LEHMAN COLLEGE
OF THE
CITY UNIVERSITY OF NEW YORK

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

CURRICULUM CHANGE

Hegis # 1701.01
Program Code 02652

1. **Type of Change:** M.A. Degree Requirements

2. **From:** Master of Arts Program [for Secondary School Teachers of] Mathematics

The Department of Mathematics and Computer Science offers courses designed to meet the needs of students [in the Program for Secondary School Teachers of Mathematics.]

**Admission Requirements**

- [B]achelor's degree (or its equivalent) from an accredited college or university.
- [D]emonstrate the ability to successfully pursue graduate study. (Above-average academic achievement in general and in the teaching specialization is required.)
- [H]ave completed the appropriate number of credits in approved courses in the relevant academic specialization, plus 12 credits in secondary education courses and one semester of student teaching (or its equivalent).
- [S]atisfy appropriate voice, speech, and health standards.
- [I]f conditionally admitted, make up not more than 12 credits of specified undergraduate coursework, starting in the first semester and finishing in no more than three consecutive semesters.
- [T]wo letters of recommendation.

**Degree Requirements**

[Students in this program are required to complete from 21 to 24 credits in mathematics, as well as 6 to 9 credits in middle and high school education. Candidates for the degree are required to pass a comprehensive examination based on four courses, including at least one course each in algebra, analysis, and geometry.]
3. **To: Master of Arts Program in Mathematics & Instruction**

The Department of Mathematics and Computer Science offers courses designed to meet the needs of students who are interested in increasing their skills in mathematics and teaching. This program is a master's program leading to New York State professional certification, developed for those holding New York State initial teacher certification in mathematics, grades 7-12.

**Admission Requirements**

An applicant must

- hold a bachelor's degree (or its equivalent) from an accredited college or university.
- have initial New York State Teacher Certification in Mathematics Education, Grades 7 – 12.
- demonstrate the ability to successfully pursue graduate study. (Above-average academic achievement in general and in the teaching specialization is required.)
- have completed a 3-4 credit course in vector calculus, a 3-4 credit course in linear algebra and a 3-4 credit course in discrete mathematics. The required math prerequisites should have an average of B- or above.
- have completed or be in the process of completing one year of supervised teaching and two or more years of teaching in content area.
- provide two letters of recommendation.

**Degree Requirements**

- 21-24 credits in MAT 600 courses and above including MAT 601 (Secondary School Mathematics from an Advanced Standpoint) and at least one course in each mathematical area: Analysis, Algebra, & Geometry
- 9 credits from School of Education with a GPA of B or better:
  - ESC 740: Teaching Math, Grades 7-10
  - ESC 748: Teaching Problem Solving in Mathematics in Middle and High School
  - ESC 749: Teaching Math in Grades 11 and 12
- Comprehensive exams based on 4 mathematics courses (3-4 credits each)

4. **Rationale:**

The program adjustments reflect instituted NY State certification requirements. The program was originally registered with the state as leading to permanent certification, which no longer exists. Additionally, the update includes a modified prerequisite list that will be required of prospective students in order to be eligible for the program.

The department agrees and commits to working with the School of Education to submit a program report to their national accrediting body, NCATE. The department would be responsible for aligning courses to NCATE and NCTM standards; creating a specified number of program assessments and rubrics; collecting and analyzing data for each assessment; writing the program report by the appropriate deadline; and abiding by any other requirements that NCATE has for accredited education or education-related programs.

5. **Date of Math/CS departmental approval:** October 26, 2011

**Date of MHSE departmental approval:** November 8, 2012