BS, Actuarial Sciences, 106A **Appalachian State University** College of Arts and Sciences **Department of Mathematical Sciences** Program of Study 2015-2016

Universal General Education Transfer Component (UGETC)								
English Composition (6 SCH) The following two English composition courses are required.								
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
ENG 111	Expository Writing	3	None	RC 1000	3	Required		
ENG 112	Argument-Based Research	3	ENG 111	RC 2001	3	Required		
Total Credit Hours Requir	ed	6			6			
Humanities/Fine Arts (6 S Prefix	1	Credit Hours	Pre-requisites	Students will select two courses from at least two different disciplines:	Credit Hours	Required or Preferred by Major	Natas	
ART 111	Course Name Art Appreciation	Credit Hours	None Pre-requisites	University Course Equivalent ART 2011	credit Hours	Required of Preferred by Major	Notes	
ART 111 ART 114	Art History Survey I	3	None	ART 2011 ART 2030	3			
ART 115	Art History Survey II	3	None	ART 2130	3			
COM 231	Public Speaking	3	None	COM 2101	3			
ENG 231	American Literature I	3	ENG 112, 113 or 114	ENG 2350	3			
ENG 232	American Literature II		ENG 112, 113 or 114	ENG 2350	3			
MUS 110	Music Appreciation		None	MUS 2011	3			
MUS 112	Introduction to Jazz		None	MUS 2014	3			
PHI 215	Philosophical Issues		ENG 111	PHL Elective	3			
PHI 240	Introduction to Ethics		ENG 111	PHL 2000	3			
Total Credit Hours Requir	ed	6			9			
Social /Behavioral Science	(C SCH)			Charles will release have account from at least true different disciplines.				
· ·	, , ,	0 - 12 11		Students will select two courses from at least two different disciplines:		Descriped as Desferred by Mains	No.	
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent ECO 2030	Credit Hours	Required or Preferred by Major	Notes	
ECO 251	Principles of Microeconomics		None None		3	Required		
ECO 252 HIS 111	Principles of Macroeconomics World Civilizations I		None	ECO 2040 His 1101	3	Required		
HIS 112	World Civilizations I		None	HIS 1101	3			
HIS 131	American History I		None	HIS 1200	3			
HIS 132	American History II		None	HIS 1200	3			
PSY 150	General Psychology		None	PSY 1200	3			
POL 120	American Government		None	P S 1100	3			
SOC 210	Introduction to Sociology		None	SOC 1000	3			
Total Credit Hours Requir		6		300 1000	6			
Mathematics (8 SCH)				Students will select two course from the following:				
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
MAT 171	Precalculus Algebra		None	MAT 1020	4			
MAT 172	Precalculus Trigonometry		MAT 171	GEP MAT	4			
MATH 263	Brief Calculus		MAT 171	MAT 1030	4			
MATH 271	Calculus I		MAT 172	MAT 1110	4	Required		
Total Credit Hours Requir	ea .	8			8			
Natural Sciences (8 SCH) Students will select 8 SCH from the following courses:								
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
AST 151/151A	General Astronomy I and lab I		None	AST 1001	4	-	-	
BIO 110	Principles of Biology		None	BIO 1201/BIO 1204	4			
BIO 111	General Biology I		None	BIO 1201/BIO 1204	4		must take both BIO 111 and BIO 112	
BIO 112	General Biology II		BIO 111	BIO 1202/BIO 1205	4		must take both BIO 111 and BIO 112	
CHM 151	General Chemistry I		None	CHE 1101/CHE 1110	4		must take both CHM 151 and CHM 152	
CHM 152	General Chemistry II		CHM 151	CHE 1102/CHE 1120	4		must take both CHM 151 and CHM 152	
GEL 111	Introduction Geology		None	GLY 1101	4			
PHY 110/110A	Conceptual Physics and Lab		None	PHY 1100	4		must take course with lab	
PHY 151	College Physics I		MAT 171	PHY 1103	4		must take PHY 151 and PHY 152	
PHY 152	College Physics II		PHY 151	PHY 1104	4		must take PHY 151 and PHY 152	
PHY 251	General Physics I		MAT 271	PHY 1150	4		must take PHY 251 and PHY 252	
PHY 252	General Physics II			PHY 1151	4		must take PHY 251 and PHY 252	
Total Credit Hours Requir	ed	8			8			

