

# MATH PREP

## MEETING INFORMATION

<b>Meeting Times</b>	MW 2:00 - 2:50
<b>Location</b>	Main Lab (Old Main Basement)
<b>Website</b>	math.mercyhurst.edu/~lwilliams/math103

<b>Instructor</b>	Lauren Williams, PhD
<b>Email</b>	lwilliams@mercyhurst.edu
<b>Office Phone</b>	(814) 824-2226
<b>Office</b>	Old Main 404
<b>Office Hours</b>	Mon 10:15 - 10:45 Tues 9:00 - 10:30, 3:30 - 4:00 Wed 10:15 - 10:45 Thurs 9:30 - 10:30 Fri 1:00 - 2:00

## IMPORTANT DATES

<b>Aug</b>	<b>23</b>	First Class Meeting
	<b>28</b>	Last Day to Add/Drop
<b>Sep</b>	<b>4</b>	Labor Day - No Class
	<b>22</b>	Last Day to Pass/Fail
	<b>29</b>	Last Day to Withdraw
<b>Oct</b>	<b>11</b>	Last Class Meeting

## COURSE DESCRIPTION

This is a one credit course, designed for:

- students that need to improve their math placement score in order to meet the eligibility requirement of their desired mathematics or statistics course,
- students that would like to improve their math placement score in order to “place out” of the mathematics/statistics requirement of the REACH curriculum, and
- students that would like to quickly improve their algebra skills in preparation for more advanced coursework.

This course will make use of ALEKS, a web-based artificially intelligent assessment and learning system. ALEKS uses adaptive questioning to quickly and accurately determine exactly what you already know and where you need to improve. As you work through a course, ALEKS periodically reassesses your skills to ensure that topics learned are also retained.

## COURSE OUTCOMES

After successfully completing the course, all students will be able to

- interpret whole numbers, fractions, and decimals.
- determine geometric properties of shapes, such as perimeter, area and volume.
- solve linear equations and inequalities, absolute value equations and inequalities.
- apply rules of exponents to simplify and combine algebraic expressions.
- recognize polynomials and factor quadratic expressions.
- identify a function and its properties, and be able to evaluate a function.
- simplify and combine rational expressions.

Additional topics may be added for the entire class or an individual student based on student interest and desired placement level.

## REQUIRED MATERIALS

You will need to purchase a subscription to the ALEKS learning system to complete this course. The cost of the subscription is about \$60. No other textbooks or supplies are required, though you will need internet access to work on the course outside of the classroom.

## PLACEMENT ASSESSMENT

At the end of the course, you'll be given an opportunity to take the mathematics placement assessment. If you are a current freshmen, you will not be charged for this exam. Other students will need to pay a \$25 fee for access to the assessment for one year. If you do not improve your score to your targeted level, you'll be able to try again by arranging a time with a mathematics faculty member.

## ACCESSING THE COURSE

You'll be given assistance at the beginning of the semester to make sure you're able to access the course in the classroom and at home. You will be expected to spend several hours working on class topics outside the labs.

## GRADING

This primary goal of this course is to improve your placement level. **If you successfully improve your math placement category by at least one level at the end of the semester, you will receive an A for the course regardless of your topic exam scores.**

If you do not improve your placement level, your grade will be determined by averaging your completed ALEKS topic exams. Your letter grade in this case will be determined by the minimum scores below.

B+	B	C+	C	D+	D
87	80	77	70	67	60

## Mathematics Placement Information

Mercyhurst University requires an ALEKS mathematics placement assessment to determine readiness for various courses. The ALEKS Placement Assessment covers material from basic mathematics through precalculus and will take approximately 90 minutes to complete.

At the end of the ALEKS Placement Assessment, you will have a much better sense of your strengths and weaknesses in math. Your score is used to help you start in the course where you have the best chance to succeed. Students who are not successful in their first math course are highly unlikely to persist in any science majors. If you need calculus, starting where you place is the best path to success.

