MILLERSVILLE UNIVERSITY

Student Name:_____ Student I.D.# _____

DEGREE: BS
MAJOR: MATH
OPTION:

MAJOR REQUIREMENTS FOR A BS DEGREE IN MATHEMATICS

Total credit hours required: 120.0 minimum

REQUIREMENTS AND POLICIES FOR THE BS MATHEMATICS MAJOR

A. Policies for Admission to the Major

1. New students (freshmen and transfers) must be admitted to the Mathematics major by the Office of Admissions upon admission to the University.
2. Admission into the Mathematics major from other departments is upon approval of the chairperson of the Department of Mathematics. A "C-" or better in MATH 161 and all Math courses already taken which count toward a Mathematics major is required for admission.
3. Non-degree and continuing education students must be admitted to the Mathematics major by the Office of Admissions, subject to approval by the chairperson of the Department of Mathematics.

B. Policies for Retention in the Major

1. University requirements for retention.
2. A mathematics major taking any Math course required as a prerequisite for a later Math course must earn a grade of "C-" or better in that course before being admitted to the later course for which it is a prerequisite.
3. Periodically, a mathematics major's progress will be reviewed in accordance with the "Department Evaluation of Majors" policy stated in the University catalog. A student who does not demonstrate satisfactory progress will be notified of the department's concern. Subsequent notifications may result in being terminated as a major in the department.

C. Policies for Completion of the Major

1. Completion of all University curricular requirements.

Note to the student: *This form is provided as a guide. It is your responsibility to consult regularly with your advisor to be aware of changes and curriculum details which are not incorporated on this form.*

MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BS MATHEMATICS**
Option:
Major Field Requirements: **45.0 credits**
Other Requirements: **18.0 - 21.0 credits**

When applicable, up to six of the **REQUIRED RELATED** courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

REQUIRED MATHEMATICS COURSES (34.0-35.0 credits)

Course No.	Short Title	C.H.	Grade
MATH 161	Calculus I*	4.0	____
MATH 211	Calculus II	4.0	____
MATH 310	Intro Mathematical Proof	3.0	____
MATH 311	Calculus III	4.0	____
MATH 322	Linear Algebra I	4.0	____
MATH 335	Mathematical Statistics I	3.0	____
MATH 345	Abstract Algebra I	3.0	____
MATH 365	Ord. Differential Equations	3.0	____
MATH 375	Numerical Analysis	3.0	____
MATH 464	Real Analysis I	3.0	____

*With permission, MATH 163 Honors Calculus I may be taken in place of MATH 161.

ELECTIVE COURSES - No Declared Option (9.0 credits)

Students must choose one of MATH 422, MATH 435, MATH 445, MATH 465 or MATH 467. Another substitution may be made with the approval of the department.

Course No.	Short Title	C.H.	Grade
MATH 353	Survey of Geometry	3.0	____
MATH 355	Transformational Geometry	3.0	____
MATH 370	Operations Research	3.0	____
MATH 393	Number Theory	3.0	____
MATH 395	Intro Combinatorics	3.0	____
MATH 422	Linear Algebra II	3.0	____
MATH 435	Mathematical Statistics II	3.0	____
MATH 445	Abstract Algebra II	3.0	____
MATH 457	Elem. Differential Geometry	3.0	____
MATH 465	Real Analysis II	3.0	____
MATH 467	Partial Differential Equations	3.0	____
MATH 471	Mathematical Modeling	3.0	____
MATH 472	Financial Mathematics	3.0	____
MATH 483	Point - Set Topology	3.0	____
MATH 4___	Topics in _____	____	____
MATH 4___	Topics in _____	____	____
MATH 535	Statistical Methods I	3.0	____
MATH 536	Statistical Methods II	3.0	____
MATH 566	Complex Variables	3.0	____
MATH 592	Graph Theory	3.0	____
MATH ____	_____	___	____
MATH ____	_____	___	____

Selected 500-level MATH courses may be substituted with departmental permission.

REQUIRED RELATED COURSES (18.0-21.0 credits)

Course No.	Short Title	C.H.	Grade
CSCI 161	Intro to Programming I	4.0	____
PHYS 231	Physics I w/Calculus	5.0	____

One of the following options:

a) Three courses (at least 3.0 credits each) chosen from the departments of Biology, Chemistry, Computer Science, Earth Science, and Physics, which count toward the major in that department and to include at least one of: BIOL 375, CSCI 162, ESCI 340, ESCI 341, ESCI 342, or PHYS 232.

--OR--

(b) Four courses (at least 3.0 credits each) chosen from a single department which count toward the major in that department.