CU Denver requires an ALEKS Placement, Preparation and Learning Assessment (ALEKS PPL) to determine readiness for four entry-level mathematics courses: MATH 1110, MATH 1120, MATH 1130 and MATH 1401. ALEKS is an institutionally funded, un-proctored, web-based program that uses artificial intelligence to map a student’s mathematics strengths and weaknesses. This is a “Placement Assessment,” not a test. Results will not appear on a transcript or impact GPA. ALEKS is designed to determine what a student knows and what a student needs to work on. At the end of the ALEKS Assessment, a student will have a much better sense of their strengths and weaknesses in math. Students then have a chance to brush up on topics that may have been forgotten or have not been practiced for some time.

For each student required to take MATH 1110, MATH 1120, MATH 1130 or MATH 1401 for their major, assessment results help determine the most appropriate entry level course for students to take, if they have not completed any prerequisite coursework. This provides our students with the highest quality education possible. These MATH courses are predominantly required for STEM and Pre-Health majors. Students should consult with their advisor and review their major requirements to determine if they must complete one of these courses and whether the assessment is necessary. If you are unsure who your advisor is please refer to the undergraduate advising website.

Students will need to complete their ALEKS Assessment or have a grade for prerequisite coursework prior to registering for any of the identified MATH courses. We recommend completing the assessment prior to attending New Student Orientation advising days or Transfer Advising Groups, or at least a week prior to their registration date. CU Denver encourages each student to spend time in the Prep and Learning Module, even after the desired score is achieved, because time spent in ALEKS will ultimately lead to better preparation and improved grades. Students can consider any assessment as practice, since the highest score across the five attempts is what will be used for placement purposes.

Each assessment must be completed within a two hour time limit and the software will inform the student when they are finished with the assessment. Upon completion, an individualized Prep and Learning Module becomes available for students to practice and refresh their knowledge and mathematics skills. Students have the opportunity to reassess and improve their placement after spending time working through the modules. Each student gets 5 attempts. Students must spend 3 hours in the learning modules in between the first and second assessment. Each subsequent attempt requires spending 5 hours in the learning modules. The highest earned score is used for placement.

Be honest. It is important that the ALEKS Assessment is taken seriously and each student gives it an honest effort so that the scores truly reflect their current level of knowledge and math preparedness. While taking it, students should not consult any outside sources for help (friends/family, internet searches, textbooks, calculators, notes, tutors or instructors etc...). The purpose of the assessment is to measure a student’s current mathematical knowledge so that they will be successful in their entry-level mathematics courses. Review the Student Code of Conduct regarding student honesty, if you have any questions about expectations.

Upon completion, scores will be uploaded to the registration system within three business days. At that time, students will be able to register for the course that they are eligible for, based on their score and advisor recommendation.

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>ALEKS Score Range</th>
<th>Prior coursework requisite (alternative to assessment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 1110</td>
<td>College Algebra</td>
<td>46 or higher</td>
<td>NA</td>
</tr>
<tr>
<td>MATH 1120</td>
<td>College Trigonometry</td>
<td>61 or higher</td>
<td>MATH 1109 or MATH 1110 with a C- or higher</td>
</tr>
<tr>
<td>MATH 1130</td>
<td>Pre-calculus</td>
<td>61 or higher</td>
<td>NA</td>
</tr>
<tr>
<td>MATH 1401</td>
<td>Calculus I</td>
<td>76 or higher</td>
<td>MATH 1109 or MATH 1110 and MATH 1120 with a C- or higher or MATH 1401</td>
</tr>
</tbody>
</table>
Follow these steps to set up your account and take ALEKS PPL:

**Step 1:** Access the ALEKS assessment through your CU Denver UCD Access student portal- https://passport.ucdenver.edu/login.php.

**Step 2:** Confirm your enrollment information by verifying the code below matches the one in your portal.

![Confirm Class Information](image)

*Class Code: GCHLC-DXC9Y*
*Class: University of Colorado Denver, Academic Year 2019 - 2020*
*Subject: Higher Education Math Placement*
*Class Dates: 03/07/2019 - 06/30/2021*
*Institution: University of Colorado--Denver*
Step 3: Select “No, I have never used ALEKS before...” even if you have an ALEKS account from another school or subject like Chemistry.

Step 4: Enter your user information to create a new ALEKS account. **Be sure to use your CU Denver email address and your CU Denver 9-digit student ID.** This ensures that your scores will get associated with your student record, once you have completed the assessment. **Be sure to save your new login and password information** so you can revisit your ALEKS account.
IMPORTANT: Each student should only create one account. Additional accounts will be deleted and assessment scores related to those accounts will not be counted. This can cause issues with scores being correctly loaded to student records.

Students who need special accommodations, including technology resources should contact MATH.Placement@ucdenver.edu for assistance. If you are not sure whether you are eligible for extended testing time, please visit our Disability Resources and Services.

Since ALEKS is an online, adaptive system it covers a broad spectrum of mathematics topics. Students will see some, but not all, of the math they have learned. Since this assessment is used for placement, it is not a preview of math courses at CU Denver. Questions are open-response and ALEKS will provide an online calculator, when appropriate, so students should not use assistive devices other than a pencil/pen and paper.

Possible Topics covered include:

- Real numbers (including fractions, integers, and percentages)
- Equations and inequalities (including linear equations, linear inequalities, systems of linear equations, and quadratic equations),
- Linear and quadratic functions (including graphs and functions, linear functions, and parabolas), exponents and polynomials (including integer exponents, polynomial arithmetic, factoring, and polynomial equations), rational expressions (including rational equations and rational functions)
- Radical expressions (including higher roots and rational exponents)
- Exponentials and logarithms (including function compositions and inverse functions, properties of logarithms, and logarithmic equations)
- Geometry and trigonometry (including perimeter, area and volume; coordinate geometry; trigonometric functions; identities and equations).

ALEKS will begin with a survey to identify which MATH course the student wants to place into followed by a brief tutorial to make sure students are comfortable with the math palette tools before the assessment begins. The tutorial shows students how to enter different types of answers, how to use the ALEKS calculator, and how to graph. Time spent in the tutorial does not count against your assessment time.

Students have two hours to complete the assessment and submit their responses. A timer will appear and count down the time, so students can keep track of their progress. If time runs out, the assessment will inform the student that “Time’s up”, no score will be recorded and student will be prompted to start from the beginning. Students will know the assessment has been successfully completed when they see a results page populate with the score earned and the level of MATH placed into indicated.

If your web browser gets stuck or computer crashes while taking the ALEKS Assessment, simply close the browser, or log out and log back in as soon as possible. ALEKS will resume the assessment exactly where you left off, with no loss of your previous answers, as long as the time allotment has not expired. Time will still continue to count down, so logging back in as quickly as possible will better ensure that you will be able to complete the assessment you began. If time runs out, students will need to start again.

Technical Support

Email: MATH.Placement@ucdenver.edu