

Course Description

This two-credit course will investigate the guiding questions: “How can we compare things in the real world using data?” and “How can we communicate these relationships in a precise and convincing way?” Students will deepen their understanding of real-world relationships through mathematics modeling, particularly using experimental data from their Physics course. Additional integration of economics concepts will occur as appropriate in concert with the fall and spring humanities expeditions. With a dual focus on application and abstract understanding, Precalculus is a high-level math class designed to prepare students for Calculus and to set the foundation for a career in science, technology, engineering, or math. To facilitate deeper learning, we use a model (Expeditionary Learning’s Workshop 2.0) that asks students to grapple with challenging material before receiving direct instruction. The primary topics we will investigate are: functions and function families, complex numbers, trigonometry, and sequences and series.

Modes of Assessment

Students will show their understanding using traditional quizzes and tests, ALEKS progress, self-reflections, class presentations, and integration of algebra into expeditions.

Materials

Please bring pencils, paper, a calculator, and a folder to class every day. Your Chromebook will also be helpful on most class days for web research, ALEKS, and Google Classroom. Please check your email and Google Classroom frequently for updates.

HOWL Grading Policy

To Earn a HOWL of 3, students must consistently do the big 2 at least 80% of the time:

Be Prepared! (This could include homework, deadlines, ALEKS, or materials.)

Be Engaged! (This involves classroom participation.)

You can earn a HOWL of 4 in a variety of ways, including doing the big 2 almost always, or showing a desire to succeed or to help others that goes over and beyond the minimum.

HOWL Standard	Grading Policy
Preparedness	If the assignment involves meeting a deadline, you may earn either a 1 or a 3 in HOWL. No revision will be possible for these assignments. If the assignment involves homework completion or other formative assessment, you may revise 1’s and 2’s to 3’s and above, including items turned in late.
Engagement	You may earn a 1, 2 or 3. Excused absences will be noted with an X for class activities. Revision of a 1 or 2 will be offered depending on the situation.

ALEKS HOWL Grades and Standard Grades

Students will be required to do weekly ALEKS topics as a Meets Deadline grade.

>10 topics per week will earn a 4.0

8-9 topics per week will earn a 3.75

6-7 topics per week will earn a 3.5

5 topics per week will earn a 3.0

In Precalculus, you must complete 80% of the ALEKS pie in order to be recommended for Calculus.

Trimester 1: You must complete 90 topics for a 3 on the ALEKS standard.

Trimester 2: You must complete 80 topics for a 3 on the ALEKS standard.

Trimester 3: You must complete 70 topics for a 3 on the ALEKS standard.

A student with a HOWL of "3" cannot receive a trimester grade of 1 or 2. At the end of the trimester, a student with a HOWL of 3 or higher who has not met standards will receive an Incomplete and will be expected to meet standards in a reasonable amount of time.. If a student has a HOWL grade lower than 3 and is not meeting academic standards, the student will receive a 1 or 2 on the report card and may not have the opportunity to make up standards for the course until summer school.

Policy on Late Standard Assessments

When standard work is late, students will receive a HOWL grade of 1 in the Preparedness standard for that assignment (excused absences exempted). This cannot be revised.

There is an approximate 2 week window for you to complete or revise an standards assignment with extended time. After two weeks, work or makeup assessments will only be accepted via appointment. If there are extenuating circumstances, you must speak with Ms. Natarajan and she will post the extension date in the comment section for the assignment on IC. IC will have late assignments tagged and revisions tagged with an R. Please read Infinite Campus and the comment section to determine what you are missing.

Class Norms

- Assume positive intention! We are here to work together, learn together, and enjoy our year! I'm so glad to be your teacher and to get to know each of you.
- Please bring your materials to class everyday. If you forget something, let me know and I will help you.
- Please be on time for class and respect the space. Let's make Canada a comfortable and safe place to learn.
- Phones should never ever be out unless it is a specifically designated test day or quiet work day and you need music to help you focus.
- Please leave the room one student at a time unless there is an appointment or extenuating circumstance. Please do not take your phone with you to the hallway.
- Please monitor when your Chromebook is a distraction versus when it is an educational tool.
- Food/drink should be consumed outside of class except for water in bottles. There will be exceptions to this based on the student and on the day.
- LEAVE NO TRACE. Please leave your space and the room cleaner than you found it.

Final Trimester Grade

To earn a 3.0: You must achieve a 3.0 on every standard. All standard grades may be revised to a 4.

To earn a 3.25: You must exceed on at least 80% of standard assignments. All students are encouraged to exceed.

To earn an additional 0.25 on your trimester grade, you may do up to 3 of the following:

- Tutor students in high school math for four hours. This should be during Acad or Block 7.
- Participate fully in Math Team (Fridays at lunch in Canada).
- Participate fully on Robotics Team or any other math-related club
- Complete the Exceeds assignments that are available on Google Classroom (one per 0.25).
- (Spring Trimester) Participate in the Math Cup
- Complete 10 extra topics on ALEKS. You can do this 3 times (30 extra) if you wish.

- Other projects or ideas that you can suggest. Please get them pre-approved.