

Certification/Endorsement CODE: EX

## Summary of Course Requirements for Specialty Studies Program

**Institution:** Eastern Michigan University      **Date:** December 2002

**Specialty Studies Program:** Mathematics

**Program Standards:** Michigan State Board of Education      **Standards Date:** 2000

**Program Contact Person(s):** Joanne Caniglia

**DIRECTIONS:** On the matrix below, list the required courses for this specialty studies program. Also indicate the number of electives and any special considerations that apply. In addition to listing the course title, course number, and course semester hours, please indicate whether the course is required for the secondary major or minor, elementary major or minor, the K-12 major or minor, and or an endorsement.

Course Title	Course Number	Sem. Hours *	Secondary		Elementary		K-12		Additional Endorsements
			Major	Minor	Major	Minor			
Mathematics for Elementary Teachers I	Math 108	3			X	X			
Mathematics for Elementary Teachers II	Math 109	3			X	X			
Calculus I	Math 120	4	X	X	X				
Calculus II	Math 121	4	X	X					
Introduction to Linear Algebra	Math 122	3	X	X					
Algebra for Elementary Teachers	Math 210	3			X	X			
Introduction to Proof	Math 211	3	X						
Multivariable Calculus	Math 223	4	X						
Geometry for Elementary Teachers	Math 240	3			X	X			
Advanced Topics for Elementary Teachers	Math 301	3			X	X			
College Geometry	Math341	3	X	X					
Statistics and Probability	Math 370/360	4/3	X 370	X 370 or 360					
Research for Elementary Teachers	Math 403	3			X				
Abstract Algebra	Math 411	3	X						
Electives			6 or 7	6	8	5			
Total number of SEMESTER HOURS required for each option offered:			34	23	30	20			

**Note:** For the Secondary Minor, Math 306 or 304, and Computer Science 137, 138 or 237 are required but are not calculated within the total hours. With these courses the total secondary minor totals 29 hours.

Course descriptions for the above courses are located at [http://www.emich.edu/coe/catalogs/ugrad/coa\\_crs/math\\_crs.html](http://www.emich.edu/coe/catalogs/ugrad/coa_crs/math_crs.html)

A description of the secondary major is located at [http://www.emich.edu/coe/catalogs/ugrad/math\\_ed/math\\_mjr.html](http://www.emich.edu/coe/catalogs/ugrad/math_ed/math_mjr.html)

A description of the secondary minor is located at [http://www.emich.edu/coe/catalogs/ugrad/math\\_ed/math\\_mnr.html](http://www.emich.edu/coe/catalogs/ugrad/math_ed/math_mnr.html)

A description of the elementary major is located at [http://www.emich.edu/coe/catalogs/ugrad/teached/math\\_maj.html](http://www.emich.edu/coe/catalogs/ugrad/teached/math_maj.html)

A description of the elementary minor is located at [http://www.emich.edu/coe/catalogs/ugrad/math\\_ed/el\\_math\\_mnr.html](http://www.emich.edu/coe/catalogs/ugrad/math_ed/el_math_mnr.html)