BS, Fermentation Sciences, 118A Appalachian State University College of Arts & Sciences Fermentation Sciences Program Programs of Study 2016-2017

Universal General Education Transfer Component (UGETC)

English Composition (6 SCH)			The following two English composition courses are requ	ired.		
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes
NG 111	Expository Writing		None	RC 1000	3	Required	
NG 112	Argument-Based Research		ENG 111	RC 2001	3	Required	
otal Credit Hours Rec				10 2001	6		
umanities/Fine Arts			•	Students will select two courses from at least two differ			1
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required <u>or</u> Preferred by Major	Notes
RT 111	Art Appreciation		None	ART 2011	3		
RT 114	Art History Survey I	3	None	ART 2030	3		
RT 115	Art History Survey II	3	None	ART 2130	3		
OM 231	Public Speaking	3	None	COM 2101	3		
NG 231	American Literature I	3	ENG 112, 113 or 114	ENG 2350	3		
NG 232	American Literature II	3	ENG 112, 113 or 114	ENG 2350	3		
NG 241	British Literature I	3	ENG 112, 113 or 114	ENG 2050	3		
NG 242	British Literature II		ENG 112, 113 or 114	ENG 2050	3		
US 110	Music Appreciation		None	MUS 2011	3		
IUS 112	Introduction to Jazz		None	MUS 2014	3		
HI 215	Philosophical Issues		ENG 111	PHL Elective	3		
HI 240	Introduction to Ethics	3	ENG 111	PHL 2000	3		
otal Credit Hours Rec	quired	(9		
cial /Behavioral Scie	ence (6 SCH)			Students will select two courses from at least two differ	rent disciplines:		
Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes
00 251	Principles of Microeconomics		None	ECO 2030	3	Required	
CO 252	Principles of Macroeconomics		None	ECO 2040	3	- 1	
IS 111	World Civilizations I		None	HIS 1101	3		
IS 112	World Civilizations II		None	HIS 1102	3		
IS 131	American History I		None	HIS 1200	3		
IS 132	American History II		None	HIS 1200	3		
SY 150	General Psychology		None	PSY 1200	3		
OL 120	American Government		None	P S 1100	3		
OC 210	Introduction to Sociology		None	SOC 1000	3		
otal Credit Hours Red					6		
lathematics (8 SCH) Prefix	Course Name	Credit Hours	Pre-requisites	Students will select two course from the following:	Credit Hours	Required or Preferred by Major	Notes
IAT 171	Precalculus Algebra		None Pre-requisites	University Course Equivalent MAT 1020	Credit Hours	Required of Preferred by Wajor	Notes
1AT 172	Precalculus Trigonometry		MAT 171	GEP MAT	4		
1ATH 263	Brief Calculus		MAT 171	MAT 1030	4		1
ATH 271	Calculus I		MAT 172	MAT 1110	4	Required	
IATH 271	Calculus II		MAT 271	MAT 1120	1	Required	
otal Credit Hours Rec				MAT 1120	8		
atural Sciences (8 SC	•	Cradit U	Dro requisits -	Students will select 8 SCH from the following courses:	Cradit Us	Descrived or Dreferred by \$4-1	Notes
atural Sciences (8 SC Prefix	Course Name	Credit Hours	Pre-requisites	University Course Equivalent	Credit Hours	Required or Preferred by Major	Notes
atural Sciences (8 SC Prefix ST 151/151A	Course Name General Astronomy I and lab I	4	None	University Course Equivalent AST 1001	Credit Hours	Required <u>or</u> Preferred by Major	Notes
Prefix ST 151/151A	Course Name General Astronomy I and lab I Principles of Biology	4	None None	University Course Equivalent AST 1001 BIO 1201/BIO 1204	Credit Hours	Required <u>or</u> Preferred by Major	
Prefix 5T 151/151A 0 110 0 111	Course Name General Astronomy I and lab I Principles of Biology General Biology I	4	None None None	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204	Credit Hours 4 4	Required <u>or</u> Preferred by Major	must take both BIO 111 and BIO 112
Prefix 57 151/151A 0 110 0 111 0 112	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology II	4	None None BIO 111	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204 BIO 1202/BIO 1205	Credit Hours 4 4 4 4		must take both BIO 111 and BIO 112 must take both BIO 111 and BIO 112
atural Sciences (8 SC Prefix 5T 151/151A 0 110 0 111 0 112 HM 151	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology II General Chemistry I	4 4 4	None None None BIO 111	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204 BIO 1202/BIO 1205 CHE 1101/CHE 1110	4 4 4 4 4	Required	must take both BIO 111 and BIO 112 must take both BIO 111 and BIO 112 must take both CHM 151 and CHM 1
atural Sciences (8 SC Prefix ST 151/151A O 110 O 111 O 112 HM 151 HM 152	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology I General Chemistry I General Chemistry II	4 4 4	None None None BIO 111 None CHM 151	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204 BIO 1202/BIO 1205 CHE 1101/CHE 1110 CHE 1101/CHE 1120	Credit Hours		
