

The University at Buffalo mathematics department is partnering with McGraw-Hill to offer the ALEKS Placement, Preparation and Learning (ALEKS PPL) product for all UB students. ALEKS is a powerful online assessment tool that diagnoses the strengths and weaknesses of a student's mathematics preparation. More information about the product is at:

https://www.aleks.com/highered/ppl/what_is_aleks_ppl

ALEKS PPL is a web-based assessment, which you complete on your own computer, and at a time convenient for you. The assessment consists of about 30 questions. The average completion time is 90 minutes, but you can take more time if you need to.

The assessment lets ALEKS develop a precise picture of your knowledge of precalculus, knowing which topics you mastered and which need work. Your knowledge is represented by a multicolor pie chart, which forms the basis of the personalized preparation module. As you learn new topics, ALEKS updates its map of your knowledge. We believe ALEKS will be a useful tool for most incoming students.

ALEKS is being funded by a "Mathematics Placement Fee" of \$33 charged to students who take ALEKS.

Frequently Asked Questions (FAQ's)

Why are we doing this?

The mathematics department tested ALEKS over the last two years in Math 141-College Calculus I. Among students using ALEKS, we saw a dramatic decline in the percentage of students who receive a poor grade (D, F or R). We believe ALEKS will provide more accurate placement than the current system, which uses student SAT scores. ALEKS also provides learning modules so students can review areas of weakness before taking calculus. Understanding one's preparedness for university level mathematics is essential for future success. We believe that all our incoming students can benefit from both the assessment ALEKS provides and the ability for self-paced learning to improve preparation. Students whose math skills are rusty can use ALEKS to prepare themselves for calculus.

We will continually assess the program and only continue the fee as long as it produces demonstrable results.

Who has to take the ALEKS Placement Assessment?

We are currently requiring ALEKS for students wishing to enroll in first semester calculus courses (Math 121, 131 or 141). We are suggesting it also for students who might wish to take ULC 147 or ULC 148, or who are simply considering taking calculus and want a better understanding of their appropriate placement. In future years, we may require all incoming students to take the assessment. Some of our peer institutions have discovered this leads to an increase in STEM majors.

When should I take ALEKS?

Currently we are requiring a score of 61/100 for Math 121 and Math 131 and a score of 76/100 for Math 141. Incoming students planning to take one of these courses should take ALEKS early in the summer.

Students who know they will not take calculus this semester should wait, as the access to ALEKS covered by the fee is good for only one year.

Is ALEKS used for placement into precalculus (ULC 148) or intermediate algebra (ULC 147)?

At this time, we are only requiring ALEKS for first semester calculus. However, it is useful as a placement tool for any student. McGraw Hill recommends the following placements:

ALEKS Score	Recommended Placement
<30	Too low for any UB math classes
30-45	Intermediate Algebra (ULC 147)
45-60	Precalculus (ULC 148)
61-75	Precalculus (ULC 148) or Math 121 or Math 131
>75	Calculus (Math 121 or Math 131 or Math 141)

Students who initially score low may spend time in the preparation module if they wish to take a higher class. This is a great opportunity for a student who may fall behind by starting in ULC 147 or 148. Working in the preparation module over the summer might prepare you to start in calculus.

I earned an “A” in precalculus. Why do I need to take ALEKS?

Perhaps you have forgotten the material, or did not have a rigorous precalculus class. If you have truly mastered precalculus, the ALEKS placement test should be easy for you. Unfortunately, not all grading scales correctly calibrate to the expected level of preparedness for university calculus. We have found that precalculus grades are not always a reliable indicator for calculus preparation. Even for well-prepared students, ALEKS will diagnose your areas of weakness and allow you to reinforce those skills before proceeding to calculus.

What do I have to do to transfer my score from ALEKS to UB?

Nothing. The Math Department retrieves all scores from ALEKS at least once a day. After you achieve the required ALEKS score, you should be able to register yourself within 24 hours.

Is there a fee for using ALEKS?

A one-time fee of \$33 will be assessed to the student account of all incoming freshmen and transfer students who take ALEKS.

What does the fee pay for?

Each UB student will have access to the ALEKS Placement, Preparation and Learning (ALEKS PPL) software online. The fee covers access to ALEKS, five attempts at the placement exam, six months use of the learning modules, and administrative support. Access to the placement exams is for one year from the time you complete the first module. Access is via a web browser using your UBIT name and password. Updated information including a link to access the software is always available here:

<http://www.buffalo.edu/cas/math/ug/math-help/aleks.html>