



DEGREE WORKSHEET FOR:

BS Physics, Liberal Arts Emphasis

2011-2012 Catalog

Degree Requirements – 120 credits

| YEAR 1- FALL (14 credits) | | YEAR 1- SPRING (15 credits) | |
|--|-------------|--|-------------|
| PHYS 240 General Physics I | 5 credits | PHYS 241 General Physics II | 5 credits |
| MATH 131 ¹ Calculus I (LAC Area 2) | 4 credits | MATH 132 ¹ Calculus II (LAC Area 2) | 4 credits |
| CHEM 111 Principles of Chemistry I | 5 credits | PHYS 320 Mathematical Methods I | 3 credits |
| | | English 122 College Composition (LAC Area 1) | 3 credits |
| YEAR 2- FALL (15 credits) | | YEAR 2-SPRING (14 credits) | |
| PHYS 340 Mechanics | 4 credits | PHYS 341 Electricity and Magnetism | 4 credits |
| PHYS 420 Mathematical Methods II | 3 credits | PHYS 321 Elementary Modern Physics | 4 credits |
| MATH 233 Calculus III | 4 credits | CS or CG Elective Course | 3 credits |
| Liberal Arts Core ³ /Electives | 4 credits | Liberal Arts Core ³ /Electives | 3 credits |
| ²For students beginning their 3rd year in odd years (2011, 2013, etc.) | | | |
| YEAR 3- FALL (16 credits) | | YEAR 3- SPRING (14-16 credits) | |
| Physics Elective ⁴ | 4 credits | Physics Elective ⁴ | 4 credits |
| Liberal Arts Core ³ /Electives | 12 credits | Math Elective | 3 credits |
| | | PHYS 370 Research I | 1-3 credits |
| | | Liberal Arts Core ³ /Electives | 6 credits |
| YEAR 4- FALL (13-15 credits) | | YEAR 4- SPRING (16 credits) | |
| PHYS 345 Quantum Mechanics I | 3 credits | PHYS 445 Quantum Mechanics II | 3 credits |
| PHYS 440 Thermodynamics and Statistical Mechanics | 4 credits | PHYS 301 Seminar in Physics | 1 credit |
| PHYS 360 Laboratory Physics I | 2 credits | PHYS 460 Laboratory Physics II | 2 credits |
| PHYS 470 Research II ⁵ | 1-3 credits | PHYS 448 Nuclear & Particle Physics | 4 credits |
| Liberal Arts Core ³ /Electives | 3 credits | Liberal Arts Core ³ /Electives | 6 credits |
| ²For students beginning their 3rd year in even years (2010, 2012, etc.) | | | |
| YEAR 3- FALL (16-18 credits) | | YEAR 3- SPRING (16 credits) | |
| PHYS 345 Quantum Mechanics I | 3 credits | PHYS 445 Quantum Mechanics II | 3 credits |
| PHYS 440 Thermodynamics and Statistical Mechanics | 4 credits | PHYS 460 Laboratory Physics II | 2 credits |
| PHYS 370 Research I | 1-3 credits | PHYS 301 Seminar in Physics | 1 credit |
| PHYS 360 Laboratory Physics I | 2 credits | PHYS 448 Nuclear & Particle Physics | 4 credits |
| Liberal Arts Core ³ /Electives | 6 credits | Liberal Arts Core ³ /Electives | 6 credits |
| YEAR 4- FALL (14-16 credits) | | YEAR 4- SPRING (14 credits) | |
| Physics Elective ⁴ | 4 credits | PHYS 301 Seminar in Physics | 1 credits |
| PHYS 470 Research II ⁵ | 1-3 credits | Physics Elective ⁴ | 4 credits |
| Liberal Arts Core ³ /Electives | 9 credits | Math Elective | 3 credits |
| | | Liberal Arts Core ³ /Electives | 6 credits |

Admission Requirement – No separate admission requirement.

Minor Required – No Minor required.

Contact Information –School of Earth Sciences and Physics, Physics Program

Ross Hall Room 0232, 970-351-2961

Program Web Page: <http://www.unco.edu/nhs/physics/index.html>

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

- 1 ¹Students 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.
- 2 ²Since 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 2010-2011 and stays on track, their 3rd year would begin in 2012, an even year.
- 3 ³To 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.
- 4 ⁴Physics electives that are suggested to take are: PHYS 343 or PHYS 347 and PHYS 447
- 4 ⁴HON 451 may be substituted for PHYS 470.

A 2.0 GPA or better is required in PHYS prefix courses for graduation.

This emphasis gives graduates excellent preparation for graduate school in Astronomy, Astrophysics, and Physics and for employment in industry and research laboratories.