BS, Mathematics, Business, 260D **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 Requi	ed	. 6	;		6			
Hamanitias/Fina Anta (C.)								
Humanities/Fine Arts (6 S	Course Name	Credit Hours	Pre-requisites	Students will select two courses from at least two different disciplines: University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
ART 111	Art Appreciation		None Pre-requisites	ART 2011	Credit Hours	Required or Preferred by Major	Notes	
ART 111	Art History Survey I	3	None None	ART 2030	3			
ART 115	Art History Survey II		None 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	3	ENG 112, 113 or 114	ENG 2350	3			
MUS 110	Music Appreciation	3	None	MUS 2011	3			
MUS 112	Introduction to Jazz	3	None	MUS 2014	3			
PHI 215	Philosophical Issues	3	ENG 111	PHL Elective	3			
PHI 240	Introduction to Ethics	3	ENG 111	PHL 2000	3			
Total Credit Hours Requi	ed		5		9			
Social /Behavioral Science	(6 SCH)			Students will select two courses from at least two different disciplines:				
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
ECO 251	Principles of Microeconomics		None	ECO 2030	3	Required of Freience by Wajor	Notes	
ECO 252	Principles of Macroeconomics		None	ECO 2040	3			
HIS 111	World Civilizations I	3	None	His 1101	3			
HIS 112	World Civilizations II	3	None	HIS 1102	3			
HIS 131	American History I	3	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	3	None	P S 1100	3			
SOC 210	Introduction to Sociology	3	None	SOC 1000	3			
Total Credit Hours Requi	ed	6	j		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	nequired <u>or</u> received by major	notes	
MAT 172	Precalculus Trigonometry		MAT 171	MAT 1025	4			
MATH 263	Brief Calculus		MAT 171	MAT 1030	4			
MATH 271	Calculus I		MAT 172	MAT 1110	4			
Total Credit Hours Requi		8			8		•	
Not and Colores (O.COM)				Charles to the Court of the Cou				
Natural Sciences (8 SCH) Prefix	Course Name	Credit Hours	Pre-requisites	Students will select 8 SCH from the following courses: University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes	
AST 151/151A	General Astronomy I and lab I		None Pre-requisites	AST 1001	A Credit Hours	required or Freierred by Major	Notes	
BIO 110	Principles of Biology	1	None	BIO 1201/BIO 1204	4			
BIO 111	General Biology I	1 4	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	1 4	CHM 151	CHE 1102/CHE 1120	4		must take both CHM 151 and CHM 152	
GEL 111	Introduction Geology	4	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	4	MAT 271	PHY 1150	4		must take PHY 251 and PHY 252	
PHY 252	General Physics II	4	MAT 272 <u>and</u> PHY 251	PHY 1151	4		must take PHY 251 and PHY 252	
Total Credit Hours Requi	ed	8	1		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	3	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 13 13							

Total General Education Hours Required

47

47

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
MAT 280	Linear Algebra	3	MAT 271	MAT 2240	3	Pre-Major	Required by major
MAT 285	Differential equations	3	MAT 272	MAT 3130	3	Pre-Major	Required by major
Pre-Major/GEC/Elective		3			3	Pre-Major/GEC/Elective	

Other Required Hours (15-16 SCH)

14

14

Total Semester Credit Hours in Program: 61

3rd - 4th Yea	ar Plan: Mathematics, Business			
Semester	Course	Hours	Notes	
SU	MAT 2130 Calculus III	4	If taken at community college, start coursework in the fall	
SU	MAT 2240 Linear Algebra	3	If taken at community college, start coursework in the fall	
SU	MAT 3130 Differential Equations	3	If taken at community college, start coursework in the fall	10
5	MAT 2110 Techniques of Proofs	3	Major Requirement	
5	MAT or STT Approved Elective 1	3	Major Requirement	
5	Business Concentration course 1	3	Major Requirement	
5	Business Concentration course 2	3	Major Requirement	
5	Free Elective	3		15
6	STT 3850 Statistical Data Analysis	4	Major Requirement	
5	MAT 3110 Intro to Modern Algebra	3	Writing in the Discipline	
6	Business Concentration course 3	3	Major Requirement	
6	MAT or Business Elective	3	Major Requirement	
6	MAT or STT Elective 2	3	Major Requirement	16
7	Business Concentration course 4	3	Major Requirement	
7	Business Concentration course 5	3	Major Requirement	
7	MAT or STT (4000 level) Elective 3	3	Major Requirement	
7	MAT or STT (4000 level) Elective 4	3	Major Requirement	
7	Free Elective	3		15
8	MAT 4040	1	CAPSTONE	
8	Business Concentration course 6	3	Major Requirement	
8	Business Concentration course 7	3	Major Requirement	
8	MAT or STT elective 5	3	Major Requirement	
8	Free Elective	3	Take enough free electives to reach 122 hours required for graduation	13
		_		61-69
				61 transfer hours
				122-130 hours for graduation

- 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.
 A contract with a list of the approved courses MUST be filed with the College of Arts & Sciences Dean's Office no later than the end of the first semester of junior year.

Residency Requirements:

- 31 hours must be from ASU
- 18 hours in the major must be from ASU
- 9 hours in the minor must be from ASU
- Final 30 hours must be courses taken through ASU (includes internships, study abroad taken through ASU)