

**SUNY Oswego School of Education**  
**Curriculum & Instruction Department**  
(Approved by NYSED in Spring 2007 for initial admissions in Fall 2007)

## **Master of Arts in Teaching (MAT): Mathematics Grades 7-12 Initial Certification Program**

### **Program Description**

The MAT Mathematics Program, leading to Initial Teaching Certification in Mathematics grades 7-12, is a full time 48 hour program. The program is designed for a qualified student to begin in the Summer First Session and finish at the end of the following summer. Primarily, admission to the program will be in the Spring, with coursework to begin in late May. However, fall admission, for spring classes, is possible in exceptional cases. The program is intended for students with a BA or BS in mathematics or equivalent who wish to earn New York State teacher certification.

### **Application Requirements**

Applicants seeking admission to the Master of Arts in Teaching: Mathematics must hold a BA or BS degree in Mathematics or equivalent.

One course in each of these three areas is expected: *i.* abstract algebra; *ii.* analysis or advanced calculus; *iii.* calculus-based statistics or probability. A candidate may be accepted lacking one of these courses; in that case the course must be completed prior to degree candidacy (see below).

All applicants must provide evidence of the equivalent of one college year (6 credit hours college level or 4 years high school to the language IV level) of a language other than English. A computer language does not meet the requirement, but American Sign Language does. Applicants who lack an introductory course in Adolescent Psychology must satisfy this prerequisite as well. Any of these requirements not satisfied upon admission to the program must be completed prior to degree candidacy.

All applications must include the following materials:

1. Completed application form -- Parts I and II.
2. An official transcript for all undergraduate and graduate work.
3. Two letters of recommendation, including one from a college professor.
4. Minimum grade index of 2.70. If the index is lower than 2.70, the score from the Graduate Record Exam (GRE) must be submitted with the application. To be considered, an applicant must score in the fiftieth percentile or better.
5. Attendance at Program Information Meeting. There are two meetings scheduled prior to the deadline for completing the program planning. To schedule a time, contact the Curriculum and Instruction Department at 315-312-4052 or email [cigrad@oswego.edu](mailto:cigrad@oswego.edu).
6. Completion of the NYS Liberal Arts and Science Test (LAST) certification exam.

Applicant materials are due by March 1 for summer admission.

### **Degree Candidacy**

Candidates accepted into the MAT Mathematics must apply for degree candidacy after completing 12 to 18 credit hours of their program; any course work taken in excess of 18 hours is liable to forfeiture. A GPA of 3.0 or better is required to qualify for degree candidacy status. Candidates also need to satisfy the competency requirement, satisfied by either a grade higher than B- in Mat 504 or a grade of 80% or higher on the undergraduate Competency Test in Before-Calculus Mathematics. The completed candidacy application should be submitted to the Graduate Studies Office. The application and a current transcript are reviewed by both the Mathematics Department advisor and the advisor from the Department of Curriculum and Instruction. Students will then receive a letter advising them of their current status.

## Curriculum

The MAT Mathematics program comprises 12 sh (semester hours) in mathematics, 12 sh in general pedagogy, 8 sh in mathematics-specific pedagogy, and 16 sh in field placement and student teaching. The field placement consists of 100 clock hours; student teaching consists of two supervised 7-week full-time experiences.

Student teaching is expected to take place in the Spring Semester. Each candidate is provided two seven-week placements for student teaching by the School of Education Director of Field Placements. Assigned placements must be accepted by the candidate or the candidate will need to wait for reassignment in a future semester. Student teaching placement is a full-time commitment, Monday through Friday, for the full school day. Student teaching applications are due a full semester prior to the actual assignment.

Candidates must complete SSHS 1020-Safe Schools, Healthy Students, a non-credit workshop relating information about drug/alcohol and tobacco abuse, mandated reporting of child abuse, school violence prevention (Project SAVE) and school safety programs, as a prerequisite to student teaching. Contact Continuing Education at [sshs@oswego.edu](mailto:sshs@oswego.edu) or [www.oswego.edu/safeschools](http://www.oswego.edu/safeschools).

## Required Courses

<b>Required Pedagogical Core</b>		<b>12sh</b>
EDU 501 Foundations of Education	3sh	
LIT 507 Literacy & Learning in the Content Area	3sh	
LIT 513 Adolescence Literacy Assessment & Intervention	3sh	
ADO 594 Interdisciplinary Methods	3sh	
<b>Field Placements</b>		<b>16sh</b>
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	
<b>Required Mathematics Courses</b>		<b>12sh</b>
MAT 504 School Algebra from an Advanced Viewpoint	3sh	
MAT 507 Geometry through History*	3sh	
MAT 550 Statistics and Classroom Research	3sh	
MAT 573 Number Theory and Discrete Mathematics through Problems	3sh	
<b>Mathematics-Specific Pedagogy</b>		<b>8 sh</b>
ADO 530 Content Specific Methods: Math	4sh	
MAE 514 Mathematics for All Learners in a Diverse Society	3sh	
MAT 509 Curricular Issues in Mathematics (Taken concurrently with Student Teaching)	1sh	
<b>Total</b>		<b>48 sh</b>

\*Students who have courses in both history and geometry should take, in place of MAT 507, with approval, one of

- MAT 553 Math Modeling and Technology for the Secondary Teacher
- MAT 580 Technology and Problem Solving