

## 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                              | A&S Lab (CHE 113: General Chemistry II Lab)     | 2   |
| UK Core NPM (CHE 105: General Chemistry I)   | 4   | 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 NPM (CHE 111: General Chemistry I Lab)   | 1   | BIO 155: Lab for Introductory Biology I                                   | 1                              | BIO 148: Introductory Biology I                 | 3   |
| UK Core ACR  | 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                              |   |     |
| A&S HUM  | 3   | CHE 410G: Inorganic Chemistry   | 2                              |   |     |
| CHE 440G: Introductory Physical Chemistry  | 4   | CHE 533: Qual. Organic Analysis Lab (If 532 in Fall) 2 (OR 0)             |                                |   |     |
| CHE 550: Biological Chemistry I  | 3   | CHE 552: Biological Chemistry II  | 3                              |   |     |
| CHE 532: Spectrometric Identification of Organic Compounds ( <u>OR</u> CHE 422: Instrumental Analysis) 2 (OR 4)    |     | CHE 554: Biological Chemistry Lab   | 2                              |   |     |
|  |     | BIO 304: Principles of Genetics <u>OR</u> BIO 315: Intro. to Cell Biology | 4                              |   |     |
| <b>Total Credits: 15-17</b>  |     |   | <b>Total Credits: 17 or 15</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                              |   |     |
| CHE 412: Inorganic Chemistry Lab   | 2   | *CHE Major field option   | 2                              |   |     |
| CHE 372: Communication in Chemistry (GCCR)   | 1   | CHE 472: Communication in Chemistry (GCCR)                                | 1                              |   |     |
| *CHE Major field option  | 2   | ◊Electives  | 6                              |   |     |
| <b>Total Credits: 15</b>   |     |   | <b>Total Credits: 17</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.

### UK Core Abbreviations

HUM =Intellectual Inquiry in the Humanities

NPM=Intellectual Inquiry in the Natural/Physical/Mathematical Science

SSC=Intellectual Inquiry in Social Sciences

ACR=Intellectual Inquiry in Arts & Creativity

GCCR= Graduation Composition and Communication Requirement

CC1= Composition and Communication I

CC2= Composition and Communication II

QFO= Quantitative Foundations

SIR= Statistical Inferential Reasoning

CCC= Community, Culture and Citizenship in U.S.

GDY= Global Dynamics

### College of Arts & Sciences Abbreviations

SS: Social Sciences

NS: Natural Sciences

Lab: College Laboratory or Field Experience HUM: Humanities