Mathematics Education Leading to Initial Certification, M.A. (SJNY Long Island)

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PROGRAM DESCRIPTION

Offered at SJNY Long Island, the Master's Degree in Mathematics Education Leading to Initial Certification is a 47 credit degree that you can earn in five semesters of part-time study. The degree requires between two and four classes each semester, including the summer. Particular attention will be paid to integrating technology with the teaching of mathematics in order to meet the standards set by both New York State and the National Council of Teachers of Mathematics. Candidates for this program will have a baccalaureate degree in mathematics or at least 30 mathematics credits. Completion of the program will satisfy the degree requirements for both initial and professional certification in New York State. To successfully complete the program, students must maintain a B average.

MISSION AND GOALS

The purpose of the Master of Arts Program in Mathematics Education Leading to Initial Certification is to prepare students to become accomplished mathematics teachers. In doing so, the Program aims to extend the depth and breadth of mathematical skills previously learned on the undergraduate level and to enable teaching professionals to use these expanded skills to motivate and engage a diverse population of students who possess varying cognitive skills and learning styles. Particular attention will be paid to integrating technology with the teaching of mathematics in order to meet the standards set by both New York State and the National Council of Teachers of Mathematics. The Department seeks to instill in teaching professionals dedication to the discipline, as well as the desire and ability to become lifelong learners.

The specific objectives of the proposed Master of Arts Program in Mathematics Education Leading to Initial Certification are as follows:

- 1. To prepare students for life-long learning of mathematics.
- 2. To develop in students a deeper understanding of, and the ability to address, a wide variety of mathematical learning styles.
- 3. To have students be able to communicate the method of their reasoning effectively.
- 4. To enable students to make connections between the upper level mathematics courses that they are taking and the mathematics at the grade level they will be teaching.
- 5. To provide a solid understanding of mathematics at the grade level students will be teaching as well as the entire K-12 curriculum.
- 6. To enable students to become familiar with current trends, issues, and technology in mathematics education.
- 7. To provide a familiarity with the New York State and National Council of Teachers of Mathematics standards.
- 8. To develop research skills in the field of mathematics education.
- 9. To learn classroom skills for teaching students of varying.
- 10. To deepen the mathematical background of students.

CURRICULUM

Education requirements - 15 Credits

- EDU 525 Perspectives in Teaching Students with Exceptionalities
- CSS 500 <u>Curriculum Paradigms and Issues</u>
- CSS 625 Language Acquisition and Literacy Development
- CSS 650 Adolescent Development
- <u>CSL 570 Teaching Literacy In The Content Areas</u>

Mathematics Education requirements - 20 Credits

- EDU 560 Methods of Secondary Education
- EDU 564 Methods of Teaching Mathematics in Schools
- EDU 573 Supervised Teaching in Secondary Schools
- MAT 505 Integrating Technology in Mathematics Education
- MAT 520 Current Issues in Mathematics Education
- MAT 620 Masters Project

Mathematics requirements - 12 Credits

- MAT 546 Probability and Statistical Inference
- MAT 552 Number Theory
- MAT 562 Modern Geometry
- MAT 564 Real Analysis

ADMISSION REQUIREMENTS

All applicants to the Master of Arts in Mathematics Education Leading to Initial Certification program must possess a baccalaureate degree in mathematics (or at least 30 mathematics credits) from an accredited college with an undergraduate grade point average of at least 3.0 as well as at least a 3.0 grade point average in all mathematics courses.

ADMISSION PROCEDURES

Application Procedures

Candidates must submit:

- 1. A completed application accompanied by a non-refundable fee of \$25.
- 2. An updated resume, which includes chronological dates of employment and descriptions of responsibilities.
- 3. Two letters of recommendation.
- 4. Please arrange to have official transcripts of your undergraduate and graduate work sent directly to the Office of Admissions.
- 5. A completed medical form. New York State Public Health Law requires all students who were born after January 1, 1957 to be immunized against measles, mumps, and rubella. You will be required to submit proof of a recent physical examination including a Diphtheria-Tetanus booster and a Tuberculin Skin test.

Admissions Process

1. Applicants will be contacted by the Office of Admissions to arrange for an interview with the program director after all relevant documents have been submitted.

Matriculated students in the Graduate Program may apply to the Program Director for acceptance of up to six (6) graduate credits, with grades of B or better, from other accredited graduate programs. Acceptance will be dependent upon appropriateness of the courses to the student's program of study.