

### Universal General Education Transfer Component (UGETC)

English Composition (6 SCH)			The following <u>two</u> 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	
<b>Total Credit Hours Required</b>		<b>6</b>			<b>6</b>		

Humanities/Fine Arts (6 SCH)			Students will select <u>two</u> 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
ART 111	Art Appreciation	3	None	ART 2011	3		
ART 114	Art History Survey I	3	None	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	3	ENG 112, 113 or 114	ENG 2350	3		
ENG 241	British Lit II	3	ENG 112, 113 or 114	ENG 2050	3		
ENG 242	British Lit I	3	ENG 112, 113 or 114	ENG 2050	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		
<b>Total Credit Hours Required</b>		<b>6</b>			<b>9</b>		

Social /Behavioral Science (6 SCH)			Students will select <u>two</u> 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	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		
<b>Total Credit Hours Required</b>		<b>6</b>			<b>6</b>		

Mathematics (8 SCH)			Students will select <u>two</u> 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	4	None	MAT 1020	4		
MAT 172	Precalculus Trigonometry	4	MAT 171	GEP MAT	4		
MAT 263	Brief Calculus	4	MAT 171	MAT 1035	4		
MAT 271	Calculus I	4	MAT 172	MAT 1110	4	Required	
MAT 272	Calculus II	4	MAT 271	MAT 1120	4		
<b>Total Credit Hours Required</b>		<b>8</b>			<b>8</b>		

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	4	None	AST 1001	4		
BIO 110	Principles of Biology	4	None	BIO 1201/BIO 1204	4		
BIO 111	General Biology I	4	None	BIO 1201/BIO 1204	4		must take both BIO 111 and BIO 112
BIO 112	General Biology II	4	BIO 111	BIO 1202/BIO 1205	4		must take both BIO 111 and BIO 112
CHM 151	General Chemistry I	4	None	CHE 1101/CHE 1110	4	Required	must take both CHM 151 and CHM 152
CHM 152	General Chemistry II	4	CHM 151	CHE 1102/CHE 1120	4	Required	must take both CHM 151 and CHM 152
GEL 111	Introduction Geology	4	None	GLY 1101	4		
PHY 110/110A	Conceptual Physics and Lab	4	None	PHY 1100	4		must take course with lab
PHY 151	College Physics I	4	MAT 171	PHY 1103	4		must take PHY 151 and PHY 152
PHY 152	College Physics II	4	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 <i>and</i> PHY 251	PHY 1151	4		must take PHY 251 and PHY 252
<b>Total Credit Hours Required</b>		<b>8</b>			<b>8</b>		

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
UGETC/GEC	Calculus II	3			3	UGETC/GEC	
UGETC/GEC		3			3	UGETC/GEC	
UGETC/GEC		3			2	UGETC/GEC	
<b>Total Credit Hours Required</b>		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
PHY 252	General Physics II	4	MAT 272 & PHY 251	PHY 1151	4	UGETC	Required for major
Pre-Major/GEC/Elective		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.

**3rd - 4th Year Plan: BS, Chemistry, Individually Designed**

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