atural Sciences (8 SC Prefix ST 151/151A O 110 O 111 O 112 HM 151 HM 152 EL 111	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology II General Chemistry I General Chemistry II Introduction Geology	4	None None BIO 111 None CHM 151 None	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204 BIO 1202/BIO 1205 CHE 1101/CHE 1110 CHE 1102/CHE 1120 GIV 1101	4 4 4 4 4	Required	must take both BIO 111 and BIO 112 must take both BIO 111 and BIO 112 must take both CHM 151 and CHM 1 must take both CHM 151 and CHM 1
atural Sciences (8 SC Prefix ST 151/151A O 110 O 111 O 112 HM 151 HM 152 EL 111 HY 110/110A	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology II General Chemistry I General Chemistry II Introduction Geology Conceptual Physics and Lab	4 4 4	None None None BiO 111 None CHM 151 None None	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204 BIO 1202/BIO 1205 CHE 1101/CHE 1110 CHE 1102/CHE 1120 GIV 1101 PHY 1100	4 4 4 4 4 4 4	Required	must take both BIO 111 and BIO 112 must take both BIO 111 and BIO 112 must take both CHM 151 and CHM 3 must take both CHM 151 and CHM 3 must take course with lab
Atural Sciences (8 SC Prefix Prefix ST 151/151A O 110 O 111 O 112 HM 151 HM 152 EL 111 HM 152 FL 111 HM 152 FL 111 HM 151 HM 151 HM 151 HM 151 HM 151 HM 151 HM 152 FL 111 HM 151 HM 151 HM 152 FL 111 HM 151 HM 151 HM 151 HM 151 HM 151 HM 151 HM 152 FL 111	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology II General Chemistry II General Chemistry II Introduction Geology Conceptual Physics and Lab College Physics I	4 4 4 4 4 4 4	None None None BIO 111 None CHM 151 None None MAT 171	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204 BIO 1202/BIO 1205 CHE 1101/CHE 1110 CHE 1102/CHE 1120 GIY 1101 PHY 1100 PHY 1103	4 4 4 4 4 4 4 4 4	Required	must take both BIO 111 and BIO 112 must take both BIO 111 and BIO 112 must take both CHM 151 and CHM must take both CHM 151 and CHM must take both CHM 151 and CHM must take course with lab must take PHY 151 and PHY 152
atural Sciences (8 SC Prefix ST 151/151A O 1110 O 111 O 112 HM 151 HM 152 EL 111 YF 110/110A HY 151 HY 151	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology II General Chemistry I General Chemistry II Introduction Geology Conceptual Physics and Lab College Physics I College Physics II	4 4 4 4 4 4 4	None None None BIO 111 None CHM 151 None None MAT 171 PHY 151	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204 BIO 1202/BIO 1205 CHE 1101/CHE 1110 CHE 1101/CHE 1120 GLY 1101 PHY 1100 PHY 1103 PHY 1103 PHY 1104	4 4 4 4 4 4 4	Required	must take both BIO 111 and BIO 112 must take both BIO 111 and BIO 112 must take both CHM 151 and CHM must take both CHM 151 and CHM must take both CHM 151 and CHM must take course with lab must take PHY 151 and PHY 152 must take PHY 151 and PHY 152
estural Sciences (8 SC Prefix Frefix ST 151/151A OO 1110 OO 1111 OO 1112 OO 112	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology II General Chemistry I General Chemistry II Introduction Geology Conceptual Physics and Lab College Physics I College Physics I General Physics I	4 4 4 4 4 4 4 4 4 4 4 4	None None None BIO 111 None CHM 151 None None None None MAT 171 PHY 151 MAT 271	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1205 CHE 1101/CHE 1110 CHE 1102/CHE 1120 GIV 1101 PHY 1100 PHY 1103 PHY 1104 PHY 1150	4 4 4 4 4 4 4 4 4	Required	must take both BIO 111 and BIO 112 must take both BIO 111 and BIO 112 must take both CHM 151 and CHM must take both CHM 151 and CHM must take both CHM 151 and CHM must take course with lab must take PHY 151 and PHY 152 must take PHY 151 and PHY 152 must take PHY 251 and PHY 252
retural Sciences (8 SC Prefix T 151/151A D 110 D 111 D 112 MM 151 MM 152 EL 111 IY 110/110A IY 151 IY 151	Course Name General Astronomy I and lab I Principles of Biology General Biology I General Biology II General Chemistry I General Chemistry II Introduction Geology Conceptual Physics and Lab College Physics II General Physics II General Physics I General Physics II	4 4 4 4 4 4 4 4 4 4 4 4	None None None BIO 111 None CHM 151 None None MAT 171 PHY 151	University Course Equivalent AST 1001 BIO 1201/BIO 1204 BIO 1201/BIO 1204 BIO 1202/BIO 1205 CHE 1101/CHE 1110 CHE 1101/CHE 1120 GLY 1101 PHY 1100 PHY 1103 PHY 1103 PHY 1104	4 4 4 4 4 4 4 4 4	Required	must take both BIO 111 and BIO 112 must take both BIO 111 and BIO 112 must take both CHM 151 and CHM must take both CHM 151 and CHM must take both CHM 151 and CHM must take course with lab must take PHY 151 and PHY 152 must take PHY 151 and PHY 152

