HAMLINE UNIVERSITY

PHYSICS - Major Requirements for BA Degree
Effective Fall 2014

Full name: Hamline ID: Phone #:

Anticipated graduation date (such as: May, 2018)

54 CREDITS (15 COURSES) FOR MAJOR

DEPT	COURSE	TITLE	GRADE	CREDITS	TERM/ YEAR	SUBSTITUTE COURSE*	BREADTH OF STUDY**
1. PHYS	1230	General Physics I		4			no
2. PHYS	1240	General Physics II		4			no
3. PHYS	3540	Modern Physics		4			no
or CHEM	3560	Physical Chemistry II					yes
4. PHYS	3600	Mathematical & Computational Methods					
5. MATH	1170	Calculus I		4			yes
6. MATH	1180	Calculus II		4			yes
7. MATH	3320	Multivariable & Vector Calculus		4			yes
8. MATH	3720	Differential Equations		4			yes
9 - 12. Four electives chosen from the following; at least one must be 5000-level:							
PHYS	3520	Physical Optics		4			no
PHYS	3700	Condensed Matter Physics		4			no
PHYS	3750	Thermodynamics & Statistical Mechanics		4			no
or CHEM	3550	Physical Chemistry I					yes
PHYS	3800	Electronics & Instrumentation		4			no
PHYS	5930	Theoretical Mechanics		4			no
PHYS	5940	Advanced Electromagnetic Field Theory		4			no
PHYS	5950	Advanced Quantum Mechanics		4			no
PHYS	5955	Advanced Topics in Physics		4			no
13 - 15. Two semesters each of Junior Seminar, Senior Seminar, and Research Project-Based Adv Lab:							
PHYS	5900	Junior Seminar		0.5			no
PHYS	5900	Junior Seminar		0.5			no
PHYS	5910	Senior Seminar		0.5			no
PHYS	5910	Senior Seminar		0.5			no
PHYS	5920	Research Project-Based Adv Lab		2			no
PHYS	5920	Research Project-Based Adv Lab		2			no
Writing intensive course in the major:							

*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)

Physics advisor signature: Date:
(required)

Department chair/director signature: Date:
(required for course substitutions and waivers)