

## PHYSICS, A.S. (Transfer Major)

#### **COURSES THAT FULFILL GENERAL EDUCATION REQUIREMENTS**

CONTENT AREA	COURSE NUMBER AND COURSE TITLE	TOTAL CREDITS
ENGLISH & COMMUNICATION	ENG 1021: ENGLISH COMPOSITION I (REQUIRED) ENG 1022: ENGLISH COMPOSITION II (REQUIRED)	6
MATHEMATICS	MAT 2410: CALCULUS I (REQUIRED)	5
ARTS & HUMANITIES (SELECT THREE)	ART 1110: ART APPRECIATION HUM 1015: WORLD MYTHOLOGY MUS 1020: MUSIC APPRECIATION PHI 1012: ETHICS	9
HISTORY	HIS 1220: U.S. HISTORY SINCE CIVIL WAR HIS 2200: HISTORY OF LATIN AMERICA HIS 2015: 20TH CENTURY WORLD HISTORY	3
SOCIAL & BEHAVIORAL SCIENCES (SELECT ONE)	ANT 1001: CULTURAL ANTHROPOLOGY ECO 2001: PRINCIPLES OF MACROECONOMICS ECO 2002: PRINCIPLES OF MICROECONOMICS PSY 1001: GENERAL PSYCHOLOGY I	3
NATURAL & PHYSICAL SCIENCES	PHY 2111: PHYSICS: CALCULUS BASED I WITH LAB (FALL ONLY) (REQUIRED) PHY 2112: PHYSICS: CALCULUS BASED II WITH LAB (SPRING ONLY) (REQUIRED)	10
GENERAL EDUCATION CREDITS		

#### ADDITIONAL REQUIRED COURSES FOR PHYSICS, A.S.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
CONTENT AREA	COURSE NUMBER AND COURSE TITLE	TOTAL CREDITS	
MATHEMATICS	MAT 2420: CALCULUS II (REQUIRED)	5	
MATHEMATICS	MAT 2430: CALCULUS III OR MAT 2431: CALCULUS III WITH ENGINEERING APPLICATIONS (REQUIRED)	4 or 5	
MATHEMATICS (SELECT ONE)	MAT 2560: DIFFERENTIAL EQUATIONS OR MAT 2561: DIFFERENTIAL EQUATIONS WITH ENGINEERING APPLICATIONS OR MAT 2562: DIFFERENTIAL EQUATIONS WITH LINEAR ALGEBRA (SEE PATHWAY ADVISOR)	3 OR 4	
NATURAL & PHYSICAL SCIENCES	PHY 2113: PHYSICS: CALCULUS BASED III MODERN PHYSICS (REQUIRED)	3	
NATURAL & PHYSICAL SCIENCES	CHE 1111: GENERAL COLLEGE CHEMISTRY I WITH LAB (REQUIRED)	5	
NATURAL & PHYSICAL SCIENCES OR COMPUTER SCIENCE (SELECT ONE)	CHE 1112: GENERAL COLLEGE CHEMISTRY II WITH LAB OR CSC 1060: COMPUTER SCIENCE I: JAVA (SEE PATHWAY ADVISOR)	4 OR 5	
ADDITIONAL PROGRAM CREDITS			
	TOTAL CREDIT HOLIRS	60 - 62	

PLEASE NOTE: PSY1001 and PHI1012 are the courses recommended by the department, but any GT Pathways Social & Behavioral Sciences course may be taken in place of PSY1001 and any GT Pathways Arts and Humanities course may be taken in place of PHI1012 to meet the general education requirements. Students planning to transfer to University of Colorado Boulder must take CHE 1112, students planning to transfer to University of Northern Colorado must take CSC 1060 instead of CHE 1112, and students planning to transfer to Fort Lewis College or University of Colorado-Colorado Spring must take CSC 1060 in addition to the course indicated above. Students planning to transfer to Colorado School of Mines must take all 200 level classes for Arts & Humanities, History, and Social & Behavioral Sciences. Please consult a Guided Pathways Advisor when making changes.





# PHYSICS, A.S. (Transfer Major)

### Recommended order of courses<sup>1</sup>

(The department recommends taking the courses in this order to complete the degree.

FOR COURSES THAT ARE NOT REQUIRED: If you cannot register for the course on this map or want to take one that is not listed, please talk to your pathway advisor.)

CENTECTED	CDEDITC
SEMESTER 1	CREDITS
ENG 1021: English Composition I (REQUIRED)	3
CHE 1111: General College Chemistry I with Lab (REQUIRED)	5
MAT 2410: Calculus I (REQUIRED)	5
ANT 1001: Cultural Anthropology OR ECO 2001: Principles of Macroeconomics OR ECO 2002: Principles of Microeconomics OR PSY 1001: General Psychology I	3
SEMESTER CREDITS	16
SEMESTER 2	CREDITS
CHE 1112: General College Chemistry II with Lab OR CSC 1060: Computer Science I: JAVA (See Pathway Advisor) MAT 2420: Calculus II (REQUIRED)	4-5 5
ENG 1022: English Composition II (REQUIRED)	3
ART 1110: Art Appreciation OR HUM 1015: World Mythology OR MUS 1020: Music Appreciation OR PHI 1012: Ethics	3
SEMESTER CREDITS	15-16
SEMESTER 3	CREDITS
PHY 2111: Physics: Calculus Based I with Lab (FALL ONLY) (REQUIRED)	5
MAT 2430: Calculus III OR MAT 2431: Calculus III with Engineering Applications (REQUIRED)	5
ART 1110: Art Appreciation OR HUM 1015: World Mythology OR MUS 1020: Music Appreciation OR PHI 1012: Ethics	3
HIS 1220: U.S. History Since Civil War OR HIS 2200: History of Latin America OR HIS 2015: 20 <sup>th</sup> Century World History	3
SEMESTER CREDITS	16
SEIVIES I ER CREDITS	
SEMESTER CREDITS SEMESTER 4	CREDITS
	CREDITS 5
SEMESTER 4  PHY 2112: Physics: Calculus Based II with Lab (SPRING ONLY) (REQUIRED)  MAT 2560: Differential Equations OR MAT 2561: Differential Equations with Engineering Applications OR MAT 2562: Differential Equations with Linear Algebra (See Pathway Advisor)	
SEMESTER 4  PHY 2112: Physics: Calculus Based II with Lab (SPRING ONLY) (REQUIRED)  MAT 2560: Differential Equations OR MAT 2561: Differential Equations with Engineering Applications OR MAT 2562: Differential Equations with Linear	5
SEMESTER 4  PHY 2112: Physics: Calculus Based II with Lab (SPRING ONLY) (REQUIRED)  MAT 2560: Differential Equations OR MAT 2561: Differential Equations with Engineering Applications OR MAT 2562: Differential Equations with Linear Algebra (See Pathway Advisor)  ART 1110: Art Appreciation OR HUM 1015: World Mythology OR MUS 1020: Music	5 3-4

<sup>&</sup>lt;sup>1</sup> Placement into courses is dependent on test scores or credit for prior learning. See a Pathways Advisor for details. Plans that include ESL, CCR, and AAA courses will increase the total number of hours to completion.

