core mathematics course; in fact MA251 is easier than all other Core mathematics courses except MA105. (The first digit refers to the strong recommendation that students take MA251 in the sophomore year, when it is more likely the material will be retained and its relevance appreciated.)

Statement on Disabilities

The following statement should be included in the mathematics placement materials sent to incoming students:

If you have (or suspect you may have) a documented disability that will require accommodations in a mathematics class, you are strongly encouraged to contact the Director of Disability Services, Shirley Deichert, in the Center for Student Success, BSC 288, (717) 361-1227, deichesa@etown.edu, as soon as possible.