## MATHEMATICS PLACEMENT

As part of General Education, all Penn State baccalaureate degree programs require a minimum of six credits in quantification; associate degree programs require a minimum of three credits. General Education quantification courses have the suffix "GQ." GQ courses are available in mathematics, statistics, computer science, and philosophy.

When choosing GQ courses, students should consider their interests, background in mathematics, the focus of majors being considered, and the results of mathematics assessment. Most science/engineering programs require MATH 140, while some liberal arts/professional programs (particularly business-focused programs) require MATH 110.

All new first-year students who have not successfully completed a high school calculus course are required to take a web-based mathematics assessment called ALEKS as part of their preparation for NSO. If a student has not yet earned college credit for the prerequisite course, the ALEKS score is used to determine placement in mathematics courses. Students who wish to improve their placement can use ALEKS prior to the start of their first semester to complete online learning modules and re-test. Students are not permitted to take a course that is above their demonstrated readiness level.

Students who have successfully completed a high school calculus course will automatically be eligible to enroll in MATH 110 or MATH 140 (placement determined by "76-100 Score" column in table below). However, students concerned that they may not be prepared for success in the more advanced courses or who have not taken a math course recently are encouraged to take the ALEKS placement and discuss the results with their academic adviser as part of their NSO process.

The chart below shows the required ALEKS placement for GQ courses. Decisions about appropriate quantification (GQ) courses should be discussed with an academic adviser.

| Required $0-13$ <br> GQ Score <br> Course  <br> for Your  <br> Intended  <br> Major  | $14-29$ <br> Score | $30-45$ Score | 46-60 Score | 61-75 Score | $76-100$ <br> Score |
| :---: | :---: | :---: | :---: | :---: | :---: |
| STAT 200 MATH 3* \# | MATH 4 \# | STAT 200 |  |  |  |
| MATH 22 MATH 3* \# | MATH 4 \# | MATH 21 \# | MATH 22 |  |  |
| MATH 26 MATH 3* \# | MATH 4 <br> \# | MATH 21 <br> \# | MATH 26 |  |  |
| MATH 11CMATH 3* \# | MATH 4 \# | MATH 21 <br> \# | MATH 22 \# | MATH 110 |  |
| MATH 140MATH 3* <br> (ALEKS \# $0-60)$ | MATH 4 \# | MATH 21 <br> \# | MATH 22 <br>  <br> MATH 26 <br> \# | \# | MATH 140 |
| MATH 14CMATH 3* (ALEKS > \# 60) | MATH 4 <br> \# | MATH 21 <br> \# | \# | MATH 26 or MATH 40* or MATH 41 \# | MATH 140 |

* Course not offered at all Penn State campuses.

For courses not listed above, choose any appropriate GQ course for your intended major and for which you have met the prerequisite.

