HAMLINE UNIVERSITY

PHYSICS - Major Requirements for BS Degree
Effective Fall 2014

Full name: Hamline ID: Phone #:

Anticipated graduation date (such as: May, 2018)

70 CREDITS (19 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
4. PHYS	3600	Mathematical & Computational Methods		4			no
5. PHYS	5930	Theoretical Mechanics		4			no
6. PHYS	5940	Advanced Electromagnetic Field Theory		4			no
7. PHYS	5950	Advanced Quantun Mechanics		4			no
8. MATH	1170	Calculus I		4			yes
9. MATH	1180	Calculus II		4			yes
10. MATH	3320	Multivariable & Vector Calculus		4			yes
11. MATH	3720	Differential Equations		4			yes
12 - 14. Three advanced elective chosen from the following; one must include a lab:							
PHYS	3520	Physical Optics		4			no
PHYS	3700	Condensed Matter Physics		4			no
PHYS	3750	Thermodynamics & Statistical Mechanics		4			no
PHYS	3800	Electronics & Instrumentation		4			no
PHYS	5955	Advanced Topics in Physics		4			no
15 - 16. Two additional science electives chosen from the following:							
BIOL	1800	Principles of Ecology & Evolution		4			yes
BIOL	1820	Principles of Plant & Animal Physiology		4			yes
BIOL	3050	Principles of Genetics		4			yes
BIOL	3060	Principles of Cell Biology		4			yes
CHEM	1130	General Chemistry I		4			yes
CHEM	1140	General Chemistry II		4			yes
17 - 19. 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)