Southern University and A&M College College of Sciences and Engineering –

**Department of Biological Sciences and Chemistry** 

Degree: Bachelor of Science in Biology Degree Requirements: 120 Credit Hours

Catalog Year: 2017 – 2020

Student's Name: Student's S#:

**Semester Entered SU:** 

Date:

BIOL 108   General Biology   (Lecture and Lab)   4	Catalog Year: 2017 – 2020										
BIOL 108   General Biology   (Lecture and Lab)   4	First Year										
CHEM 132   General Chemistry Lecture   3		Course	Course Title	Credits	Semester Taken	Grade Earned	Transfer Institution	Course Notes			
CHEM 112   General Chemistry Lab	ier	BIOL 108	General Biology I (Lecture and Lab)	4							
Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Chemistry Lecture   3   Chemistry Lecture   4   Chemistry Lecture   5   Chemistry Lecture   6   Chemistry Lecture   7   C		CHEM 132		3				Pre-requisites: MATH 135 or above			
Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Chemistry Lecture   3   Chemistry Lecture   4   Chemistry Lecture   5   Chemistry Lecture   6   Chemistry Lecture   7   C	lest	CHEM 112	General Chemistry Lab	1				Co-requisite: CHEM 132			
Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Chemistry Lecture   3   Chemistry Lecture   4   Chemistry Lecture   5   Chemistry Lecture   6   Chemistry Lecture   7   C	it Sem	MATH 140	Pre-Calculus II	3				Pre-requisite: MATH 135 or Placement Score; must pass with C or better			
Course   Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   C	₩ [		Freshman Composition I	3				Pre-requisite: Placement Score			
Course   Course   Course   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Semester Taken   Semester Taken   Semester Taken   Semester Taken   Semester Taken   Pre-requisite:   Pre-req		FRMN 110		•							
BIOL 109   General Biology II (Lecture and Lab)   4   Pre-requisite:			TOTAL SEMESTER HOURS	15							
BIOL 109   General Biology II (Lecture and Lab)   4   Pre-requisite:											
CHEM 133   General Chemistry Lecture   3   Pre-requisite:				Credits	Semester Taken	Grade Earned	Transfer Institution	Course Notes			
CHEM 113   General Chemistry Lab   1								Pre-requisite: BIOL 108			
FRMN 111   Freshman Seminar   1	重			3				Pre-requisite: CHEM 132			
FRMN 111   Freshman Seminar   1	Jes	CHEM 113	General Chemistry Lab	1							
FRMN 111   Freshman Seminar   1	d Sen	MATH 264	Calculus I	4				Pre-requisites: MATH 135 and 140 with a C or better			
Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Chem 230   Organic Chemistry Lecture   3   Pre-requisites   Chem 220   Organic Chemistry Lab   1   Pre-requisites   Pre-requis	2n	ENGL 111	Freshman Composition II	3				Pre-requisite: ENGL 110			
Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   CHEM 230   Organic Chemistry Lecture   3   Pre-requisites   CHEM 220   Organic Chemistry Lab   1   Pre-requisites   Pre-requis		FRMN 111	Freshman Seminar	1				Pre-requisite: FRMN 110			
Course Course Title Credits Semester Taken Grade Earned Transfer Institution CC CHEM 230 Organic Chemistry Lecture I 3 Pre-requisites PHYS 141 Elements of Physics 4 Pre-requisites 133/112, 113 Pre-requisites 15 Pre-requi			TOTAL SEMESTER HOURS	16							
CHEM 230 Organic Chemistry Lecture I 3 Pre-requisites CHEM 220 Organic Chemistry Lab I Pre-requisites PHYS 141 Elements of Physics 4  BIOL 232 General Microbiology 4  CMPS 290 Microcomputer Applications in Business  TOTAL SEMESTER HOURS 15  CHEM 231 Organic Chemistry Lecture II 3  CHEM 221 Organic Chemistry Lab II 2  PHYS 142 Elements of Physics 4  PSYC 210 Introduction to Psychology 3											
