

DEPARTMENT OF CHEMISTRY
BACHELOR OF SCIENCE IN CHEMISTRY (BIOCHEMISTRY AND BIOMEDICAL SCIENCES)
 Major Code 025

Curriculum Guide 2020-21

Course	CR	Course	CR
Freshman Year: First Semester		Freshman Year: Second Semester	
CHEM 106: General Chemistry VI	3	CHEM 107: General Chemistry VII	3
CHEM 108: Chemistry Orientation	1	CHEM 190: Introduction to Chemical Research / CHEM 117: General Chemistry VII Laboratory	1
CHEM 116: General Chemistry VI Laboratory	1	MATH 131: Calculus I	4
ENGL 100: Ideas and Their Expressions I	3	ENGL 101: Ideas and Their Expressions II	3
African American Studies ¹	3	Humanities / Fine Arts ²	3
MATH110: Pre-calculus Engineers & Scientists	4	HPED ³	1
HPED ³	1		
Semester Total	16	Semester Total	15
Sophomore Year: First Semester		Sophomore Year: Second Semester	
CHEM 208: Chemistry Sophomore Colloquium I	1		
CHEM 221: Organic Chemistry I	3	CHEM 222: Organic Chemistry II	3
CHEM 290: Res Meth in Organic Chemistry I / CHEM 223: Organic Chemistry I Lab	1	CHEM 291: Res Meth in Organic Chemistry II	2
MATH 132: Calculus II	4	MATH ELECTIVE ⁶	4
Global Awareness ⁴	3	PHYS 241: General Physics I	3
Social and Behavioral Sciences ⁵	3	PHYS 251: General Physics I Laboratory	1
Semester Total	15	Semester Total	13
Junior Year: First Semester		Junior Year: Second Semester	
CHEM 308: Chemistry Junior Colloquium I	1		
CHEM 231: Quantitative Analysis I	3	CHEM 451: Biochemistry I	3
CHEM 232: Quantitative Analysis I Laboratory	2	CHEM 452: Biochemistry I Laboratory	2
PHYS 242: General Physics II	3	CHEM 431: Quantitative Analysis II	3
PHYS 252: General Physics II Laboratory	1	CHEM 432: Quantitative Analysis II Laboratory	2
BIOL 101: Concepts in Biology	4	CHEM 391: Research in Chemistry and Biochemistry I	2
CHEM 390: Methods in Chemical Research III	2	Free Electives	3
Semester Total	16	Semester Total	15
Senior Year: First Semester		Senior Year: Second Semester	
CHEM 408: Chemistry Senior Colloquium	1	CHEM 412: Inorganic Synthesis (formerly CHEM 610)	2
CHEM 490: Research in Chemistry and Biochemistry II	2	Biology Elective	4
CHEM 441: Physical Chemistry I	3	CHEM 497: (capstone) (formerly CHEM 499)	3
CHEM 443: Physical Chemistry I Laboratory	1	CHEM 411: Inorganic Chemistry (formerly CHEM 511)	3
CHEM453: Biochemistry II	3	CHEM 442: Physical Chemistry II	3
Free Elective	4	CHEM 444: Physical Chemistry II Laboratory	1
Semester Total	14	Semester Total	16

Total Credits: 120

¹ Select one of the following: ENGL 333, ENGL 334, HIST 106, HIST 107, HIST 103, LIBS 202, MUSI 220

² Select one of the following: ENGL 200, ENGL 201, ENGL 230, ENGL 231, ENGL 333, ENGL 334, LIBS 202, MUSIC 216, MUSIC 220, PHIL 101, PHIL 103, PHIL 104, PHIL 201, PHIL 266, PHIL 267, SPCH 250

³ PHED 200 may be substituted for the two courses in Physical Education

⁴ Select one of the following: HIST 130, HIST 206, HIST 207, HIST 216, HIST 231, PHIL 103, PHIL 201

⁵ BUED 279, ECON 200, ECON 201, FCS 134, FCS 181, FCS 260, HIST 104, HIST 105, JOMC 240, POLI 110, PSYC 101, SOCI 100, SOCI 200, SSFM 226

⁶ MATH 231 (Calculus III), MATH 431 (Differential Equation), MATH 224 (Probability and Statistics)