## MILLERSVILLE UNIVERSITY

**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.

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**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.

FALL 2020
MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major:  BS MATHEMATICS
Option:  STATISTICS

Major Field Requirements:  44.0-45.0 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.

Course No. Short Title          C.H.         Grade

REQUA ASD OATS COURSES (34.0-35.0 credits)

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 163 Honors Calculus I may be taken in place of MATH 161.

REQUA ASD OATS - Statistics Option (10.0 credits)

MATH 435  Mathematical Statistics II  3.0  ___
MATH 535  Statistical Methods I      3.0  ___
MATH 536  Statistical Methods II     3.0  ___
MATH 537  Stat Prob Solving Seminar  1.0  ___

Additional Recommended: MATH 370, 422.

REQUIRED RELATED COURSES (18.0-21.0 credits)

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.