2014-2015

Bachelor of Arts (BA) **Program of Study for Chemistry Majors**
Degree Code 216A

I. GENERAL EDUCATION CURRICULUM 44
CHE 1101/1110 and 1102/1120 fulfills the Science Inquiry Perspective. MAT 1110 fulfills the 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)* **..... 52-54**
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. No more than 46 semester hours of Chemistry courses may be counted toward the BA Degree.

A. Chemistry (40 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)*
CHE 2201	_____ (3)	Organic Chemistry I	*(Pre: CHE 1102/1120; Co: CHE 2203)*
CHE 2203	_____ (1)	Organic Chemistry I Lab	*(Co: CHE 2201)*
CHE 2202	_____ (3)	Organic Chemistry II	*(Pre: CHE 2201/2203 w/minimum grade "C-"; Co: CHE 2204)*
CHE 2204	_____ (1)	Organic Chemistry II Lab	*(Pre: CHE 2201/2203 w/minimum grade of "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 2202; CHE 2210)*
CHE 3301	_____ (3)	Physical Chemistry I	*(Pre: CHE 2210/2211; MAT 1120; PHY 1151)*
CHE 3303	_____ (1)	Physical Chemistry I Laboratory **[WID]**	*(Pre: ENG 2001; Pre/Co: CHE 3301)*
CHE 3302	_____ (3)	Physical Chemistry II	*(Pre: CHE 3301)*
CHE 3304	_____ (1)	Physical Chemistry II Laboratory	*(Pre: CHE 3303; Pre/Co: CHE 3302)*
CHE 3404	_____ (3)	Inorganic Chemistry	*(Pre: CHE 3301)*
CHE 3405	_____ (1)	Inorganic Chemistry Laboratory	*(Co: CHE 3404)*
CHE 4000	_____ (1)	Chemistry Seminar **[CAP]**	*(Pre: CHE 3000, 3303)*
CHE 4400	_____ (1)	Senior Research	*(Pre: CHE 4000)*

Plus an additional 5 semester hours of chemistry courses at or above the 3000 level (CHE 3520 & 4610 excluded)

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CHE 3560/3561 Instrumental Methods of Analysis & Lab and CHE 4580 Biochemistry I are strongly recommended. If CHE 3560 & 4580 are chosen, this degree is approved by the American Chemical Society's Committee on Professional Training.

B. Physics (10 semester hours)

PHY 1150	_____ (5)	Analytical Physics I	*(Pre: MAT 1110)*
PHY 1151	_____ (5)	Analytical Physics II	*(Pre: MAT 1120)*

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 Science (6-8 semester hours) An additional 6-8 semester hours selected from astronomy, biology, geology, or physics.
GLY 2301 may be used in General Education Perspectives.
_____ (Physics courses at the 1000 level and PHY 3350 are not accepted)

IV. MINOR REQUIRED 12-16
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>2-8</u>
2 semester hours of free electives must be outside the major discipline. **122**
Total major (including language & minor) = 82-88 hrs; Gen Ed courses may count in major (depends on choices) – up to 18; net major 64-70 hours.