

**FRESHMAN YEAR**

FALL

CHEM 170	Chemistry for Chemical Sciences I (G3) <sup>a</sup>	5
CHEM 180	Seminar I	0.5
MATH 125	Calculus I (G1, LO2)	4
G2, LO1	ENGL 101 or other Communications Course <sup>b</sup>	3
	First Year Seminar (Goal 1.1, Critical Thinking)	3
	<b>Total Hours</b>	<b>15.5</b>

SPRING

CHEM 175	Chemistry for Chemical Sciences II	5
MATH 126	Calculus II	4
G2, LO1	ENGL 102 or other course <sup>b</sup>	3
G2, LO2	Communications Course	3
	<b>Total Hours</b>	<b>15</b>

**JUNIOR YEAR**

FALL

CHEM 201	Laboratory Safety	1
CHEM 530	Physical Chemistry I	3
CHEM 620	Analytical Chemistry	3
CHEM 621	Analytical Chemistry Laboratory	2
BIOL 636	Biochemistry I (or BIOL 600)	3
G3	Social Science	3
	<b>Total Hours</b>	<b>15</b>

SPRING

CHEM 531	Physical Chemistry I Laboratory	2
CHEM 535	Physical Chemistry II	4
CHEM 698	Undergraduate Research Problems <sup>c</sup>	2
G4, LO1	Culture Awareness Course <sup>b</sup>	3
Elective	300+ course level	3
	<b>Total Hours</b>	<b>14</b>

<sup>a</sup> Natural Sciences Unit, CHEM 170 requires eligibility for MATH 115 to enroll

<sup>b</sup> See the KU Core <http://www.kucore.ku.edu> for a listing of all approved courses.

<sup>c</sup> Or Chem 699 Honors Research; for those admitted to the Departmental Honors program

Please Note: All students in the College of Liberal Arts and Sciences are required to complete 120 total hrs of which 45 hrs must be a the Jr/Sr (300+) level.

**SOPHOMORE YEAR**

FALL

CHEM 330	Organic Chemistry I (Or CHEM 380-Honors)	3
CHEM 331	Organic Chemistry I Laboratory	2
MATH 127	Calculus III	4
PHSX 211	General Physics I (G1, LO1)	4
PHSX 216	General Physics I Laboratory	1
G3	Humanities	3
	<b>Total Hours</b>	<b>17</b>

SPRING

CHEM 335	Organic Chemistry II (or CHEM 385-Honors)	3
CHEM 336	Organic Chemistry Laboratory	2
CHEM 250	Mathematical Methods for the Chemical Sciences	3
PHSX 212	General Physics II	3
PHSX 236	General Physics II Laboratory	1
BIOL 150	Molecular and Cellular Biology	4
	<b>Total Hours</b>	<b>16</b>

**SENIOR YEAR**

FALL

CHEM 536	Physical Chemistry II Laboratory	2
CHEM 695	Seminar II	0.5
CHEM 698 <sup>c</sup>	Undergraduate Research Problems <sup>c</sup>	2
G4, LO2	Global Awareness	3
G5	Social Responsibility and Ethics	3
Elective		3
	<b>Total Hours</b>	<b>13.5</b>

SPRING

CHEM 635	Instrumental Methods of Analysis (G6, LO1)	2
CHEM 636	Instrumental Methods Laboratory (G6, LO1)	2
CHEM 660	Systematic Inorganic Chemistry	3
CHEM 661	Advanced Inorganic Laboratory	2
CHEM 698	Undergraduate Research Problems <sup>c</sup>	2
Electives	300+ course level	5
	<b>Total Hours</b>	<b>16</b>