Appalachian State University College of Arts & Sciences Department of Chemistry
Program of Study

2015-2016							
2015-2016		1.1.	niversal Cana	val Education Transfer Component /IIC	CTC\		
		U	niversai Gene	ral Education Transfer Component (UG	ETC)		
English Composition (6 SC	·H)			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		None	RC 1000	3	Required	11000
ENG 112	Argument-Based Research		ENG 111	RC 2001	3	Required	
Total Credit Hours Requir	ŭ	6			6		!
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Humanities/Fine Arts (6 S		6	B	Students will select two courses from at least two different discipline		Barrian day Barfarradha Mailea	Notes
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required <u>or</u> Preferred by Major	Notes
ART 111	Art Appreciation		None	ART 2011	3		
ART 114	Art History Survey I		None	ART 2030 ART 2130	3		
ART 115	Art History Survey II		None		3		
COM 231	Public Speaking		None	COM 2101	3		
ENG 231	American Literature I		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	ea	6			9		
Social /Behavioral Science	e (6 SCH)			Students will select two courses from at least two different discipline	es:		
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes
ECO 251	Principles of Microeconomics	3	None	ECO 2030	3		
ECO 252	Principles of Macroeconomics	3	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	3	None	HIS 1200	3		
PSY 150	General Psychology	3	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 Requir	ed	6			6		
Marthamatica (O.CCU)				Chindren will release to the second from the fellowing.			
Mathematics (8 SCH)	Course Norse	Credit Hours	Due menutatas	Students will select two course from the following:	Credit Hours	Required or Preferred by Major	Natas
Prefix MAT 171	Course Name Precalculus Algebra		Pre-requisites None	University Course Equivalent  MAT 1020	Credit Hours	Required or Preferred by Major	Notes
MAT 171	Precalculus Trigonometry		MAT 171	GEP MAT	4		
MATH 263	Brief Calculus		MAT 171	MAT 1030	4		
MATH 203	Calculus I		MAT 172	MAT 1110	4	Required	
Total Credit Hours Requir		8		INAT 1110	8	Required	
Total create flours negali							
Natural Sciences (8 SCH)				Students will select <u>8 SCH</u> 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	Required	must take both CHM 151 and CHM 152
CHM 152	General Chemistry II		CHM 151	CHE 1102/CHE 1120	4	Required	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	4	MAT 272 <u>and</u> PHY 251	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
PHY 251	General Physics I	4	MAT 271	PHY 1150	4	UGETC	Required for major
MAT 272	Calculus II	4	MAT 271	MAT 1120	4	GEC	Required for major
UGETC/GEC		3			3	UGETC/GEC	
UGETC/GEC		2			2	UGETC/GEC	
<b>Total Credit Hours Requir</b>	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	<b>Credit Hours</b>	Pre-requisites	University Course Equivalent	<b>Credit Hours</b>	Category	Notes
ACA 122	College Transfer Success	1	None		1	GEC	required by CAA
PHY 252	General Physics II	4	MAT 272 & PHY 251	PHY 1151	4	UGETC	Required for major
Pre-Major/GEC/Elective	1	3			4	Pre-Major/GEC/Elective	
Pre-Major/GEC/Elective		3			3	Pre-Major/GEC/Elective	
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**

• Degree requires both Physics and Chemistry sequences and will serve as prerequisites for future coursework.

Semester	Course	Hours	Notes	
·	CHE 2201 & 2203 Organic Chemistry I	110013	Major Requirement	1
	CHE 2210 & 2211 Quantitative Analysis	4	Chemistry Elective Course 1	
	•	4	CHE 4580 recommended	
	Individually Designed Course 1	3		1.4
	Individually Designed Course 2	3	Major Requirement	14
	CHE 2202 & 2204 Organic Chemistry II	4	AST, BIO, GLY, OR PHY, Except 1000-level Physics or PHY 3350	
	Chemistry Elective Course 2	3	CHE 4580 recommended	
	Individually Designed Course 3	3	Major Requirement	
	Individually Designed Course 4	3	Major Requirement	
	Free Elective	3		16
	CHE 3301 & 3303 Physical Chemistry I	4	Offered Fall semester only - Writing in the Discipline	
	CHE 3000 Introduction to Chemical Research	1	Major Requirement	
	Other Science Course 1	3	AST, BIO, GLY, OR PHY, Except 1000-level Physics or PHY 3350	
	Individually Designed Course 5	3	Major Requirement	
	Individually Designed Course 6	3	Major Requirement	
	Free Elective	3		17
	CHE 3404 Inorganic Chemistry	3	Major Requirement	1
	CHE 4000 Chemistry Seminar	1	CAPSTONE	
	Other Science Course 2	3	Major Requirement	
	Free Elective	3	•	
	Free Elective	4	Take enough Free Electives to reach 122 hours	14
			-	61
				61 transfer hours
				122 hours for graduation

- The Individually Designed concentration requires approval from the department chairperson.
- A contract for the Individually Designed concentration must be on file with the dean's office before a senior check or graduation check-out can be done.

## Residency Requirements:

- 31 hours overall 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)