2012-2013

Bachelor of Arts (BA) **Program of Study for Physics Majors**
Degree Code 269A

I. GENERAL EDUCATION CURRICULUM 44
CHE 1101/1110 and 1102/1120 fulfill Science Inquiry perspective. MAT 1110 fulfills Quantitative Literacy.

II. LANGUAGE (Completion of 6 semester hours at the *intermediate level, or higher) 6
_____1040 ____ and 1050 ____ or 1060 ____; or higher level courses _____
**NOTE: Language 1010 and 1020 (or 1030) are prerequisites for the intermediate level courses.*
FL 1050 or 1060 may be used in General Education Perspectives depending upon choices

III. MAJOR REQUIREMENTS (Not including 12 s.h. already counted in I, above) **.....47**
2.0 major GPA is required for graduation. Major GPA calculation will include <u>all</u> courses taken in the major department, plus any other courses under III. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian. No more than 46 semester hours of Physics and Astronomy courses may be counted toward the BA Degree.

A. Physics Core Requirements (36 semester hours):

PHY 1103	_____ (4)	General Physics I *(Co: MAT 1020/1025)*	**OR**	PHY 1150_____(5)	Analytical Physics I *(Co: MAT 1110)*
PHY 1104	_____ (4)	General Physics II *(Pre: PHY 1103)*		PHY 1151_____(5)	Analytical Physics II *(Co: MAT 1120)*

PHY 2010 _____ (4) Intermediate Physics I *(Pre: PHY 1104/1151; MAT 1120)*
PHY 2020 _____ (4) Intermediate Physics II *(Pre: PHY 2010; MAT 2130)*
PHY 2210 _____ (3) Physics Laboratory Techniques and Data Analysis **[WID]** *(Co: ENG 2001, PHY 2020)*
PHY 3010 _____ (3) Classical Mechanics *(Pre: PHY 2010; Co: MAT 3130)*
PHY 3020 _____ (3) Electromagnetic Fields and Waves *(Pre: PHY 2020; MAT 3130)*
PHY 4210 _____ (3) Methods of Experimental Physics **[CAP]** *(Pre: PHY 2210)*
6 to 8 semester hours of physics and astronomy electives to bring total in Area A to 36 hrs:
_____
_____

B. Mathematics (15 semester hours)
MAT 1110 _____ (4) Calculus with Analytic Geometry I *(Pre: MAT 1025 w/min grade C-)*
MAT 1120 _____ (4) Calculus with Analytic Geometry II *(Pre: MAT 1110 w/min grade C-)*
MAT 2130 _____ (4) Calculus with Analytic Geometry III *(Pre: MAT 1120 w/min grade C-)*
MAT 3130 _____ (3) Introduction to Differential Equations *(Pre: MAT 1120)*

C. Chemistry (8 semester hours)
CHE 1101 _____ (3) Introductory Chemistry I *(Co: CHE 1110)*
CHE 1110 _____ (1) Introductory Chemistry I Lab *(Co: CHE 1101)*
CHE 1102 _____ (3) Introductory Chemistry II *(Pre: CHE 1101/1110; Co: CHE 1120)*
CHE 1120 _____ (1) Introductory Chemistry II Lab *(Co: CHE 1102)*

IV. MINOR REQUIRED.....12-20
Minimum of 9 semester hours of courses taken to fulfill minor requirements must be courses offered by Appalachian.

V. ELECTIVES (taken to total 122 hours for the degree).....<u>5-13</u>
2 semester hours of free electives must be outside the major discipline. **122**