

2007-08 CATALOG

PHYSICS

B.S. Degree Requirements
120 Credits

GENERAL REQUIREMENTS

COMMUNICATIONS:- (9)

Engl 111X (3)____
Engl 211X or 213X (3)____
Comm 131X or 141X (3)____

PERSPECTIVES ON THE HUMAN CONDITION:- (18-22)

Complete the 6 courses listed **OR** 4 of those listed plus 2 semester length courses in a single AK Native or other non-English language or 3 semester length courses (9 credits) in American Sign Language.

Anth 100X/Soc 100X (3)____
Econ/PS 100X (3)____
Hist 100X (3)____
Art/Mus/Thr 200X or Hum 201X or
Ans 202X (3)____
Engl/FL 200X (3)____
BA 323X or Comm 300X or Just 300X or Nrm 303X or
Phil 322X or PS 300X (3)____
Language option as listed above:
_____()____ _____()____ _____()____

MATHEMATICS:- (18)

Math 200X (4)____ Math 202X (4)____
Math 201X (4)____
Complete 6 Math credits at the 300 level or above:
_____()____ _____()____

NATURAL SCIENCE:- (8)

Complete any two 4-credit Core Natural Science Courses (only one course may be PHYS)
_____(4)____ _____(4)____

LIBRARY & INFO SKILLS:- (0-1)

LS competency test ____ OR
LS 100X or 101X (1)____

UPPER DIVISION CREDITS:- (39)

Transfer Credits ____
UAF Credits (24)* ____
TOTAL TO DATE: ____
TO BE COMPLETED: ____
*a minimum of 24 UAF credits

*Designates only grades of "C" or better may be used to fulfill this requirement.

*MAJOR REQUIREMENTS

Complete the following:- (54)

Phys 113 (1)____
Phys 211X (4)____+
Phys 212X (4)____+
Phys 213X (4)____+
Phys 220 (4)____
Phys 301 (4)____
Phys 313 (4)____
Phys 341 (4)____
Phys 342 (4)____
Phys 343 (4)____
Phys 381 (3)____(W,O)
Phys 382 (3)____W
Phys 421 (4)____
Phys 462 (4)____
Phys 471 (3)____

+May be used to meet one year sequence requirement.

ELECTIVES (for a total of 120 credits):

_____()____ _____()____
_____()____ _____()____
_____()____ _____()____
_____()____ _____()____
_____()____ _____()____

COMPLETE 2 DESIGNATED (W) COURSES AND 1 COURSE DESIGNATED (O) OR 2 COURSES DESIGNATED (O/2) AT THE UPPER DIVISION LEVEL:

_____(W) _____(W)
_____(O) OR _____(O/2) _____(O/2)

Credits for core/general requirements:	58
Credits required for major:	54
Elective credits:	8
Total credits required for degree:	120

Physics BS Recommended Curriculum:

Begins with math placement in Math 201 - Calculus II

First Year: Fall

PHYS 211X - General Physics I	4	
ENGL 111X - Intro to Academic Writing	3	
MATH 201 - Calculus II	4	
PHYS 113 - Concepts of Physics	1	
Core Perspectives (1 of 6)	3	15

Second Year: Fall

ENGL 213X -Academic Writing Soc/Nat	3	
CHEM 105 - General Chemistry I	4	
Physics 213X - Elementary Mod. Physics	4	
PHYS 313 - Thermo and Stat Physics	4	
Core Perspectives (3 of 6)	3	18

Third Year: Fall

MATH 421 - Applied Analysis	4	
PHYS 341- Class Physics: Part Mech	4	
PHYS 381W/O- Physics Laboratory	3	
Core Perspectives (4 of 6)	3	14

Fourth Year: Fall

PHYS 343- Class Phys: Vibrations/Waves	4	
PHYS 421- Quantum Mechanics	4	
PHYS 471- Advanced Topics I	3	
Upper Division Elective	3	14

Suggested electives for a total of 130 credits:

PHYS 472 (4)	CS 201 (3)	CS 202 (3)
MATH 308 (3)	MATH 310 (3)	MATH 412 (3)
MATH 305 (3)	ENGL 314 (3)	

First Year: Spring

PHYS 212X - General Physics II	4	
Comm 131X/141X	3	
MATH 202X - Calculus III	4	
LS 101 - Library Science	1	
Core Perspectives (2 of 6)	3	15

Second Year: Spring

PHYS 301 - Intro to Math Physics	4	
CHEM 106X - General Chemistry II	4	
PHYS 220 - Computational Physics	4	
Upper Division Elective	3	15

Third Year: Spring

PHYS 342-Class Phys II: E & M	4	
PHYS 382W- Physics Advanced Lab	3	
MATH 422 - Intro Complex Analysis	3	
Core Perspectives (5 of 6)	3	13

Fourth Year: Spring

PHYS 462- Optics	4	
PHYS 472- Advanced Topics	3	
MATH Elective	3	
Upper Division Elective (Oral Instensive)	3	
Core Perspectives (6 of 6)	3	17