San José State

DEPARTMENT OF MATHEMATICS

M.A. MATHEMATICS, Concentration in Mathematics Education

Admission Requirements

- 1. Admission to the Graduate Division.
- 2. International students must have achieved a score of at least 550 on the TOEFL exam (NO TOEFL waiver).
- 3. Completion of at least 21 semester units of upper division mathematics with a grade point average of at least a 3.0. The courses taken must be acceptable toward a bachelor's degree in mathematics.
- 4. Letters of recommendation (1-3), sent directly to the Mathematics Graduate coordinator at the address below.

IF YOU DO NOT MEET THE ABOVE REQUIREMENTS

Students who meet the minimum requirements for admission to the Graduate Division but do not meet the requirements for admission to the master's degree program may be admitted as Conditionally Classified students.

Graduation Requirements: M.A. Mathematics, Concentration in Mathematics Education

1. Students must pass a written qualifying examination on linear algebra and real analysis. This Basic Exam must be taken during a student's first year; its topics are those normally covered in Math 129A and Math 131A. Students may obtain guidance in preparing for this exam by enrolling for one unit of Math 298.

Students must also pass a written exam on fundamental ideas related to the concentration in Mathematics Education. These ideas are normally covered in Math 201A, Math 201B, and MathEd 209.

Note: students must pass both qualifying exams before they may begin their formal thesis work.

- 2. Nine units from Math 201A, Math 201B, and MathEd 209. Students who have already completed one or more of these courses as undergraduates must replace each previously completed course with a three-unit course.
- 3. Twelve units of 200- level courses in mathematics from the following list. These courses must include a one-year sequence.

Math	211A	Geometry of Projective Spaces
Math	211B	Advanced Topics in Geometry
Math	213	Advanced Differential Geometry
Math	221A	Higher Algebra I
Math	221B	Higher Algebra II
Math	226	Theory of Numbers
Math	229	Advanced Matrix Theory
Math	231A	Real Analysis I
Math	231B	Real Analysis II
Math	233A	Applied Mathematics I
Math	233B	Applied Mathematics II
Math	238	Advanced Complex Variables
Math	243	Advanced Numerical Analysis
Math	271A	Mathematical Logic
Math	271B	Advanced Mathematical Logic
Math	275	Topology
Math	279	Graph Theory
Math	285	Advanced Topics in Mathematics

- 4. Six additional units of electives. These must be in 100- or 200- level mathematics courses, with certain exceptions allowed as described in the general catalog. A maximum of 3 units of Math 180 or Math 298 may be included. See below for other restrictions on these units.
- 5. Satisfy the University's Competency in Written English requirement. See www.sjsu.edu/gradstudies for details.
- 6. Obtain a faculty thesis (or writing project) advisor and complete a thesis (or writing project) in mathematics.

RESTRICTIONS

Math 101, 105, 106, 107A, 107B, 110L, and education courses applied toward the Single Subject Credential are not applicable.

Applying for Graduation

With the aid of the Graduate Coordinator, students must complete and file the Departmental Request for Candidacy and Graduate Degree Program form with Graduate Studies before the posted deadline (usually 8 months before proposed graduation date). Students must file the Application for Award of Master's Degree form before posted deadline (usually 3 months before the proposed graduation date). These forms, and the precise deadlines, are available at www.sjsu.edu/gradstudies.

Department of Mathematics San Jose State University One Washington Square San Jose, CA 95192-0103 (408) 924-5100; Fax (408) 924-5080 http://www.math.sjsu.edu

Contact Dr. Richard Kubelka at (408) 924-5132 or kubelka@math.sjsu.edu for further information about the mathematics graduate program at SJSU.
See also www.math.sjsu.edu/~kubelka.

Graduate Studies & Research (for applications and information): www.sjsu.edu/gradstudies, (408) 924-2480