Total UGETC Hours 34 34

Additional General Education Courses (11-12 SHC): These courses must be classified as UGETC or general education within the CAA.								
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Category	Notes	
MAT 272	Calculus II	4	MAT 271	MAT 1120	4	GEC	Required for major	
UGETC/GEC		3			3	UGETC/GEC		
UGETC/GEC		3			3	UGETC/GEC		
UGETC/GEC		3			3	UGETC/GEC		
Total Credit Hours Required								

Total General Education Hours Required

46

46

Other REQUIRED HOURS (14-15 SHC): These courses must be classified as pre-major, elective or general education within the CAA.								
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Category	Notes	
ACA 122	College Transfer Success	1	None		1	GEC	required by CAA	
MAT 273	Calculus III	4	MAT 272	MAT 2130	4	GEC	Required by major	
ACC 120	Principals of Financial Accounting	3		ACC 2100	3	Pre-Major	Required by major	
BUS 115	Business Law	3		LAW 2150	3	Pre-Major	Required by major	
Pre-Major/Elective/GEC		3			3	Pre-Major/GEC/Elective		

Other Required Hours (15-16 SCH)

14

14

Total Semester Credit Hours in Program: 60

3rd - 4th Year	Plan: BS, Actuarial Science				A contract with a list of the
Semester	Course	Hours	Notes		approved Math elective course
SU	MAT 2240 Introduction to Linear Algebra	3	If taken at community college, take Free Elective		MUST be filed with the College
SU	MAT 2130 Calculus III	4	If taken at community college, take Free Elective	7	of Arts & Sciences Dean's Office
5	MAT 3330 Financial Mathematics	3	Major Requirement		no later than the end of the first
5	STT 3850 Data Analysis I	4	Major Requirement		semester of junior year.
5	FIN 3680 Intro to Finance	3	Major Requirement		II
5	MAT 3540 Financial Derivatives	1	Major Requirement		Residency Requirements:
5	Free Elective	3	Major Requirement	14	
6	STT 3851 Data Analysis II	3	Major Requirement		o 31 hours overall must be
6	FIN 3100 Principals of Risk Management & Ins.	3	Major Requirement		from ASU
6	MAT 3541 Topics In FM	1	Major Requirement		o 18 hours in the major
6	MAT Approved Elective	3	Major Requirement		must be from ASU
6	Free Elective	3	Major Requirement	13	o 9 hours in the minor
7	STT 3250 Fundamentals of Probability	3	Major Requirement		must be from ASU
7	STT 4840 Time Series and Forecasting	3	Major Requirement		o Final 30 hours must be
7	FIN 3690 Financial Management	3	Major Requirement		courses taken through
7	MAT Approved Elective	3	Major Requirement		ASU (includes
7	Free Elective	3	Major Requirement	15	internships, study abroad
8	FIN 3890 Survey of Investments	3	Major Requirement		taken through ASU)
8	FIN 4770 Derivatives and Financial Risk	3	Major Requirement		
8	MAT 3340 Actuarial Models	3	Major Requirement		
8	MAT 4430 Senior Seminar	3	CAPSTONE		
8	Free Elective	1	Take enough electives to reach 122 hours required for graduation	13	ll .
				62	
				60 transfer hours	ll .
				122 hours for graduation	ll .

- If Calculus II (MAT 272) is not offered at the community college attending, it is recommended that students transfer after completing 30 hours of coursework.
 Many summer courses are offered. Students are encouraged to take summer classes, when available, to ensure completion of degree in a timely manner and so not to overload semesters.