CHEM 220 Organic Chemistry Lab I 1 Pre-requisites PHYS 141 Elements of Physics 4 Pre-requisites BIOL 232 General Microbiology 4 Pre-requisites 133/112, 113:  CMPS 290 Microcomputer Applications in Business  TOTAL SEMESTER HOURS 15  COurse Course Title Credits Semester Taken Grade Earned Transfer Institution C CHEM 231 Organic Chemistry Lecture II 3 Pre-requisites CHEM 221 Organic Chemistry Lab II 2 Pre-requisites PHYS 142 Elements of Physics 4 Pre-requisites 130 or higher		Course	Course Title	Credits	Semester Taken	Grade Earned	Transfer Institution	Course Notes			
PHYS 141 Elements of Physics 4  BIOL 232 General Microbiology 4  CMPS 290 Microcomputer Applications in Business  TOTAL SEMESTER HOURS 15  CHEM 231 Organic Chemistry Lecture II 3  CHEM 221 Organic Chemistry Lab II 2  PHYS 142 Elements of Physics 4  Pre-requisites  Pre-requisites  Semester Taken Grade Earned Transfer Institution C  CHEM 231 Organic Chemistry Lecture II 3  CHEM 221 Organic Chemistry Lab II 2  PHYS 142 Elements of Physics 4  PSYC 210 Introduction to Psychology 3		CHEM 230	Organic Chemistry Lecture I	3				Pre-requisites: CHEM 133/113			
TOTAL SEMESTER HOURS 15    Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Chem 231   Organic Chemistry Lecture II   3   Pre-requisites   Chem 221   Organic Chemistry Lab II   2   Pre-requisites   Pre-requisite	er	CHEM 220	Organic Chemistry Lab I	1				Pre-requisites: CHEM 133/113			
TOTAL SEMESTER HOURS 15    Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Chem 231   Organic Chemistry Lecture II   3   Pre-requisites   Chem 221   Organic Chemistry Lab II   2   Pre-requisites   Pre-requisites   Pre-requisites   Pre-requisites   130 or higher   PSYC 210   Introduction to Psychology   3   Pre-requisites   Pre-	est	PHYS 141	Elements of Physics	4				Pre-requisite: MATH 130 or higher			
TOTAL SEMESTER HOURS 15    Course   Course Title   Credits   Semester Taken   Grade Earned   Transfer Institution   Credits   Chem 231   Organic Chemistry Lecture II   3   Pre-requisites   Chem 221   Organic Chemistry Lab II   2   Pre-requisites   Pre-requisite	t Sem	BIOL 232	General Microbiology	4				Pre-requisites: CHEM 132/112, 133/112, 113; BIOL 108 and 109			
Course Course Title Credits Semester Taken Grade Earned Transfer Institution CC  CHEM 231 Organic Chemistry Lecture II 3  CHEM 221 Organic Chemistry Lab II 2  PHYS 142 Elements of Physics 4  PSYC 210 Introduction to Psychology 3	18	CMPS 290		3							
Course Course Title Credits Semester Taken Grade Earned Transfer Institution CC  CHEM 231 Organic Chemistry Lecture II 3  CHEM 221 Organic Chemistry Lab II 2  PHYS 142 Elements of Physics 4  PSYC 210 Introduction to Psychology 3			TOTAL SEMESTER HOURS	15							
CHEM 231 Organic Chemistry Lecture II 3 Pre-requisites CHEM 221 Organic Chemistry Lab II 2 Pre-requisites PHYS 142 Elements of Physics 4 Pre-requisites PSYC 210 Introduction to Psychology 3						<u>'</u>					
CHEM 221 Organic Chemistry Lab II 2  PHYS 142 Elements of Physics 4  PSYC 210 Introduction to Psychology 3  CHEM 221 Organic Chemistry Lab II 2  Pre-requisites 130 or higher		Course	Course Title	Credits	Semester Taken	Grade Earned	Transfer Institution	Course Notes			
CHEM 221 Organic Chemistry Lab II 2 PHYS 142 Elements of Physics 4 PSYC 210 Introduction to Psychology 3 Pre-requisites 130 or higher	. [	CHEM 231	Organic Chemistry Lecture II	3				Pre-requisites: CHEM 230/220			
PHYS 142 Elements of Physics 4 PSYC 210 Introduction to Psychology 3 PSYC 210 Introduction to Psychology 3	ster							Pre-requisites: CHEM 230/220			
PSYC 210 Introduction to Psychology 3	2nd Semes	PHYS 142	· ·	4				Pre-requisites: PHYS 141 and MATH 130 or higher			
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ENGL 203   Literature Elective   3   Pre-requisites		ENGL 203	Literature Elective	3				Pre-requisites: ENGL 110, 111			
TOTAL SEMESTER HOURS 15			TOTAL SEMESTER HOURS	15							

