2003-05 Catalog Paradigm
Mathematics Teaching Major
Secondary/Middle School Certification; 6-12

First Year	
1.	MT131 or MT132 (GS8)
2.	MT132 or MT233
3.	CS110
4.	DS220 (GS3)
5.	General Education
6.	General Education
7.	General Education
8.	General Education

Second Year	
1.	MT233
2.	MT250 (2nd semester)
3.	MT321
4.	General Education
5.	General Education
6.	Sophomore Block
7.	Sophomore Block
8.	Sophomore Block

Third Year	
1.	MT306
2.	MT350
3.	MT300 or above
4.	General Education
5.	General Education
6.	ED H91, H92, H94
7.	ED377
8.	ED 351

Fourth Year	
1.	MT300 or above
2.	MT499 (non credit) (2nd semester)
3.	General Education
4.	General Education
5.	Professional Semester – Student Teaching
6.	Professional Semester – Student Teaching
7.	Professional Semester – Student Teaching
8.	Professional Semester – Student Teaching
9.	Elective

Elective course can be used to take an additional major courses or a free elective.

June, 2004

Progress Sheet
Mathematics Teaching Major

Student Name: Student ID:	
General Education – Lower Biennium	**Major**
☐ **GS1** – Religious Studies _____ ☐ **GS2** – Philosophy of Human Nature _____ ☐ **GS3** – Human Relationships __DS220_____ ☐ **GS4** – Natural Science _____ ☐ **GS5** – Creative Expression _____ ☐ **GS6** – United States Heritage _____ ☐ **GS7** – Foreign Heritages _____ ☐ **GS8** – Quantitative Skills _____ ☐ **GS9** – Writing _____	**Required Courses:** ☐ CS110 – Introduction to Computer Programming ☐ MT131 (or 124) – Calculus and Analytic Geometry I (or Survey of Calculus) ☐ MT132 – Calculus and Analytic Geometry II ☐ MT233 – Calculus and Analytic Geometry III ☐ MT250 – Advanced Foundations of Mathematics ☐ MT321 – Probability and Statistics ☐ MT306 – Abstract Algebra ☐ MT350 – Modern Geometry ☐ MT300 or above _____ ☐ MT300 or above _____ ☐ MT499 – Senior Examination . MT499 is a noncredit course required of all math majors in their senior year.
General Education – Upper Biennium	
☐ **GS1** – Religious Studies _____ ☐ **GS10** – Western Tradition _____ ☐ **GS11** – Global Society _____ ☐ **GS12** – Senior Colloquium (GS400) _____	Note – 1. Those wishing to obtain teaching certification must contact a co-advisor in the Education Discipline. During the Freshman year a letter of intent to apply for admission to the Teacher Education Program must be filed in the Teacher Education office. 2. Teaching certification requires specific General Education courses. 3. MT 306 must be taken no later than the fall of the junior year in order to complete the program in four years. 4. MT 350, a required course, is offered every other spring. 5. Advanced MT courses are numbered 300 or above.

June, 2004

Mathematics (MATH)

The mathematics program is designed to be personally and intellectually challenging and to have three objectives: 1) to introduce students to the methodology and applications of mathematics; 2) to provide students in all disciplines with the mathematical competency required in their studies; and 3) to train professional mathematicians for graduate school, teaching, or other careers.
Check out our web site at http://www.snc.edu/math to obtain more information about the major program and the many activities in which mathematics majors participate.

Outcomes of the Major Program
1. Each student should have a firm grounding in calculus, set theory, logic, and strategies of mathematical proof and problem solving.
2. Each student should have a working knowledge of at least five of the following mathematical areas: linear algebra, abstract algebra, differential equations, numerical analysis, operations research, probability and statistics, modern geometry, real analysis, and complex analysis. The precise combination of areas will depend on the student's particular interests and career objectives.
3. Each student should understand the connections and the differences between pure and applied mathematics. Students should be able to reason rigorously in mathematical arguments, and students should be able to use mathematical models and algorithms to solve problems.
4. Each student should master the language, symbology, and form used in mathematical proof and develop the ability to communicate mathematics clearly.
5. Each student should develop the ability to use technology to reason numerically, symbolically, graphically, and verbally. Students should be able to write computer programs or use appropriate software to solve mathematical problems.
6. Each student should develop the ability to be a self-learner in mathematics in order to maximize the student's future success as a professional mathematician, an actuary, a high school teacher, a computer scientist, etc.

Graduate School Advisor: Dr. Richard Poss
Pre-Actuarial Advisor: Dr. Gene DeBoth and Dr. Richard Poss

Major (10 courses plus MATH 499): CSCI 110, MATH 131 (or MATH 124), MATH 132, MATH 233, MATH 250, MATH 499, plus at least five additional mathematics courses numbered 300 or above. At least one of these five courses must be MATH 303, MATH 306, MATH 373, or MATH 376. For the mathematics major, CSCI 323 will count as a mathematics course numbered 300 or above. The major receives a Bachelor of Arts degree.
It is recommended that students majoring in mathematics take courses in at least one area where mathematics is applied; for example, computer science, physics, economics or business administration.

Teaching Major: For secondary teaching, the program shall consist of CSCI 110, MATH 131 (or MATH 124), MATH 132, MATH 233, MATH 250, MATH 306, MATH 321, MATH 350, MATH 499, plus at least two additional mathematics courses numbered 300 or above.

Academic Minor (6 courses): MATH 131 (or MATH 124), MATH 132, MATH 233, MATH 250, and two mathematics courses numbered 300 or above.

Teaching Minor: The program shall consist of CSCI 110, MATH 131 (or MATH 124), MATH 132, MATH 250, MATH 306, and MATH 321 or MATH 350.

Residency Requirements: Students majoring in mathematics (including the teaching major) must take MATH 499 and earn credit in at least three mathematics courses at St. Norbert College which are numbered 300 or above.