MAT Mathematics 7-12 Proposal

Program Description:

The faculties of the Curriculum and Instruction and the Mathematics Departments have developed the Master of Arts in Teaching (MAT) – Mathematics 7-12. The program will help to address the need for certified teachers in the area of Adolescence Mathematics 7-12 that exists on a national and state basis. Through the combined resources of the Curriculum and Instruction and the Mathematics Departments, this program offers an alternative to graduate applicants seeking initial/professional teacher certification in Mathematics 7-12. This program will offer 16sh of mathematics content that the current Master of Science in Education – Adolescence Mathematics 7-12 does not. Both faculties continue to work together to develop a program that is consistent with the School of Education Conceptual Framework as well as national and state standards namely those of the National Council of Teachers of Mathematics (NCTM), NYS Learning Standards, and NY teacher certification requirements respectively. The program is a 48-semester hour program. As well as 16sh of mathematics content, the program offers 16sh of pedagogical content and 16sh of field placement that includes a full semester of student teaching. Applicants will be expected to have completed a BS or BA Degree in Mathematics or the equivalent to enter this program.

Proposed Program

Proposed MAT Mathematics 7-12 Program 48sh

Required Pedagogical Core 16sh
EDU 501 Inquiry into Educational Foundations 3sh
LIT 507 Literacy & Learning in the Content Area 3sh
LIT 513 Adolescence Literacy: Assessment & Intervention 3sh
ADO 530 Content Specific Methods: Math 4sh
ADO 594 Interdisciplinary Methods 3sh

Field Placements 16sh
EDU 503 Field Placement I: Observe & Participation 1sh
SPE 593 Field Placement II: Small Group Instruction in Inclusion Classrooms 1sh
ADO 533 Field Placement III: Content Specific: Math 2sh
ADO 525 Student Teaching 6sh
ADO 526 Cross-Cultural Student Teaching 6sh

Required Mathematics Courses 16sh
MAT 504 School Algebra from an Advanced Viewpoint 3sh
MAT 507 Geometry through History 3sh
MAT 509 Issues in Teaching Mathematics (Taken concurrently with Student Teaching) 1sh
MAT 550 Statistics and Classroom Research 3sh
MAT 573 Number Theory & Discrete Math through Problems 3sh
MAE 514 Mathematics for All Learners in a Diverse Society 3sh