

## DEGREE WORKSHEET FOR: BS Physics 2016-2017 Catalog Degree Requirements – 120 credits

YEAR 1- FALL (14 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
CHEM 111 Principles of Chemistry I	5 credits	ENG 122 College Composition (LAC Area 1)	3 credits
		Liberal Arts Core <sup>2</sup> /Electives	3 credits
YEAR 2- FALL (14 credits)		YEAR 2- SPRING (16 credits)	
PHYS 320 Mathematical Methods I	3 credits	PHYS 321 Elementary Modern Physics	4 credits
MATH 233 Calculus III	4 credits	PHYS 420 Mathematical Methods II	3 credits
CS or CG Elective Course	3 credits	Math Elective	3 credits
Liberal Arts Core <sup>2</sup> /Electives	4 credits	Liberal Arts Core <sup>2</sup> /Electives	6 credits
	eir 3 <sup>rd</sup> yea	r in odd years (2017, 2019, etc.)	
YEAR 3- FALL (15 credits)		YEAR 3- SPRING (14 credits)	
PHYS 340 Mechanics	4 credits	PHYS 301 Seminar in Physics	1 credit
Physics Electives <sup>4</sup>	8 credits	PHYS 341 Electricity and Magnetism	4 credits
Liberal Arts Core <sup>2</sup> /Electives	3 credits	Liberal Arts Core <sup>2</sup> /Electives	9 credits
YEAR 4- FALL (16-18 credits)		YEAR 4- SPRING (16-18 credits)	
PHYS 345 Quantum Mechanics I	3 credits	PHYS 445 Quantum Mechanics II	3 credits
PHYS 360 Laboratory Physics I	2 credits	PHYS 460 Laboratory Physics II	2 credits
PHYS 370 <sup>5</sup> Research I	1-3 credits	PHYS 470 <sup>6</sup> Research II	1-3 credits
PHYS 440 Thermodynamics & Statistical Mechanics	4 credits	PHYS 448 Nuclear & Particle Physics	4 credits
Liberal Arts Core <sup>2</sup> /Electives	6 credits	Liberal Arts Core <sup>2</sup> /Electives	6 credits
<sup>3</sup> For students beginning the	in even years (2016, 2018, etc.)		
YEAR 3- FALL (16 credits)		YEAR 3- SPRING (17 credi	ts)
PHYS 340 Mechanics	4 credits	PHYS 301 Seminar in Physics	1 credit
PHYS 360 Laboratory Physics I	2 credits	PHYS 341 Electricity and Magnetism	4 credits
PHYS 440 Thermodynamics & Statistical Mechanics	4 credits	PHYS 448 Nuclear & Particle Physics	4 credits
Liberal Arts Core <sup>2</sup> /Electives	6 credits	PHYS 460 Laboratory Physics II	2 credits
		Liberal Arts Core <sup>2</sup> /Electives	6 credits
YEAR 4- FALL (15-17 credits)		YEAR 4- SPRING (13-15 credits)	
PHYS 345 Quantum Mechanics I	3 credits	PHYS 445 Quantum Mechanics II	3 credits
PHYS 370 <sup>5</sup> Research I	1-3 credits	PHYS 470 <sup>6</sup> Research II	1-3 credits
Physics Electives <sup>4</sup>	8 credits	Liberal Arts Core <sup>2</sup> /Electives	9 credits
Liberal Arts Core <sup>2</sup> /Electives	3 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: <a href="http://www.unco.edu/nhs/physics/index.html">http://www.unco.edu/nhs/physics/index.html</a>

This worksheet is a <u>recommended schedule</u> 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 lack sufficient preparation in mathematics may need to start in MATH 124 (4) -- College Algebra, MATH 125 (3)--Plane Trigonometry, or MATH 127 (4)--Elementary Functions. Please consult your Physics faculty advisor.

<sup>2</sup>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>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 2016-2017 and stays on track, their 3<sup>rd</sup> year would begin in 2018, an even year.

<sup>4</sup>Suggested physics electives are: PHYS 343, PHYS 347, PHYS 447, PHYS 355, AST 301, AST 302, or AST 303.

<sup>5</sup>Students must select a senior research topic and have it approved by their physics faculty advisor in order to register for their final year of classes.

<sup>6</sup>HON 451 may be substituted for PHYS 470.

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