

## 4-YEAR CURRICULAR MAP

# Bachelor of Science in Chemistry - Biochemistry

FALL	YEAR 1		SPRING
‡UK Core CC1	3	UK Core CC2	3
UK Core QFO (MA113: Calculus I <u>AND</u> MA 193: Supp. Workshop I <u>OR</u> MA 137: Calculus I for Life Sciences)	4-5	A&S NS (CHE 107: General Chemistry II)	3
UK Core NPM (CHE 105: General Chemistry I)	4	A&S Lab (CHE 113: General Chemistry II Lab)	2
UK Core NPM (CHE 111: General Chemistry I Lab)	1	MA 114: Calculus II <u>AND</u> MA 194: Supp. Workshop II <u>OR</u> MA 138: Calculus II for Life Sciences	4-5
UK Core ACR	3	BIO 155: Lab for Introductory Biology I	1
		BIO 148: Introductory Biology I	3
	<b>Total Credits: 15-16</b>		<b>Total Credits: 16-17</b>
FALL	YEAR 2		SPRING
UK Core SIR (STA 210: Intro to Statistical Reasoning)	3	UK Core HUM	3
MA 213: Calculus III	4	CHE 226: Analytical Chemistry	3
CHE 230: Organic Chemistry I	3	CHE 231: Organic Chemistry Lab I	1
PHY 231: General Univ. Physics I	4	CHE 232: Organic Chemistry II	3
PHY 241: General Univ. Physics Lab I	1	PHY 232: General Univ. Physics II	4
BIO 152: Principles of Biology II	3	PHY 242: General Univ. Physics II Lab II	1
	<b>Total Credits: 18</b>		<b>Total Credits: 15</b>
FALL	YEAR 3		SPRING
UK Core SSC	3	‡Foreign language 101	4
CHE 440G: Introductory Physical Chemistry	3	CHE 410G: Inorganic Chemistry	2
CHE 550: Biological Chemistry I	3	CHE 533: Qual. Organic Analysis Lab (If 532 in Fall)	0-2
CHE 532: Spectrometric Identification of Organic Compounds ( <u>OR</u> CHE 422: Instrumental Analysis)	2 or 4	CHE 552: Biological Chemistry II	3
WRD 310: Writing in the Natural Sciences	3	CHE 454: Biological Chemistry Lab	2
		BIO 304: Principles of Genetics <u>OR</u> BIO 315: Intro. to Cell Biology <u>OR</u> BIO 308 General Microbiology	3-4
	<b>Total Credits: 14-16</b>		<b>Total Credits: 14-17</b>
FALL	YEAR 4		SPRING
‡Foreign language 102	4	‡Foreign language 201	3
UK Core CCC	3	UK Core GDY	3
A&S SS	3	CHE 441: Physical Chemistry Lab	2
A&S HUM	3	*CHE Major field option	2
CHE 412: Inorganic Chemistry Lab	2	∆Electives	6
*CHE Major field option	2		
	<b>Total Credits: 17</b>		<b>Total Credits: 16</b>

- ‡ Incoming students are strongly encouraged to take WRD 112 to fulfill the CC1 and CC2 requirements if they have any of the following: an ACT English score of 32 or Higher, an SAT Verbal score of 720 or Higher, or an AP English Composition score of 4 or 5. If the student has been accepted into the University Honors Program, the student is required to take WRD 112 to fulfill CC1 and CC2.
- ‡ Students who have taken at least 2 years of a language in high school can complete the A&S Foreign Language Requirement with 3 college semesters of a different language. Students choosing this option should replace the 4<sup>th</sup> semester of language with electives. Also note that if you take a foreign language placement exam, you may be exempt from 1 or more of the beginning semesters of that language. In this case, replace the by-passed language courses with electives. Any language sequence may be used to satisfy the foreign language requirements.
- ∆ 6 hours of 'free' electives - that do not count toward any other requirement - must be taken. Additional electives may be required to reach the required minimum of 120 hours.
- **Race and Ethnicity Requirement:** The College requires its students to complete an approved race and ethnicity (R&E) course that will address the changing meanings of race and ethnicity across time and space. Students may double-dip courses to satisfy the R&E requirement with any other requirement

<b>UK Core Abbreviations</b>	CC1= Composition and Communication I
HUM =Intellectual Inquiry in the Humanities	CC2= Composition and Communication II
NPM=Intellectual Inquiry in the Natural/Physical/Mathematical Science	QFO= Quantitative Foundations
SSC=Intellectual Inquiry in Social Sciences	SIR= Statistical Inferential Reasoning
ACR=Intellectual Inquiry in Arts & Creativity	CCC= Community, Culture and Citizenship in U.S.
GCCR= Graduation Composition and Communication Requirement	GDY= Global Dynamics
<b>College of Arts &amp; Sciences Abbreviations</b>	
SS: Social Sciences	NS: Natural Sciences
Lab: College Laboratory or Field Experience HUM: Humanities	