

**Recommended Academic Plan for Science B.S. General Science Pre-certification Option
(SCNBD at Penn State Erie, Behrend College) Revised Summer 2003**

Semester 1	Credits	Semester 2	Credits
ENGL 015 or 030 (GWS) Rhetoric & Composition	3	Social and Behavioral Sciences (GS)	3
MATH 140 (GQ) Calculus w. A. Geometry I	4	MATH 141 (GQ) Calculus w. A. Geometry II	4
Humanities (GH)	3	Arts (GA)	3
CHEM 110 (GN) Chemical Principles I	3	CHEM 112 (GN) Chemical Principles II	3
CHEM 111 (GN) Experimental Chemistry I	1	CHEM 113 (GN) Experimental Chemistry II	1
First-Year Seminar	1	Health & Physical Activity (GHA)	1.5
Total Credits:	15	Total Credits:	15.5
Semester 3	Credits	Semester 4	Credits
CAS 100 (GWS) Effective Speech	3	CMPSC 121 Intro to Programming Tech.	3
Foreign Language 1*	4	GEOSC 002 Historical Geology	3
BIOL 110 (GN) Biology: Basic Concepts & Biodiversity	4	Arts (GA)	3
PHYS 250 (or PHYS 211) Intro Physics I	4	PHYS 251 (or PHYS 212) Intro Physics II	4
		Humanities (GH)	3
Total Credits:	15	Total Credits:	16
Semester 5	Credits	Semester 6	Credits
ASTRO 10 & 11 (GN) Elementary Astronomy	3	BIOL 220W Biology: Populations	4
ENGL 202C (GWS) Effective Writing; Technical	3	METEO 003 Introductory Meteorology	3
BIOL 230W Biology: Molecules & Cells	4	Foreign Language 2*	4
Program List Course 4XX**	3	GEOSC 020 Planet Earth	3
PHYS 213, 214 General Physics, or elective	3 - 4	Health & Physical Activity (GHA)	1.5
Total Credits:	15 - 16	Total Credits:	15.5
Semester 7	Credits	Semester 8	Credits
MATH 230 or MATH 250 or CSE 122, or STAT 200	3 - 4	Science Supporting Course 4XX*	3
Science Supporting Course 4XX*	3	Program List Course 4XX**	3
Program list course 4XX**	3	BIOL 240W Biology: Function & Development	4
Social and Behavioral Sciences (GS)	3	GEOSC 040	3
		Elective (if needed)	1
Total Credits:	13 - 14	Total Credits:	13 - 14

- A grade of C or better is required for each 300 or 400 level course in the major field.
- # - For Science Supporting Courses, select 6 credits at the 400 level in category a, b, c, or d below.
(a) computer sciences (b) life sciences (c) mathematical sciences (d) physical sciences
- * If a student places into the second course of a foreign language by placement action, elective courses may be used to meet the credit requirement.
- **Program List Courses (choose at least 6 credits at the 400 level) Student may select supporting courses from nearly the entire range of the University's course offerings, **excluding** the following: BIOL 011, 012, BI SC 001, 002, 003, 004, B M B 001, CHEM 001, 003, 101, 108, CMPSC 001, 100, 110, ENGL 004, 005, LL ED 005, 010, MATH 001, 002, 003, 004, 017, 018, 021, 026, 030, 035, 036, 040, 081, 082, 083, 110, 111, 200, MICRB 106, 107, 120, 121A, 121B, 150, any MICRB 151x, PHYS 001, 150, 151, SPCOM 04, 126, STAT 100.