

## **Math Course Advising**

*Department of Mathematics, University of Denver, updated May 2020*

This document is intended to accompany the Math Advising Tool (see <https://science.du.edu/math/advising-resources>) and assist incoming DU students in selecting an appropriate math course.

See:

- page 2 for general information about math course advising
- page 3 for course recommendations based on the results of the Math Advising Tool test
- page 4 for information on math credit earned through AP and IB examinations

## General information about math course advising

Many math courses satisfy the *Analytical Inquiry: The Natural and Physical World (AI-Natural)* university requirement (see <https://science.du.edu/math/ai-natural-requirement> for more information).

Individual majors require students to take specific math courses which also fulfill the AI-Natural requirement. Students should refer to [bulletin.du.edu](https://bulletin.du.edu) for specific details on what math courses are required for which majors. Generally speaking:

- **MATH 1951 Calculus I** (4 credits) is required for science, math, computer science, and engineering majors,
- **MATH 1200 Calculus for Business and Social Sciences** (4 credits) is required for students majoring in Business.

Both MATH 1951 and MATH 1200 satisfy the AI-Natural requirement. Note that MATH 1951 may be taken in place of MATH 1200 for majors where MATH 1200 is required, but not *vice versa*.

One of the main factors which determines whether a student will be successful in the above courses is the level of preparation for the class. MATH 1951 requires both algebra and trigonometry skills, while MATH 1200 requires only algebra skills.

Students who intend to take either MATH 1951 or MATH 1200 but determine that they are underprepared have the option of taking one of the following courses:

- **MATH 1070 College Algebra and Trigonometry** (4 credits) is designed to prepare students for MATH 1951.
- **MATH 1010 Elements of College Algebra** (2 credits) is designed to prepare students for MATH 1200.

The Math Advising Tool first determines if students need to take MATH 1951 or MATH 1200, based on their intended major, AP/IB exams and transfer credits. If one of those courses is required, the Math Advising Tool will administer a short online proficiency test of precalculus.

Upon completion of the test, the score will be immediately displayed on the screen and a link to this document will be provided. The score will also be emailed to the test-taker for the record.

## Course recommendations based on the result of the Math Advising Tool test

The mathematics department makes the following recommendations based on the scores of the Math Advising Tool test:

*Please note well: These are recommendations, not requirements. Students should take other factors into account when determining their level of preparation, such as math scores on standardized exams (ACT/SAT) and previous math courses taken.*

### **17-20 points**

These scores indicate a strong level of preparation for MATH 1951. Even if you only need MATH 1200, we recommend that you enroll in MATH 1951 for a more in-depth treatment of calculus.

### **13-16 points**

These scores indicate a satisfactory level of preparation for MATH 1951 or MATH 1200. We recommend enrolling in whichever of these courses your major requires. If your major requires MATH 1951, you might consider enrolling in MATH 1070 first or review college algebra and trigonometry on your own.

### **9-12 points**

These scores indicate algebra skills that need some refreshing. While MATH 1200 provides limited opportunities for students to independently build up their algebra skills, please consider enrolling in MATH 1010 before attempting MATH 1200. If you are aiming at MATH 1951, we recommend that you enroll in MATH 1070 first.

### **0-8 points**

These scores indicate algebra skills that may be a serious obstacle in MATH 1200 or MATH 1951. We strongly recommend that you enroll in MATH 1010 before taking MATH 1200, or in MATH 1070 before taking MATH 1951.

## Math credit earned through AP/IB examinations

The University of Denver grants math credits for AP/IB exams according to the following tables.

Any of the below scores also fulfils the AI-Natural requirement.

### *Advanced Placement (AP)*

Exam	Score = 5	Score = 4	Score = 3
Calculus BC	12 credits MATH 1951, 52, 53	8 credits MATH 1951, 52	4 credits* MATH 1951
Calculus AB	4 credits MATH 1951	4 credits MATH 1951	

\* with an AB subscore of 4 or 5. In the years when no AB subscore is awarded on the BC test, score of 3 on the BC test will be accepted for credit.

### *International Baccalaureate (IB)*

Exam	Score = 7 or 6	Score = 5
Mathematics HL	12 credits MATH 1951, 52, 53	8 credits MATH 1951, 52

No credit is given for Standard-Level Subject Exams.