

MILLERSVILLE UNIVERSITY

Student Name: _____ Student I.D.# _____

| | |
|---------------|--|
| DEGREE: BA | MAJOR REQUIREMENTS FOR A BA DEGREE IN |
| MAJOR: PHYS | PHYSICS: METEOROLOGY |
| OPTION: METEO | Total credit hours required: 120.0 minimum |

REQUIREMENTS AND POLICIES FOR THE BA PHYSICS METEOROLOGY MAJOR

A. Policies for Admission to the Major

1. New students (freshmen and transfers) must be admitted to the Physics major by the Office of Admissions upon admission to the University.
2. Admission into the Physics major from other departments is upon approval of the chairperson of the Department.
3. Non-degree and continuing education students must be admitted to the Physics major by the Office of Admissions.

B. Policies for Retention in the Major

1. University requirements for retention.

C. Policies for Completion of the Major

1. Completion of all University curricular requirements.
2. Students majoring in Physics are required to attain a C- or better in MATH 161 - 211 and PHYS 231 - 232 before taking courses which have these courses as prerequisites.

Note to the student: *This form is provided as a guide. It is your responsibility to consult regularly with your adviser to be aware of changes and curriculum details which are not incorporated on this form.*

MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BA PHYSICS**
 Option: **METEOROLOGY**

Major Field Requirements: **32.0 credits**
 Other Requirements: **46.0 - 52.0 credits**

When applicable, up to six of the **REQUIRED RELATED** courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

| Course No. | Short Title | C.H. | Grade | Course No. | Short Title | C.H. | Grade |
|--|------------------------------|------|-------|---|--------------------------|------|-------|
| REQUIRED PHYSICS COURSES (32.0 credits) | | | | REQUIRED RELATED (46.0-52.0 credits) | | | |
| PHYS 231 | Physics I with Calculus | 5.0 | _____ | Mathematics (15.0 credits) | | | |
| PHYS 232 | Physics II with Calculus | 5.0 | _____ | MATH 161 | Calculus I | 4.0 | _____ |
| PHYS 233 | Modern Theory Wave/Particles | 3.0 | _____ | MATH 211 | Calculus II | 4.0 | _____ |
| PHYS 266 | Electronics | 3.0 | _____ | MATH 311 | Calculus III | 4.0 | _____ |
| PHYS 311 | Mechanics I | 3.0 | _____ | MATH 365 | Ord Diff Equations | 3.0 | _____ |
| PHYS 321 | Electromagnetic Fields I | 3.0 | _____ | Chemistry (8.0 credits) | | | |
| PHYS 334 | Macro/Thermodynamics | 3.0 | _____ | CHEM 111 | Intro Chemistry I | 4.0 | _____ |
| PHYS 335 | Quantum Sys/Statistics | 3.0 | _____ | CHEM 112 | Intro Chemistry II | 4.0 | _____ |
| PHYS 351 | Intermediate Physics Lab I | 1.0 | _____ | Foreign Language (0 - 6.0 credits) | | | |
| PHYS 492 | Research & Seminar | 2.0 | _____ | Competency required through the elementary level (FORL 101 and 102). To satisfy this requirement with two years of successful high school study in one language, please have your adviser contact the Degree Audit Office at dars@millersville.edu confirming the competency has been met. | | | |
| PHYS 498 | Ind Study/ Research | 1.0 | _____ | _____ 101 | Elementary I | 3.0 | _____ |
| | | | | _____ 102 | Elementary II | 3.0 | _____ |
| | | | | Meteorology (23.0 credits)* | | | |
| | | | | ESCI 241 | Meteorology | 4.0 | _____ |
| | | | | ESCI 340 | Physical Meteorology | 3.0 | _____ |
| | | | | ESCI 341 | Atmos. Thermodynamics | 3.0 | _____ |
| | | | | ESCI 342 | Atmospheric Dynamics I | 3.0 | _____ |
| | | | | ESCI 343 | Atmospheric Dynamics II | 3.0 | _____ |
| | | | | ESCI 441 | Synoptic Meteor. Lec/Lab | 3.0 | _____ |
| | | | | ESCI 444 | Mesoscale Meteorology | 4.0 | _____ |
| | | | | * These courses fulfill the <u>MINOR in Meteorology</u> . Substitution of ESCI 343 for ESCI 245 will be accepted by the Earth Science Department. | | | |
| | | | | These courses fulfill the minimum course requirements for employment by the National Weather Service. | | | |