

2013-2014

Bachelor of Arts (BA)  
Degree Code 261A

Program of Study for Mathematical  
Sciences Majors

**I. GENERAL EDUCATION CURRICULUM .....44**

Math 1110 will count toward Quantitative Literacy general education requirement.

**II. LANGUAGE (Completion of 6 semester hours at the \*intermediate level, or higher) .....6**

\_\_\_\_\_1040 \_\_\_\_\_ and 1050 \_\_\_\_\_ or 1060 \_\_\_\_\_; or higher level courses \_\_\_\_\_

*\*NOTE: Language 1010 and 1020 (or 1030) are prerequisites for the intermediate level courses.  
FL 1050 or 1060 may be used in General Education Perspectives depending upon choices*

**III. MAJOR REQUIREMENTS (not including 4 s.h. counted in Area I, above).....31**

**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 III. No more than 46 semester hours of Mathematics courses may be counted toward the BA Degree.**

**1. Mathematics Major Requirements: (25-28 s.h.)**

- 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 2130 \_\_\_\_\_ (4) Calculus with Analytic Geometry III (Pre: MAT 1120 w/min grade C-)
- MAT 2240 \_\_\_\_\_ (3) Introduction to Linear Algebra (Pre: MAT 1120)
- MAT 3110 \_\_\_\_\_ (3) Introduction to Modern Algebra [WID] (Pre: ENG 2001, MAT 2110 or 2510; Co: 2240)
- MAT 3220 \_\_\_\_\_ (3) Introduction to Real Analysis I [WID] (Pre: ENG 2001, MAT 2110 or 2510)

**Choose one CAP:**

- MAT 4040 \_\_\_\_\_ (1) Mathematics Capstone [CAP] (Pre: MAT 3110 or 3220; Sr. standing)
- MAT 4510 \_\_\_\_\_ (3) Senior Honors Thesis [CAP] (Pre: MAT 3510; 3.45+ GPA In math)

**Choose one:**

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

**2. Mathematics Elective Requirements: (7-10 s.h. to bring total hours in AREA III to 35 hours)**

7-10 semester hours electives at the 2000 level or above (5 semester hours must be from the 4000 level)

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**IV. MINOR REQUIRED.....12-20**

Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian.

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Student Signature: _____
Advisor Signature: _____
Chairperson Signature: _____
Date: _____ Date Sent to Dean's Office _____

**V. ELECTIVES (taken to total 122 hours for the degree).....21-29**

2 semester hours of free electives must be outside the major discipline.

**122**