

## REQUIREMENTS FOR THE BIOCHEMISTRY MAJOR

**Grade Requirement:** All courses required for the Biochemistry major (CH, MATH, PHYS, BI courses) must be graded and passed with a grade of C- or better.

### Core Chemistry Courses:

General Chemistry	CH 221, 222, 223	OR	CH 224H, 225H, 226H
General Chemistry Lab	CH 227, 228, 229	OR	CH 237, 238, 239
Organic Chemistry	CH 341, 342, 343		
Organic Chemistry Lab	CH 337, 348		
Biochemistry	CH 461, 462, 463		
Biochemistry Lab	CH 467		
Physical Chemistry	CH 411, 412		

### Biology, Math & Physics:

Biology	BI 281H, 282H, 320		
Calculus	MATH 251, 252, 253		
Physics	PHYS 201, 202, 203	OR	PHYS 251, 252, 253

### Physical Lab Requirement:<sup>1</sup>

PHYS 204, 205, 206 OR PHYS 290, 290, 290 OR CH 417, 418

### Advanced Lab Requirement:<sup>1</sup>

- Option 1) One term of a 400-level chemistry lab course
- Option 2) At least one year (6 cr) of undergraduate research (written report required)

**Advanced Biochemistry Electives:<sup>1</sup>** Select two from CH 464, 465, 466, 468

**Other Advanced Electives:<sup>1</sup>** Three approved upper-division courses.

In addition to the courses listed above, the UO Core Education Requirements must be satisfied (either by taking sufficient Writing, Cultural Literacy, Arts & Letters, and Social Science classes or completing the R. D. Clark Honors College requirements).

<sup>1</sup> Courses cannot be used to satisfy requirements in more than one area

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On the following pages are sample four-year plans. The main differences between the plans are the initial chemistry and math courses, and how the advanced electives are met. Note that these are just examples, and you should work with an academic advisor to come up with an academic plan for you.

## Plan #1: Beginning with CH 224H and Math 251

### Year 1

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 224H	4	CH 225H	4	CH 226H	4
CH 227	2	CH 228	2	CH 229	2
Math 251	4	Math 252	4	Math 253	4
Core Ed	4	WR 121	4	WR 122	4

### Year 2

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 341	4	CH 342	4	CH 343	4
CH 337	3	CH 348	4	BI 320	4
BI 281H	5	BI 282H	5	Core Ed	4
Core Ed	4	Core Ed	4	Core Ed	4

### Year 3

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 461	4	CH 463	4	CH 462	4
CH 467	4	PHYS 252	4	PHYS 253	4
PHYS 251	4	PHYS 290	1	PHYS 290	1
PHYS 290	1	CH 401	1	CH 401	1
CH 401	1	Core Ed	4	Core Ed	4

### Year 4

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 401	1	CH 401	1	CH 401	1
CH 411	4	CH 412	4	AdvBIC	4
CH 46x	4	CH 46x	4	Core Ed	4
AdvBIC	4	AdvBIC	4	Elective	4
Core Ed	4	Core Ed	4		

Total Credits = 180

## Plan #2: Beginning with CH 221 and Math 112

### Year 1

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 221	4	CH 222	4	CH 223	4
CH 227	2	CH 228	2	CH 229	2
Math 112	4	Math 251	4	Math 252	4
Core Ed	4	WR 121	4	WR 122	4

### Year 2

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 341	4	CH 342	4	CH 343	4
CH 337	3	CH 348	4	BI 320	4
BI 281H	5	BI 282H	5	Core Ed	4
Math 253	4	Core Ed	4	Core Ed	4

### Year 3

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 461	4	CH 463	4	CH 462	4
CH 467	4	PHYS 202	4	PHYS 203	4
PHYS 201	4	PHYS 205	2	PHYS 206	2
PHYS 204	2	Core Ed	4	Core Ed	4

### Year 4

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 411	4	CH 412	4	AdvBIC	4
CH 417	4	CH 46x	4	Core Ed	4
CH 46x	4	AdvBIC	4	Core Ed	4
AdvBIC	4	Core Ed	4	Core Ed	4

Total Credits = 181

### Plan #3: Beginning with CH 111 and Math 111

#### Year 1

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 111	4	CH 221	4	CH 222	4
Math 111	4	CH 227	2	CH 228	2
Core Ed	4	Math 112	4	Math 251	4
Core Ed	4	WR 121	4	WR 122	4

CH 223/229 must be taken in the summer between years 1 and 2!!

#### Year 2

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 341	4	CH 342	4	CH 343	4
CH 337	3	CH 348	4	BI 320	4
BI 281H	5	BI 282H	5	Core Ed	4
Math 252	4	Math 253	4	Core Ed	4

#### Year 3

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 461	4	CH 463	4	CH 462	4
CH 467	4	PHYS 202	4	PHYS 203	4
PHYS 201	4	PHYS 205	2	PHYS 206	2
PHYS 204	2	Core Ed	4	Core Ed	4

#### Year 4

Fall		Winter		Spring	
Course	Credits	Course	Credits	Course	Credits
CH 411	4	CH 412	4	AdvBIC	4
CH 417	4	CH 46x	4	Core Ed	4
CH 46x	4	AdvBIC	4	Core Ed	4
AdvBIC	4	Core Ed	4	Core Ed	4

Total Credits = 187