

Full name: \_\_\_\_\_ Hamline ID: \_\_\_\_\_ Phone #: \_\_\_\_\_  
 Anticipated graduation date (such as: May, 2017) \_\_\_\_\_

**17-18 COURSES FOR MAJOR AND OPTIONAL ACS CERTIFICATION**

DEPT	COURSE	TITLE	GRADE	CREDITS	TERM/ YEAR	SUBSTITUTE COURSE*	BREADTH OF STUDY CREDITS**
<b>1.-2. Two general chemistry courses or one advanced general chemistry course:</b>							
CHEM	1130	General Chemistry I		4			no
CHEM	1140	General Chemistry II		4			no
<i>or</i>							
CHEM	1500	Advanced General Chemistry		4			no
3. CHEM	3240	Analytical Chemistry		4			no
4. CHEM	3330	Instrumental Methods		4			no
5. CHEM	3450	Organic Chemistry I		4			no
6. CHEM	3460	Organic Chemistry II		4			no
7. CHEM	3550	Physical Chemistry I		4			no
8. CHEM	3560	Physical Chemistry II		4			no
9. CHEM	3940	Advanced Laboratory Techniques		2			no
10. CHEM	3950	Physical Chemistry Lab Techniques		2			no
11. CHEM	5840	Advanced Inorganic Chemistry		4			no
12. CHEM	5960	Research Techniques I		2			no
13. CHEM	5961	Research Techniques II		2			no
14. MATH	3320	Multivariable & Vector Calculus		4			yes
15. PHYS	1230	General Physics I		4			yes
16. PHYS	1240	General Physics II		4			yes
<b>17.-18. Two of the following advanced courses:</b>							
CHEM	5820	Advanced Analytical Chemistry		4			no
CHEM	5860	Advanced Organic Chemistry		4			no
CHEM	5880	Advanced Physical Chemistry		4			no
<b>Writing intensive course in the major:</b>							

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

\*\*In order to graduate, you must have at least 76 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: \_\_\_\_\_ Date: \_\_\_\_\_  
 (required)

Chemistry advisor signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 (required)

Department chair signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 (required for course substitutions and waivers)