### What is ALEKS?

ALEKS is a powerful artificial-intelligence based assessment tool that zeros in on the strengths and weaknesses of a student's mathematical knowledge, reports its findings to the student, and then provides the student with a learning environment for improving this knowledge to an appropriate level for course placement.

The ALEKS Math Assessment ensures students' readiness for particular math, statistics, and chemistry courses at Mercyhurst. Since these courses require the mastery of prerequisite material, it is important for students to begin in the course most likely to lead to success. Students will not be permitted to take a course unless they have demonstrated readiness. After completing the initial assessment, students who wish to improve their skills may use the included learning modules.

### What score do I need to get on the mathematics assessment?

It depends on your major and what other classes you might like to take. The minimum scores for mathematics and statistics courses that satisfy the REACH requirements are shown below. You will not be able to register for a course unless you place at or above this score, even if you're just one point away.

30	MATH 110	<b>Math Apps</b>
	STAT 109	<b>Statistics</b>
	STAT 130	<b>Intro to Social Statistics</b>
	STAT 137	<b>Biostatistics</b>
46	MATH 111	<b>College Algebra</b>
	STAT 139	<b>Statistics for the Sciences</b>
	MATH 146	<b>Programming I</b>
54	MATH 118	<b>Math for the Natural Sciences</b>
61	MATH 112	<b>Trig and Functions</b>
76	MATH 170	<b>Calculus I</b>
	PHYS 101	<b>Principles of Physics I</b>

### How will this class help?

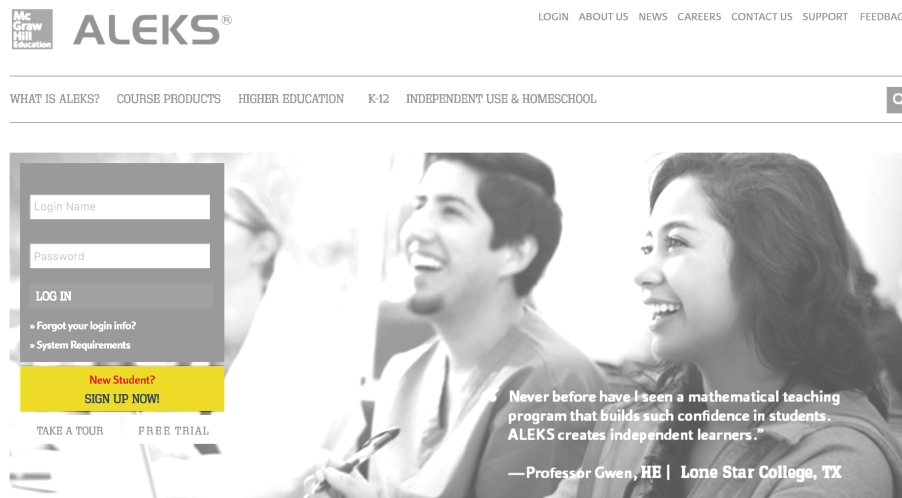
The topics covered in this course were chosen specifically to reinforce your understanding of the material on the ALEKS Math Assessment. The ALEKS learning modules will guide you through material *you* would benefit from reviewing, spending less time on topics you're already proficient in. You will also be more familiar with the ALEKS system, preparing you to take the Math Assessment at the end of the term.

## Getting Started with ALEKS

1. Go to the ALEKS website at

<https://www.aleks.com>

2. Click on the SIGN UP NOW! button on the left side of the screen:



3. Enter the class code for this course:

**FKYUA-4VJTL**

4. Select Purchase An Access Code 5. Enter your registration information and choose a password.

## IMPORTANT

Remember your user name and password. You will use this information throughout the semester.

*Never* share your ALEKS account login information with others. Allowing other students to sign into your account will be interpreted as academic dishonesty. You are responsible for keeping your account secure.