MILLERSVILLE UNIVERSITY

Student Name:_____ Student I.D.# _____

DEGREE:	BS	**MAJOR REQUIREMENTS FOR A BS DEGREE IN MATHEMATICS: APPLIED**
MAJOR:	MATH	
OPTION:	APPM	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: **APPLIED MATHEMATICS**
Major Field Requirements: **43.0-44.0 credits**
Other Requirements: **18.0 - 22.0 credits**

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

Course No.	Short Title	C.H.	Grade

REQUIRED MATHEMATICS COURSES (37.0-38.0 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	____
MATH 467	Partial Differential Equations	3.0	____

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

MATHEMATICS ELECTIVES (6.0 credits)

Choose two of the following:

Course No.	Short Title	C.H.	Grade
MATH 370	Operations Research	3.0	____
MATH 471	Mathematical Modeling	3.0	____
MATH 472	Financial Mathematics	3.0	____
MATH 478	Topics in Applied Math	3.0	____

REQUIRED RELATED COURSES (18.0-22.0 credits)

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

Choose one of the following courses:

Course No.	Short Title	C.H.	Grade
PHYS 232	Physics II w/Calculus	5.0	____
ESCI 341**	Atmospheric Thermo	3.0	____
ESCI 342**	Atmospheric Dynamics	3.0	____

Choose two additional 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.

** Note: These courses have a prerequisite of ESCI 241.

RECOMMENDED COURSES

Course No.	Short Title	C.H.	Grade
CSCI 406	Topics in CSCI (FORTRAN)	1.0	____
PHYS 311	Mechanics I ***	3.0	____
PHYS 312	Mechanics II ***	3.0	____

*** Note: These courses have a prerequisite of PHYS 232.

Additional Mathematics or General Electives

____ ____ _____ ____ ____
____ ____ _____ ____ ____
____ ____ _____ ____ ____
____ ____ _____ ____ ____
____ ____ _____ ____ ____