

Bachelor of Science (BS)
Degree Code 260*
Concentration Code 260H
Student Name: _____

Program of Study for Mathematical
Sciences Majors
STATISTICS

Date _____

I. GENERAL EDUCATION CURRICULUM 44
Math 1110 will meet the Quantitative Literacy general education requirement.

II. MAJOR REQUIREMENTS (not including 4 s.h. counted in Area I, above)..... 61
2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under II. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

A. Mathematics Common Core (14-15 hours)

- MAT 1110 _____ (4) Calculus with Analytic Geometry I (Pre: MAT 1025 w/min grade C-)
- MAT 1120 _____ (4) Calculus with Analytic Geometry II (Pre: MAT 1110 w/min grade C-)
- MAT 2240 _____ (3) Introduction to Linear Algebra (Pre: MAT 1120)

Choose one:

- MAT 2110 _____ (3) Techniques of Proof (Pre: MAT 1120)
- MAT 2510 _____ (4) Sophomore Honors Seminar (Pre: MAT 1120)

B. General Mathematics Concentration (25-26 hours)

- MAT 2130 _____ (4) Calculus with Analytic Geometry III (Pre: MAT 1120 w/min grade C-)
- MAT 2310 _____ (3) Computational Mathematics (Pre: MAT 1120)
- MAT 3130 _____ (3) Introduction to Differential Equations (Pre: MAT 1120)
- MAT 3220 _____ (3) Introduction to Real Analysis [WID] (Pre: ENG 2001, MAT 2110 or 2510)
- MAT 4310 _____ (3) Numerical Methods (Pre: MAT 2310)

Choose one:

- MAT 4040 _____ (1) Mathematics Capstone [CAP] (Pre: MAT 3110 or 3220; Sr. standing)
- MAT 4510 _____ (1) Senior Honors Thesis [CAP] (Pre: MAT 3510; 3.45+ GPA in math)

6-9 hours of approved electives** in mathematical sciences to bring total hrs in AREA II to 65 (3 hours must be at 4000 level)

C. Statistics Concentration (25 hours)

- STT 3850 _____ (4) Statistical Data Analysis I (Pre: MAT 1110)
- STT 3851 _____ (3) Statistical Data Analysis II [WID] (Pre: ENG 2001, STT 3850)
- STT 4860 _____ (3) Probability Models & Statistical Inference I (Pre: MAT 2130)
- STT 4865 _____ (3) Statistical Inference II (Pre: STT 4860)

3 hours of approved statistics electives** at or above STT 3830 (excluding STT 4811 and 4812)

9 hours of approved electives** in related coursework which may include courses from outside mathematical sciences

**Must be approved by advisory committee.

III. MINOR (optional)

Student Signature: _____ Advisor Signature: _____ Chairperson Signature: _____ Date: _____ Date Sent to Dean's Office: _____
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IV. ELECTIVES (taken to total 122 hours for the degree) 17
2 semester hours of free electives must be outside the major discipline. 122