2011-2012

Bachelor of Science (BS) **Checksheet for Chemistry Majors**
Degree Code 214* **ENVIRONMENTAL**
Concentration Code 214G

I. GENERAL EDUCATION CURRICULUM 44
CHE 1101/1110 and 1102/1120 fulfills the Science Inquiry Perspective. MAT 1110 fulfills the Quantitative Literacy requirement.

II. MAJOR REQUIREMENTS (Not including 12 s.h. already counted in I, above)**.....73**
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 II. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian.

A. Chemistry (32 semester hours)

CHE 1101/1110	_____	(4)	Introductory Chemistry I & Lab
CHE 1102/1120	_____	(4)	Introductory Chemistry II & Lab *(Pre: CHE 1101/1110)*
CHE 2201	_____	(3)	Organic Chemistry I *(Pre: CHE 1102/1120; Co: CHE 2203)*
CHE 2203	_____	(1)	Organic Chemistry I Lab *(Pre: CHE 1102/1120; Co: 2201)*
CHE 2202	_____	(3)	Organic Chemistry II *(Pre: CHE 2201/2203 w/minimum grade "C-"; Co: 2204)*
CHE 2204	_____	(1)	Organic Chemistry II Lab *(Pre: CHE 2201/2203 w/minimum grade "C-"; Co: CHE 2202)*
CHE 2210	_____	(3)	Quantitative Analysis *(Pre: CHE 1102/1120; Co: CHE 2211)*
CHE 2211	_____	(1)	Quantitative Analysis Lab *(Co: CHE 2210)*
CHE 3000	_____	(1)	Introduction to Chemical Research *(Pre: CHE 2101 or 2201; 2210)*
CHE 3301	_____	(3)	Physical Chemistry I *(Pre: CHE 2210 & 2211; MAT 1120; PHY 1151)*
CHE 3303	_____	(1)	Physical Chemistry I Laboratory **[WID]** *(Co: CHE 3301; Pre: ENG 2001)*
CHE 3404	_____	(3)	Inorganic Chemistry *(Pre: CHE 3301)*
CHE 3560	_____	(3)	Instrumental Methods of Analysis *(Pre: CHE 3301; Co: 3561)*
CHE 3561	_____	(1)	Instrumental Methods of Analysis Lab *(Co: 3560)*

B. Physics (13 semester hours)

PHY 1150	_____	(5)	Analytical Physics I *(Co: MAT 1110)*
PHY 1151	_____	(5)	Analytical Physics II *(Co: MAT 1120)*
PHY 3140	_____	(3)	Environmental Physics *(Pre: PHY 1104 or 1151)*

C. Mathematics (8 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-)*

D. Other Sciences (8 semester hours)

BIO 1801	_____	(4)	Biological Concepts I *(Co: CHE 1101)*
GLY 1101	_____	(4)	Introduction to Physical Geology

E. Environmental Concentration (24 semester hours)

1. Science and Mathematics (15 semester hours)

CHE 4620	_____	(4)	Environmental Chemistry **[CAP]** *(Pre: CHE 3301, 3560, 3561; STT 2810)*
BIO 3302	_____	(4)	Ecology *(Pre: BIO 1801)*
GLY 1103	_____	(4)	Introduction to Environmental & Applied Geology
STT 2810	_____	(3)	Introduction to Statistics *(Pre: MAT 1010)*

2. Social Science (9 semester hours)

ECO 2620	_____	(3)	Environmental & Resource Economics
GHY 1010	_____	(3)	Introduction to Physical Geography
P S 2130	_____	(3)	State and Local Government

III. MINOR (optional)

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

Major Requirements that count in Gen Education:	
Quantitative Lit	
MAT 1110	4 s.h.
Science Inquiry	
CHE 1101/1110	4 s.h.
CHE 1102/1120	4 s.h.
Perspectives (depends on choices)	
ECO 3620	3 s.h.
Total Major hrs:	85
Gen Ed-up to 15 hrs:	- 15
Net Major hrs:	70

Recommended Electives

CHE 3302	_____	(3)	Physical Chem II (*Pre/Co: CHE 2211; MAT 1120; PHY 1151)*
CHE 3304	_____	(3)	Physical Chemistry II Lab (*Pre/Co: CHE 3302)*
C S 1440	_____	(3)	Computer Science I *(Pre: MAT 1020/1025 w/grade "C-")*
GHY 3100	_____	(3)	Weather and Climate *(Pre: GHY 1010)*
GHY 3110	_____	(3)	Vegetation, Soils, & Landforms *(Pre: GHY 1010)*
GHY 3310	_____	(3)	Environmental Remote Sensing
GHY 3320	_____	(3)	Environmental Issues in Appalachia
GHY 3820	_____	(3)	GIS for the Environ & Soc Science
GHY 4820	_____	(3)	Geographical Hydrology *(Pre: GHY 1010, 3100, 3110)*
GLY 4630	_____	(3)	Hydrogeology (*Pre: Jr. standing; 6 sh GLY ≥ 1000)*
PHL 1100	_____	(3)	Logic I
P S 3280	_____	(3)	Public Policy Analysis