



THE UNIVERSITY *of* NORTH CAROLINA
GREENSBORO

**Middle Grades Education
Concentration
in
Mathematics
Information Packet**

Department of Mathematics and Statistics

August 2006 Edition

Students should obtain any updated versions of this document as requirements for licensure are periodically changed by the State of North Carolina.

MIDDLE GRADES EDUCATION MAJOR ~ CONCENTRATION in MATHEMATICS
(27 hours)

(For students who entered M.G. Ed. Program Fall 2004 or later)

<u>NUMBER</u>	<u>COURSE NAME</u>	<u>HOURS</u>	
CORE: (9 hours)			
MAT 191	Calculus I	3	Prerequisite: min grade of C in MAT 151
MAT 292	Calculus II	3	Prerequisite: min grade of C in MAT 191
STA 271	Fund. Concepts of Statistics	3	Prerequisite: min grade of C in MAT 150 or STA 108

LICENSURE CORE: (12 hours)

MAT 303	Topics in Mathematics	3	Spring only offering
MAT 503	Problem Solving in Mathematics	3	Prerequisite: min grade of C in MAT 191 and MAT 303 Fall offering only
MAT 504	Found. of Geometry for Teachers	3	Prerequisite: min grade of C in MAT 292 Fall only offering
MAT 505	Found. of Math. for Teachers	3	Prerequisite: min grade of C in MAT 292 Spring offering only

ELECTIVES: (min of 6 hours)

MAT 220	Plane/Solid Analytic Geometry	3	Prerequisite: min grade of C in MAT 151 Spring Offering Only
MAT 253	Discrete Mathematics I	3	Prerequisite: min grade of C in MAT 151
MAT 293	Calculus III	3	Prerequisite: min grade of C in MAT 292
MAT 295	Proofs & Mathematical Structures	3	Prerequisite: min grade of C in MAT 292
MAT 310	Matrix Theory	3	Prerequisite: min grade of C in MAT 292
MAT 311	Modern Algebra	3	Prerequisite: min grade of C in MAT 310
MAT 353	Discrete Mathematics II	3	Prerequisite: min grade of C in MAT 253
MAT 390	Ordinary Differential Equations	3	Prerequisite: min grade of C in MAT 292
MAT 513	Historical Dev. of Mathematics	3	Prerequisite: min grade of C in MAT 292 Fall only offering

Contact Ms. Barbara Carter at 256-1132 or bccarter@uncg.edu, or Department of Mathematical Sciences at 334-5836.

(Students seeking a **minor in mathematics** need Department of Mathematics and Statistics approval and the requirements are MAT 191 and MAT 292 and MAT 310 or MAT 353 as well as a minimum of 6 additional hours of MAT, CSC, STA courses 200-level or above which count toward a major in mathematics.

Fall 2004

Updated 8/14/06 bcc

Prior page information is for the mathematics concentration. A student needs to meet the requirements for the Middle Grades Education major and earns a B.S. degree in that field. The Department of Curriculum and Instruction in School of Education governs the requirements for the Middle Grades Education major and the primary advising will be through CUI. Therefore, the interested student should consult the following site for more information on the Middle Grades Education program.

http://www.uncg.edu/cui/under_programs/middle_edu.html

Another resource for teacher education is *The Teachers Academy Teacher Licensure Handbook for Undergraduates* which can be found at http://www.uncg.edu/ted/teach_acad_handbooks.html.

As noted on the previous page, many mathematics courses have prerequisites, so individualized planning is highly recommended. The contact person listed above will work with you on your mathematics program of study so plan an advising appointment with a mathematics education advisor as well as with your CUI advisor. Remember if the goal is also to obtain a minor in mathematics, it is important to contact the Department of Mathematics and Statistics for approval of the plan of study for the minor.

Suggested Plan of Study

Freshman Year	
Prerequisite mathematics if required	
Sophomore Year	
MAT 191 and STA 271 (if not before)	MAT 292 (if not before) and MAT 303
Junior Year	
MAT 503 and MAT elective (if not before)	MAT 505 and MAT elective (if not before)
Senior Year	
MAT 504	Clinical practice