

PHYSICS MAJOR 2021-2022

Student Name and ID	Date			
GRADUATION REQUIREMENTS				
Minimum 120 credit hours INCLUDING ALL MAJOR, USM CORE, and EDUCATION REQUIREMENTS				
Minimum of 30 credit hours, including at least 9 credit hours in the major field at the 200-level or above, must be completed at USM and a minimum overall GPA of 3.0.				
USM Core Requirements		Credits	Semester	Grade
Writing, Reading, & Inquiry 1 (WRI1)	ENG 100 College Writing	3		
Writing, Reading, & Inquiry 2 (WRI2)	ENG 102 Academic Writing	3		
Quantitative Reasoning (QR) prerequisite	MAT 108 & MAT 140 or appropriate Math Placement Score	var		
Quantitative Reasoning (QR)	MAT 152 Calculus A	4		
Creative Expression (CE)	Any CE course	3		
Cultural Interpretation (CI)	Any CI course	3		
Science Exploration (SE)	PHY 121/114 General Physics I and Lab	5		
Socio-Cultural Analysis (SCA)	Any SCA course	3		
Ethical Inquiry and Social Responsibility (EISRC)	Any EISRC course	3		
Diversity (DIV)	Any DIV course	3		
International (INT)	Any INT course	3		
Engaged Learning (EL)	Any EL course	3		
Writing, Reading, & Inquiry 3 (WRI3)	Any WRI3 course	3		
Senior Seminar/Capstone	PHY242	3		
Physics Major Requirements		Credits	Semester	Grade
Major Requirements: 68 credit hours total. All courses in the major must be passed with at least a C. You must maintain an overall GPA of 3.0.				
Foundation Courses (40 cr.)	PHY 121 & 114 General Physics I and Introductory Physics Lab I	5		
	PHY 123 & 116 General Physics II and Introductory Physics Lab II	5		
	PHY 211 Nonclassical Physics I	3		
	PHY 213 Nonclassical Physics II	3		
	PHY 240 Intermediate Laboratory I	3		
	PHY 261 Computational Physics	3		
	PHY 314 Statistical and Thermal Physics	3		
	PHY 321 Classical Physics I	3		
	PHY 323 Classical Physics II	3		
	PHY 331 Electrodynamics I	3		
	PHY 333 Electrodynamics II	3		
PHY 341 Quantum Mechanics	3			
Additional Major Requirements				
Mathematics (16 cr.)	MAT 152 Calculus A (prereq: MAT 140)	4		
	MAT 153 Calculus B (prereq: MAT 152)	4		
	MAT 252 Calculus C (prereq: MAT 153)	4		
	MAT 350 Differential Equations (MAT 252)	4		
Chemistry (8 cr.)	CHY 113/114 Principles of Chemistry I & Lab	4.5		
	CHY 115/116 Principles of Chemistry II & Lab	4.5		
Electives (3 cr.) In addition to the required courses, students must take one of the following courses:	PHY 251 Principles of Electronics	3		
	PHY 281 Astrophysics	3		
	PHY 375 Optics	3		
THIS IS ONLY A GUIDE. FOR DETAILED INFORMATION PLEASE REFER TO YOUR ACADEMIC CATALOG				
Questions? Please contact your Professional or Faculty Advisor				
revised 4.18.21				

