

# BIOCHEMISTRY - Major Requirements for BS Degree

Effective Fall 2008

Hamline University

Anticipated graduation date (such as: May, 2010) \_\_\_\_\_

Full name: \_\_\_\_\_

Hamline ID: \_\_\_\_\_

Phone #: \_\_\_\_\_

## 17 COURSES, SEMINAR, AND AN INDEPENDENT RESEARCH PROJECT FOR MAJOR

DEPT	COURSE	TITLE	GRADE	CREDITS	TERM/ YEAR	SUBSTITUTE COURSE	ADVISOR APPROVAL*	AUDITOR'S NOTES	BREADTH OF STUDY CREDITS**
1. CHEM	1130	General Chemistry I		4					no
2. CHEM	1140	General Chemistry II		4					no
3. CHEM	3240	Analytical Chemistry		4					no
4. CHEM	3450	Organic Chemistry I		4					no
5. CHEM	3460	Organic Chemistry II		4					no
6. CHEM	3560	Molecular Structure & Spectroscopy		4					no
7. BIOL	3060	Principles of Cell Biology		4					no
8. BIOL	5900	Molecular Cell Biology		4					no
9. MATH	1170	Calculus I		4					yes
10. MATH	1180	Calculus II		4					yes
11. MATH	3320	Multivariable and Vector Calculus		4					yes
12. BIOC	3820	Biochemistry I		4					no
13. BIOC	3830	Biochemistry II		4					no
14. PHYS	1230	General Physics I		4					yes
15. PHYS	1240	General Physics II		4					yes
<b>16. One of the following courses:</b>									
BIOL	5600	Developmental Biology		4					yes
BIOL	5760	Immunology							
CHEM	3330	Instrumental Methods							
CHEM	3550	Chemical Thermodynamics							
CHEM	5840	Advanced Inorganic Chemistry							
<b>17. An additional course from #16 above or 5000-level math, biology or physics:</b>									
				4					yes
<b>Seminar--Four semesters of BIOL 5950 or two semesters of CHEM 5960:</b>									
BIOL	5950	Biology Seminar		0.5					no
BIOL	5950	Biology Seminar		0.5					no
BIOL	5950	Biology Seminar		0.5					no
BIOL	5950	Biology Seminar; or		0.5					no
CHEM	5960	Research Techniques		2					no
CHEM	5960	Research Techniques		2					no
<b>Independent research project:</b>									
BIOC	5970	Independent Study; or		4					no
	4010	Collaborative Research							
<b>Writing intensive course in the major:</b>									

\*Advisor approval is required for transfer courses or other substitutions. Approval must be initialed in the Advisor Approval column.

\*\*In order to graduate, you must have at least 84 Breadth of Study credits (credits outside your major department). See above for courses in your major that also count toward Breadth of Study.

Student signature (required): \_\_\_\_\_

Date: \_\_\_\_\_

Biochemistry advisor signature (required): \_\_\_\_\_

Date: \_\_\_\_\_