Online SJSU Catalog: http://info.sjsu.edu

Mathematics Faculty

- Alperin, Roger (Ph.D., Rice University, 1973) Algebra
- Becker, Joanne Rossi (Ph.D., University of Maryland, 1979) Mathematics Education
- Beeson, Michael (Ph.D., Stanford University, 1972)
 Automated Deduction (theorem-proving by Computers),
 Software for Learning and Teaching Mathematics,
 Algorithms for Symbolic Computation, Minimal Surfaces,
 Constructive Mathematics
- Bergthold, Trisha (Ph.D., University of Oklahoma, 1999) Mathematics Education
- Blockus, Marilyn (Ph.D., Johns Hopkins University, 1977) Algebraic Topology
- Bozovic, Natasha (Ph.D., University of Belgrade, 1975) Theory of Algorithms, Group Theory, Foundations of Mathematics, Mathematical Physics
- Bremer, Martina (Ph.D., Purdue University, 2006) Biostatistics, Statistics
- Cayco, Maria (Ph.D.,Carnegie-Mellon University,1985) Numerical Partial Differential Equations, Finite Element Methods, Numerical Linear Algebra, Computational Fluid Dynamics
- Crunk, Steven (Ph.D., University of Pennsylvania, 1999) Statistics, Time Series
- Day, Jane (Ph.D., University of Florida, 1964) Linear Algebra
- Dodd, Roger (Ph.D., Hull University, England, 1970) Integrable Equations, Dynamical Systems, General Relativity
- Foster, Leslie (Ph.D. Brown University, 1977) Numerical Analysis, Scientific Computation
- Goldston, Daniel (Ph.D., University of California, Berkeley, 1981)
 - **Number Theory**
- Grantcharov, Dimitar (Ph.D., University of California, Riverside, 2003)
 - Lie Algebras, Superalgebras, Geometric Quantization
- Hsu, Tim (Ph.D. Princeton University, 1994) Algebra, Combinatorics
- Jackson, Bradley (Ph.D., University of Maryland, 1977) Graph Theory, Combinatorics, Analysis of Algorithms
- Katsuura, Hidefumi (Ph.D., University of Delaware, 1984)
 Topology
- Kellum, Kenneth (Ph.D., University of Alabama, 1971) Real Analysis, Point-Set Topology
- Lee, Bee Leng (Ph.D., University of Wisconsin-Madison, 2000) Statistics, Semiparametric Inference, Survival Analysis
- Kubelka, Richard (Ph.D., Stanford University, 1980) Algebraic Topology, Number Theory, Statistics
- Malyshev, Igor (Ph.D., Kiev State University, Ukraine, 1973)
 Partial Differential Equations, Functional Analysis, Applied
 Mathematics

- Morris, Hedley (Ph.D., University of London, 1971) Nonlinear Wave Theory, Soliton Physics, Global Analysis, Dynamical Systems Theory, Mathematical Modeling
- Ng, Ho-Kuen (Ph.D., University of California, Berkeley, 1982) Algebra, Operations Research, Actuarial Science
- Obaid, Samih (Ph.D., Pennsylvania State University, 1977) Elasticity Theory, Fluid Mechanics, Integral Equations, Complex Analysis, Fibonacci Sequence
- Pence, Barbara (Ph.D., Stanford University, 1974) Mathematics Education
- Peterson, Brian (Ph.D., University of California, Berkeley, 1976) Algebra, Number Theory
- Pfiefer, Richard (Ph.D., University of California, Davis, 1982) Geometry, Convexity and Related Inequalities
- Rivera, Ferdinand (Ph.D., Ohio State University, 1998) Mathematics Education, Cultural Studies
- Roddick, Cheryl (Ph.D., Ohio State University, 1997) Mathematics Education
- Saleem, Mohammad (Ph.D., University of California, Davis, 1988)
 - Numerical Analysis, Mathematical Fluid Dynamics, Computational Linear Algebra, Mathematical Modeling
- Schmeichel, Edward (Ph.D., Northwestern University, 1974) Combinatorial Mathematics, Computational Complexity
- Shubin, Tatiana (Ph.D., University of California, Santa Barbara, 1983) Number Theory, Algebra, Finite Geometries,
 - Number Theory, Algebra, Finite Geometries, Combinatorics
- Simić, Slobodan (Ph.D., University of California, Berkeley, 1995)
 - Dynamical Systems, Geometric Control Theory, Subriemannian Geometry
- Sliva Spitzer, Julie (Ph.D., The University of North Carolina at Chapel Hill, 1998)
 - Mathematics Education
- So, Wasin (Ph.D., University of California, Santa Barbara, 1991)
 - Linear Algebra
- Stanley, Maurice (Ph.D., University of California, Berkeley, 1984)
 - Mathematical Logic
- Valdes, Linda (Ph.D., University of California, Santa Cruz, 1990)
- Graph Theory, Computer Algorithms In Graph Theory Weddington, Donald (Ph.D., University of Miami, 1968)
 Analysis, Topology