MATH Advising Document Spring 2025

The 4 credit **Analytical Inquiry: Natural and Physical World (AI:Natural)** common curriculum requirement can be met by successfully completing **4 credits' worth of courses** with the AI: Natural attribute. The relevant courses, as of March 2025, is as follows.

Class Name	Credit Hours
MATH 1150 (Foundations Seminar)*	4 Credits
MATH 1200 (Calculus for Business and Social Sciences)	4 Credits
MATH 1951 (Calculus I)	4 Credits
MATH 2050/PHIL 2160 (Symbolic Logic)	4 Credits
PHIL 2040 (Practical Logic)	4 Credits
COMP 1101 (Analytical Inquiry I)	4 Credits
COMP 1201(Introduction to Computer Science I)	2 Credits
COMP 1351(Introduction to Programming I)	3 Credits
COMP 1202 (Introduction to Computer Science II)	2 Credits
COMP 1352 (Introduction to Programming II)	3 Credits

*Topics Based. Past examples include "Fat Chance: Games & Probability," & "How Does a Computer Draw a 3D World?"

(Note: College Algebra, pre-calculus, trigonometry, or statistics courses **cannot be applied** toward the AI: Natural requirement.)

Consult an up-to-date list of AI: Natural Courses, which can be found here: https://bulletin.du.edu/undergraduate/undergraduateprograms/traditionalbachelorsprogram/selec tingadegreeprogram/courseplans/ai-natural-courses/

Certain majors (e.g., sciences, business) require particular MATH courses. Check the bulletin <u>https://bulletin.du.edu/</u> for specific requirements for your individual major. Below is a general guideline:

- MATH 1200 (Calculus for Business and Social Sciences) or MATH 1951 (Calculus 1) is required for Bachelor of Science in Business Administration (all business majors)
- MATH 1951 (Calculus 1) is required for most majors in the Natural Sciences, Engineering, Computer Science, and Mathematics.

Business Majors who receive credit for MATH 1951 do not need to take MATH 1200.

FREQUENTLY ASKED QUESTIONS

Q: What AP or IB scores count toward credit for MATH 1200 or MATH 1951?

A: Students can earn MATH credits for certain scores on AP or IB exams. Please refer to the table below for AP exams.

AP Score	5	4
Calculus AB or	4 credits of MATH 1951*	4 credits of MATH 1951*
AB subscore on		
Calculus BC exam		
Calculus BC	12 total credits:	8 total credits:
	4 credits of MATH 1951* &	4 credits of MATH 1951* &
	4 credits of MATH 1952 &	4 credits of MATH 1952
	4 credits of MATH 1953	

* Business Majors who receive credit for MATH 1951 do not need to take MATH 1200.

An AP score of 4 or 5 on either the Calculus AB or Calculus BC exam satisfies the AI:Natural requirement.

For IB Mathematics (Analysis & Approaches or Applications & Interpretation), a score of 5 or above counts toward 4 credits of MATH 1951 and satisfies the AI:Natural requirement.

See <u>https://bulletin.du.edu/undergraduate/undergraduateprograms/examinations/</u> for the most up-to-date information about credits earned through examinations.

Q: What if I am not sure I am ready for Calculus (MATH 1200 or MATH 1951)?

A: A strong foundation in algebra and pre-calculus skills is crucial. Specifically, a student enrolling in MATH 1951(Calculus I) should have at least passed a course covering algebra and trigonometry (sometimes called Algebra II Trig, or Pre-Calculus). The level of preparation for MATH 1200 should be similar, with the exception that trigonometry is not necessary.

Students should be confident in these skills:

- Manipulating algebraic expressions
- Solving equations/inequalities
- Working with polynomial, rational, exponential, logarithmic, and trigonometric functions.

You are likely ready to take MATH 1951 if:

- You have taken a calculus course prior to enrolling at the University of Denver, or
- You haven't taken a calculus course, but are confident in your mathematical skills from precalculus courses (especially in exponential, logarithmic, and trigonometric functions), or
- You scored over 620 on the SAT math section or 27 on the ACT math section.

You are likely ready to take MATH 1200 if

- You have taken a calculus course prior to enrolling at the University of Denver, or
- you haven't taken a calculus course, but are confident in your mathematical skills from precalculus courses (especially in exponential and logarithmic functions), or
- you scored over 570 on the SAT math section or 25 on the ACT math section.

Q: What can I do if I don't feel prepared for my Calculus class?

A: DU offers the following courses (note that these courses on their own **do not satisfy** the AI: Natural requirement):

- MATH 1190 (Business Calculus Algebra Workshop) a 1 credit course taken concurrently with MATH 1200. This workshop is designed to help support students who want extra support with their algebra skills.
- MATH 1941 (Calculus 1 Workshop) a 1 credit course taken concurrently with MATH 1951 with supplemental calculus instruction.
- MATH 1010 (College Algebra) a 2-credit course preparing students for MATH 1200.
- MATH 1070 (College Algebra with Trigonometry) a 4-credit course preparing students for MATH 1951.

Q: How can I benefit from a Calculus Workshop?

A: A workshop provides students with additional structure and targeted support to enhance their learning experience in a calculus course. In a workshop meeting, students deepen their understanding of algebra and calculus concepts through collaborative problem-solving and receive personalized assistance from workshop leaders. The grade in the workshop is solely based on attendance and participation in the workshop; there is no homework and there are no quizzes or exams associated with the workshop. As such, this additional credit hour represents a relatively small commitment in terms of time that can yield significant benefits for students enrolled in a Calculus course.

Q: What should I do if I'm not sure whether my transfer course counts for Calculus, or AI:Natural credit?

A: For **incoming first-year or transfer students**, please note that your official transcripts should be sent to Undergraduate Admissions, and then Undergraduate Admissions will send you an initial credit evaluation, which will tell you how your credits will transfer to DU. If you have questions, contact Undergraduate Admissions by phone: 303-871-2036 or email: <u>admission@du.edu</u>

For students that have **already started/taken** courses at DU, official transcripts should to be sent to the Office of the Registrar. If you have further questions, please email <u>registrar@du.edu</u> or call 303-871-4095.

See <u>https://www.du.edu/registrar/other-student-services/transfer-study-abroad-credits</u> for more information on transfer courses and credit.