Bachelor of Science (BS) Non-Teaching   Program of Study for Mathematical Sciences Majors
Degree Code 106A   ACTUARIAL SCIENCES
Student Name: _____   Date_____

I.   **GENERAL EDUCATION CURRICULUM** **44**
  Math 1110 will count toward Quantitative Literacy Gen Ed requirement. ECO 2030 will count towards Gen Ed perspectives, depending on choices.

II. **MAJOR REQUIREMENTS** (not including 4 s.h. counted in Area I, above)**..65**
  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.** Course requirements for the Bachelor of Science degree in actuarial sciences are as follows (with program subject to the approval of the advisory committee). An acceptable program consists of at least 69 semester hours but no more than 80, with a minimum of 33 hours in the Department of Mathematical Sciences.

A.   **Mathematics – 37 s.h.**

MAT 1110	_____	(4)	Calculus w/ Analytic Geometry I *(Pre: MAT 1025 w/min grade C-)*
MAT 1120	_____	(4)	Calculus w/ Analytic Geometry II *(Pre: MAT 1110 w/min grade C-)*
MAT 2130	_____	(4)	Calculus w/ Analytic Geometry III *(Pre: MAT 1120 w/min grade C-)*
MAT 2240	_____	(3)	Introduction to Linear Algebra *(Pre: MAT 1120)*
MAT 3330	_____	(3)	Financial Mathematics *(Pre: MAT 1120)*
MAT 4330	_____	(3)	Senior Seminar in Actuarial Sciences **[CAP]** *(Pre: MAT 3330; Co: STT 4865)*
STT 3850	_____	(4)	Statistical Data Analysis I *(Pre: MAT 1110)*
STT 3851	_____	(3)	Statistical Data Analysis II **[WID]** *(Pre: ENG 2001; STT 3850)*
STT 4840	_____	(3)	Forecasting & Time Series *(Pre: STT 3851; MAT 2240)*
STT 4860	_____	(3)	Probability Models & Statistical Inference I *(Pre: MAT 2130)*
STT 4865	_____	(3)	Statistical Inference II *(Pre: STT 4860)*

B.   **Business – 30 s.h.**

ACC 2100	_____	(3)	Principles of Accounting I *(Pre: 24 sh college credit)*
ECO 2030	_____	(3)	Principles of Economic – Price Theory
ECO 2040	_____	(3)	Principles of Economics – Macro *(Pre: ECO 2030)*
FIN 3071	_____	(3)	Principles of Risk Management and Insurance
FIN 3072	_____	(3)	Personal Insurance *(Pre: ECO 3071)*
FIN 3680	_____	(3)	Introduction to Finance *(Pre: ACC 2100; MAT 1030 or 1110)*
FIN 3690	_____	(3)	Financial Management *(Pre: FIN 3680)*
FIN 3890	_____	(3)	Survey of Investments *(Pre: FIN 3680)*
FIN 4770	_____	(3)	Derivatives & Financial Risk Management *(Pre: FIN 3890)*
LAW 2150	_____	(3)	Legal Environment of Business

C. Electives – 2 s.h.
Two hours of approved electives** in Mathematical Sciences or Business (no more than 6 additional elective hours can be taken in Business).

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**Must be approved by advisory committee.

III. **MINOR (optional)**

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

IV. **ELECTIVES (taken to total 122 hours for the degree)**...**13**
  2 semester hours of free electives must be outside the major discipline.   **122**