# **Physics** Physics Education Major

### 43-45 (PHYS) + 24 (SEYS) credits

## Courses Required for Major

Number		Title	Credits	Perspectives	
Phys	145.4	Principles of Physics I	4	AoK: NS	
Phys	145.1	Principles of Physics I Laboratory	1	AoK: NS-L	
Phys	146.4	Principles of Physics II	4	AoK: NS	
Phys	146.1	Principles of Physics II Laboratory	1	AoK: NS-L	
Phys	220W	Current Issues in Physics	2		
Phys	222	Optics	3		
Phys	225	Solid State Electronics	4		
Phys	233.1	Intermediate Methods of Math Physic	cs I		
		for Physics-Science Education Major	rs 1		
Phys	235	Classical Physics Laboratory	2		
Phys	237	Mechanics	4		
Phys	242	Thermodynamics	3		
Phys	260	Introduction to Modern Physics	4		
Astr	002	Astronomy with Laboratory	4		

**Additional Requirements**: Two 3- or 4-credit Physics courses at the 200 level or above (excluding Physics 204), approved by the department.

#### **Minor in Secondary Education & Youth Services (SEYS)**

Numb	er	Title	Credits
<b>SEYS</b>	201W	Historical, Social and Philosophical	
		Foundations of Education	3
SEYS	221	Development and Learning in Middle	
		Childhood & Adolescence	3
SEYS	340	Language, Literacy, and Culture In Education	3
SEYS	350	Cognition, Technology and Instruction	
		for Diverse Learners	3
SEYS	362	Methods in Teaching Content Area in	
		Middle and High School	3
SEYS	372.2	Initial Clinical Experience	
		M.S. or High School	2
SEYS	372.4	Student Teaching in High School or	
		Middle School	4
SEYS	382	Standards-Based Curriculum and	
		Assessment in Teaching the Content	3

(continued...)

#### Math Prerequisite (needed for course number in parentheses)

Number	Title	Credit				
Math 151 (for Phys 145) Math 152 (for Phys 146)	Calculus/ Differentiation & Integration Calculus/ Integration & Infinite Series	4 4				
OR						
Math 141 (for Phys 145) Math 142 (for Phys 146)	Calculus/Differentiation Calculus/Integration	3 3				
Math 201 (for Phys 233)	Calculus	4				

AoK = Area of Knowledge NS = Natural Science

NS-L = Natural Science with Lab (only if including the 4 credit related lecture course)