



Office of Academic Affairs

205 East 42nd Street, New York, New York 10017

(646) 664-8102

email: david.crook@cuny.edu

MEMORANDUM

Date: January 15, 2019

To: Chief Academic Officers

From: David Crook, Associate University Provost for Academic Affairs
G. Michael Guy, University Associate Dean for Undergraduate Studies

Subject: New Guidelines for Placing Math-Proficient Students into College Algebra, Precalculus and Calculus

We are writing to provide new guidelines that CUNY's Office of Academic Affairs (OAA) has developed to place newly-admitted math-proficient students into the most appropriate credit-bearing math course. The guidelines are necessitated by CUNY's plans to discontinue the use of the Accuplacer testing suite for all purposes except ability-to-benefit testing, including the determination of basic proficiency and placement into specific credit-bearing math courses.

As stated in the memo dated December 13, 2018, CUNY will change its placement practices starting with the spring 2020 entering class (which will be evaluated for admissions in fall 2019): CUNY will no longer use Accuplacer placement tests to determine basic proficiency.¹ Historically, students who were deemed math proficient by the University were also required to take a placement test to determine into which credit-bearing mathematics courses they were eligible to enroll. The specific score requirements for each course were determined locally by each campus.

To develop the new credit placement guidelines, which are voluntary, the CUNY Office of Undergraduate Studies convened a Mathematics Credit Placement Faculty Working Group (Working Group) whose members were nominated by the Math Discipline Council. The Working Group, which began to meet in October 2017, was

¹ This end date corresponds to the date that the publisher of CUNY's current placement test (Accuplacer) will discontinue offering the current version of the instrument. The December 13 memo explains the University's plans for determining math proficiency.

charged with recommending a new means of placing students into the STEM math sequence: college algebra, pre-calculus, and calculus. Over the academic year, the Working Group studied historical math performance data at CUNY, placement practices nationwide, and alternatives to placement testing that relied on data currently captured during the admissions process. The Working Group submitted two progress reports to the Mathematics Discipline Council and eventually recommended the placement guidelines summarized below.

Proposed Placement Guidelines

The guidelines utilize the following student information collected during admissions:

1. Mathematics high school GPA
2. Highest-level high school mathematics course successfully completed
3. New York State Regents Trigonometry or Common Core Algebra 2 Exam Scores

Pre-calculus Placement Guideline:

A student is eligible to enroll in pre-calculus if *either* of the following two conditions is met:

1. Mathematics high school GPA of at least 85 and successful completion of at least Algebra 2;
2. New York State Regents Trigonometry Score of at least 70.²

Calculus Placement Guideline:

A student is eligible to enroll in Calculus 1 if either of the following two conditions is met:

1. Mathematics high school GPA of at least 94 and successful completion of a course beyond Algebra 2;
2. New York State Regents Trigonometry Score of at least 85.

Default Placement for Freshmen with Insufficient Information

The default placement for all math-proficient students, including students for whom the above information is lacking, is the lowest-level credit-bearing mathematics course required for the student's major. This course depends on the major, and can include quantitative reasoning, statistics, and college algebra. Students who do not need college algebra for their major should take the appropriate entry-level math course aligned with their major.

An inspection of historical student data found that only a small group of math-proficient freshmen lacked sufficient information to apply the placement

² An equivalent score for Common Core Algebra 2 is available for implementation.

guidelines.³ Almost three-quarters of these students started in college algebra. However, we suggest that colleges allow students an opportunity to present evidence suggesting that another placement is more appropriate.

Placement of Transfer Students

Students who successfully transfer credit for a math course taken at another college are eligible to enroll in the same courses as native students who successfully complete the equivalent course. Transfer students who have not transferred any math courses for credit should be placed following the same guidelines as freshmen. The information needed for placement should be readily available on the transfer application for students presenting fewer than 24 earned credits. Otherwise, you may have to ask the student to provide the necessary data from their high school transcript.

Validation of the Guidelines

We applied these guidelines to historical cohorts to compare the actual placement of these students with the placements generated by the new guidelines. Placements did not change for a large majority of students. Students who would have been assigned to a lower course by the new guidelines were generally among the lowest-performing students in their courses, suggesting that originally they may have been misplaced into a course higher than appropriate. Students whose placement would have been shifted to a higher course were generally among the highest performing students in their courses, suggesting that they may originally have been misplaced into a course lower than appropriate.

Central Office Support for Implementing the Placement Guidelines

The CUNY central office will support colleges wishing to implement the Placement Guidelines (with potentially different numerical values as determined by each college) by providing a CUNYfirst query that will identify the population eligible for college algebra, pre-calculus, or calculus and automatically populate a Placement Milestone on the student record. The Placement Milestone will be visible on the CUNYfirst record to advisors and the student. Some campuses are currently utilizing Placement Milestones to indicate foreign language course placement, and their implementation for mathematics will follow this same model.

Colleges will continue to have discretion over the placement criteria for their own courses. The new guidelines described above are voluntary. Departments may use other means to determine the best credit-bearing math course for incoming students to take.⁴ However, I believe that the proposed guidelines will be effective in placing students in those courses for which they are best prepared to succeed, and the Office of Academic Affairs is willing to work with colleges to adapt the guidelines

³ The new admissions process implemented for spring 2019 is expected to capture more comprehensive data than the previous admissions process and as a result further reduce this population of students.

⁴ CUNY Policy requires that all math proficient students be eligible to enroll in at least one Pathways Math and Quantitative Reasoning course offered by the college.

to suit their needs. Also, please note: Should a college wish to deploy an alternative means of placing students such as a new placement or diagnostic test, the college will be responsible for procuring, scheduling, validating and administering the test. If you have questions or need support for implementing the guidelines, please feel free to contact Michael Guy, at Michael.guy@cuny.edu.

cc: Jane Bowers
Laura Bruno
Sarah Truelsch
Mark Ciolli
Testing Directors