



**DEGREE WORKSHEET FOR:**  
**BS Physics, Secondary Teaching Emphasis**  
**2020-2021 Catalog**  
**Degree Requirements – 123 credits**

YEAR 1- FALL (15 credits)		YEAR 1- SPRING (15 credits)	
PHYS 240 General Physics I (LAC Area 6)	5 credits	PHYS 241 General Physics II	5 credits
MATH 131 <sup>1</sup> Calculus I (LAC Area 2)	4 credits	MATH 132 <sup>1</sup> Calculus II (LAC Area 2)	4 credits
ENST 225 Energy and the Environment (LAC Area 6)	3 credits	ENG 122 College Composition (LAC Area 1)	3 credits
Liberal Arts Core <sup>2</sup>	3 credits	Liberal Arts Core <sup>2</sup>	3 credits
YEAR 2- FALL (15 credits)		YEAR 2-SPRING (17 credits)	
PHYS 320 Mathematical Methods I	3 credits	PHYS 321 Elementary Modern Physics	4 credits
AST 301 Classical Astronomy	3 credits	CHEM 112/112L Principles of Chemistry II	5 credits
BIO 110 Principles of Biology	4 credits	Liberal Arts Core <sup>2</sup>	3 credits
CHEM 111 Principles of Chemistry I (LAC Area 6)	4 credits	STEP 161 Observation and Analysis <sup>3</sup>	2 credits
CHEM 111L Principles of Chemistry I Lab (LAC Area 6)	1 credit	EDF 366 Conceptions of Schooling <sup>3</sup>	3 credits
<b><sup>4</sup>For students beginning their 3<sup>rd</sup> year in odd years (2021, 2023, etc.)</b>			
YEAR 3- FALL (17 credits)		YEAR 3- SPRING (16 credits)	
PHYS 340 Mechanics	4 credits	PHYS 341 Electricity and Magnetism I	4 credits
PHYS 347 Optics	4 credits	Liberal Arts Core <sup>2</sup>	3 credits
Biology Elective Course	3 credits	EDSE 360 Exceptional Learner <sup>5</sup>	3 credits
Earth Sciences Elective Course	3 credits	PSY 349 Educational Psychology <sup>5</sup>	3 credits
Liberal Arts Core <sup>2</sup>	3 credits	STEP 262 Observation & Analysis <sup>5</sup>	2 credits
		SCED 440 Secondary Science Strategies	1 credit
YEAR 4- FALL (14 credits)		YEAR 4- SPRING (14 credits)	
PHYS 345 Quantum Mechanics I	3 credits	STEP 464 Student Teaching <sup>7</sup>	14 credits
Liberal Arts Core <sup>2</sup>	3 credits		
EDRD 340 Secondary Content Area Literacy <sup>6</sup>	3 credits		
SCED 441 Secondary Science Methods <sup>6</sup>	3 credits		
STEP 363 Clinical Experience <sup>6</sup>	2 credits		
<b><sup>4</sup>For students beginning their 3<sup>rd</sup> year in even years (2020, 2022, etc.)</b>			
YEAR 3- FALL (16 credits)		YEAR 3- SPRING (16 credits)	
PHYS 340 Mechanics	4 credits	PHYS 341 Electricity and Magnetism I	4 credits
Biology Elective Course	3 credits	Liberal Arts Core <sup>2</sup>	3 credits
Earth Sciences Elective Course	3 credits	EDSE 360 Exceptional Learner <sup>5</sup>	3 credits
Liberal Arts Core <sup>2</sup>	6 credits	PSY 349 Educational Psychology <sup>5</sup>	3 credits
		STEP 262 Observation & Analysis <sup>5</sup>	2 credits
		SCED 440 Secondary Science Strategies	1 credit
YEAR 4- FALL (15 credits)		YEAR 4- SPRING (14 credits)	
PHYS 345 Quantum Mechanics I	3 credits	STEP 464 Student Teaching <sup>7</sup>	14 credits
PHYS 347 Optics	4 credits		
EDRD 340 Secondary Content Area Literacy <sup>6</sup>	3 credits		
SCED 441 Secondary Science Methods <sup>6</sup>	3 credits		
STEP 363 Clinical Experience <sup>6</sup>	2 credits		

**Admission Requirement – No separate admission requirement.**

**Minor Required – No Minor required.**

**Contact Information – Department of Physics and Astronomy**

**Ross Hall Room 0232, 970-351-2961**

**Program Web Page: <http://www.unco.edu/nhs/physics-astronomy/index.aspx>**

This worksheet is a recommended schedule to complete your bachelor's degree in 4 years. Every UNC student must meet the following requirements in order to graduate with a bachelor's degree: earn a minimum of 120 semester credit hours; possess a minimum of a 2.00 cumulative grade point average; have at least 40 credit hours in courses designated as Liberal Arts Core; meet all degree requirements in the student's major field of study. Each major and/or emphasis may have additional requirements necessary for graduation.

**Students must consult with their major advisor to receive information on any additional graduation requirements.**

## **Notes**

<sup>1</sup>Students who need additional preparation in mathematics may need to start in MATH 124 (4) -- College Algebra or MATH 127 (4)--Elementary Functions. Please consult your major advisor.

<sup>2</sup>SCI 225 is recommended for LAC area 1b, since this course is targeted towards teaching majors. To satisfy the Liberal Arts Core requirements using this plan, students need to select courses from Area 7 and/or 8 that also count for Areas 3, 4, or 5.

<sup>3</sup>Phase I Teaching Courses. Application for Initial Admission to PTEP is required.

<sup>4</sup>Since some of the major courses are offered every other year, two plans are provided -- one for the student's 3rd year commencing in an even year and one for it commencing in an odd year. If a student starts the physics major in 2020-2021 and stays on track, their 3<sup>rd</sup> year would begin in 2022, an even year.

<sup>5</sup>Phase II Teaching Courses. Full Admission to PTEP is required.

<sup>6</sup>Phase III Teaching Courses. Application for Student Teaching is required.

<sup>7</sup>Student Teaching. Completion of a content specific PRAXIS test is required prior to Student Teaching.

A minimum 2.0 cumulative grade point average is required in PHYS prefix courses for graduation.