				Third Year						
1st Semester	Course	Course Title	Credits	Semester Taken	Grade Earned	Transfer Institution	Course Notes			
	CHEM 340	General Biochemistry Lecture	3				Pre-requisites: CHEM 231			
	CHEM 342	General Biochemistry Lab	1				Pre-requisites: CHEM 231			
	BIOL 350	Genetics	4				Pre-requisites: CHEM 132/113, 133/113; BIOL 108, 109			
	BIOL XXX	Biology Elective*	4							
		Foreign Languages Sequence I	3							
	TOTAL SEMESTER HOURS		15							
	Course	Course Title	Credits	Semester Taken	Grade Earned	Transfer Institution	Course Notes			
2nd Semester	BIOL XXX	Biology Elective*	4							
	BIOL XXX	Biology Elective*	4							
	HIST XXX	History Elective	3							
	HLTH/PHED	Health/Physical Ed Elective	2							
2nc		Foreign Language Sequence II	3							
	BIOL 300	Principles of Research	1				Pre-requisite: BIOL 108, 109			
		TOTAL SEMESTER HOURS	17							
	Fourth Year									
	Course	Course Title	Credits	Semester Taken	Grade Earned	Transfer Institution	Course Notes			
-	BIOL 402	Cell and Molecular Biology (Lecture and Lab)	4				Pre-requisites: BIOL 232, CHEM 230, 231			
est	BIOL 403	Seminar	1				Junior Standing			
e m	HIST XXX	History Elective	3							
1st Semester		Humanities Elective	3				Select from: PHIL 200, 210 or HUMN 241, 242, 244, or 366			
	SVLR 400	Service Learning	3							
		TOTAL SEMESTER HOURS	14							
2nd Semester	BIOL XXX	Physiology Electives	4				Select from: BIOL 305, 412, 433,442			
	BIOL 409	Introduction to Biostatistics	3				Pre-requisite: MATH 140 or equivalent			
		Social Science Elective	3							
		Art Elective	3				ARTS 200 or MUSC 200			
	TOTAL SEMESTER HOURS		13							

<sup>\*</sup> Biology Elective: Two of the three biology electives must be at the 300 level or above. Biology majors CANNOT use BIOL 104, 105, 107, 223, 230, 231, 238, or 239 for degree credit.

## **Other Graduation Requirements:**

Writing Proficiency taken in ENGL 111 unless transferred ENGL 111 then Writing Proficiency must be scheduled;

Students must pass Departmental Comprehensive; 3 Credit Hours of African American Experience (ENGL 203); See Advisor about Service Learning Requirement. Students are required to earn a grade "C" or better in all biology, chemistry, mathematics, physics and English courses.

Student cumulative GPA must be a 2.0 or higher.

STUDENTS ARE REQUIRED TO MEET WITH THEIR ADVISOR PRIOR TO REGISTRATION. SHOULD A STUDENT FAIL TO SECURE PROPER ADVISEMENT, THE UNIVERSITY WILL NOT BE HELD RESPONSIBLE.

CSE, 08/2017