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		Notes
MAT 152	Statistics	4		STT 2810	4	UGETC	Required by major
BIO 111	General Biology I	4		BIO 1801	4	UGETC	
UGETC/GEC		3			3	UGETC/GEC	
UGETC/GEC		3			3	UGETC/GEC	
Total Credit Hours Requir	otal Credit Hours Required 14 14						

Total General Education Hours Required

48

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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
BUS 110	Introduction to Business	3		BUS 1050	3	Pre-Major	Required by major
ACC 120	Principals of Financial Accounting	3		ACC 2110 (will satisfy ACC 1050 required for major)	3	Pre-Major	Required by major
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)

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Total Semester Credit Hours in Program: 61

	ar Plan: BS, Fermentation Sciences			
Semester	Course	Hours	Notes	
SU	BIO 2600 Cell Biology	3	Major Requirement	3
5	FER 1000 Principals of Fermentation Science	3	Major Requirement	
5	FER 2000 Social Implications of Fermented Beverages	3	Major Requirement	
5	CHE 2101 & 2102 Fundamentals of Organic Chemistry & Lab	4	Major Requirement	
5	NUT 1202 Basic Food Science	3	Major Requirement	
5	ENG 3090 OR ENG 3100	3	Prerequisite for ENG 3700	16
;	CHE 2210 & 2211 Quantitative Analysis & Lab	4	Major Requirement	
5	BIO 3308 Microbiology	4	Major Requirement	
5	ENG 3700 Technical Writing	3	Major Requirement	
5	MKT 3050 Principals of Marketing	3	Major Requirement	14
,	FER 3200 Facility Design & Operation	3	Writing in the Discipline	
,	NUT 3210 Beverage Management	3	Major Requirement	
,	FER Science Elective Course 1	3	Major Requirement	
,	Focus Area Elective Course 1	3	Major Requirement	
,	Business Elective Course	3	Major Requirement	15
3	CHE 4580 Biochemistry I	3	Major Requirement	
3	FER 4300 Sensory Analysis of Wine & Beer	3	CAPSTONE	
3	FER Science Elective Course 2	3	Major Requirement	
3	Focus Area Elective Course 2	3	Major Requirement	
3	Free Elective	1	Take enough Free Electives to reach 122 hours	13
				61
				61 transfer hours
				122 hours for graduation

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- 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)