

Bachelor of Science (BS)
Degree Code 214*
Concentration Code 214J

Program of Study for Chemistry Majors
CHEMISTRY
SECONDARY EDUCATION LICENSURE

I. CORE CURRICULUM44

CHE 1101, 1110, 1102, 1120, and MAT 1110 will fulfill General Education requirements.

II. PROFESSIONAL EDUCATION REQUIREMENTS 24

A minimum grade of C is required in each professional education course. CI 2300 & FDN 2400 are required prior to admission to Teacher Educ.

CI 2300	_____ (2)	Teaching and Learning in the Digital Age (<i>Entry course to teacher education</i>)	
FDN 2400	_____ (2)	Critical Perspectives on Teaching and Learning (<i>Pre or Co: CI 2300</i>) (<i>Entry course to teacher education</i>)	
PSY 3010	_____ (3)	Psychology Applied to Teaching (<i>Pre or Co: CI 2300</i>)	PROFICIENCIES:
SPE 3300*	_____ (3)	Creating Inclusive Learning Communities (<i>Pre: CI 2300, FDN 2400, PSY 3010</i>)	Reading _____
CI 3400*	_____ (2)	Policies and Practice in Educational Assessment (<i>Pre: CI 2300, FDN 2400, PSY 3010</i>)	English _____
CI 4900	_____ (12)	Student Teaching [CAP] (<i>Cumulative 2.7 GPA; All courses in professional core must be completed with grades of C (2.0) or higher prior to student teaching, along with other courses (including methods and reading) identified within the major.</i>)	

*Admission to Teacher Education required.

Minimum 2.7 cumulative GPA required to graduate.

NOTE: To be admitted to the Teacher Education Program students must have a minimum 2.7 cumulative GPA and take and satisfy testing requirements for Reading, Writing and Math areas of the PRAXIS (PPST or CBT). The PRAXIS II Area Exams are required for student teaching.

III. MAJOR REQUIREMENTS (Not including 12 s.h. already counted in I, above)52

2.0 major GPA is required for graduation. Major GPA calculation will include all 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)	Intro Chemistry II & Lab (<i>Pre: CHE 1101 & 1110; Co: 1120</i>)
CHE 2210	_____ (3)	Quantitative Analysis (<i>Pre: CHE 1102 & 1120; Co: 2211</i>)
CHE 2211	_____ (1)	Quantitative Analysis Lab (<i>Co: CHE 2210</i>)
CHE 3000	_____ (1)	Introduction to Chemical Research (<i>Pre: CHE 2101 or 2202; 2210</i>)
CHE 3301	_____ (3)	Physical Chemistry I (<i>Pre: CHE 2210 & 2211; MAT 1120; PHY 1151</i>)
CHE 3303	_____ (1)	Physical Chemistry I Laboratory [WID] (<i>Pre: RC 2001; Pre/Co: CHE 3301</i>)
CHE 3404	_____ (3)	Inorganic Chemistry (<i>Pre: CHE 2101 & 2102 or 2202 & 2204; CHE 2210 & 2211</i>)
CHE 3521	_____ (1)	Secondary Science Field Experience (<i>Pre: Jr/Sr standing</i>)

Experience as a tutor through the Learning Assistance Program or the Supplemental Instruction Program is strongly recommended.

CHOOSE ONE GROUP OF 11 semester hours:

CHE 2101	_____ (3)	Fundamentals of Organic Chemistry (<i>Pre: CHE 1102 & 1120; Co: 2102</i>)
CHE 2102	_____ (1)	Fundamentals of Organic Chemistry Lab (<i>Pre: CHE 1102 & 1120; Co: 2101</i>)

Plus 7 semester hours of chemistry courses (CHE 4580, Biochemistry I is recommended) _____

OR

CHE 2201	_____ (3)	Organic Chemistry I (<i>Pre: CHE1102 & 1120; Co: 2203</i>)
CHE 2203	_____ (1)	Organic Chemistry I Lab (<i>Pre: CHE 1102 & 1120; Co: 2201</i>)
CHE 2202	_____ (3)	Organic Chemistry II (<i>Pre: CHE 2201 & 2203 w/minimum grade "C-"; Co: CHE 2204</i>)
CHE 2204	_____ (1)	Organic Chemistry II Lab (<i>Pre: CHE 2201 & 2203 w/grade "C-"; Co: CHE 2202</i>)

Plus 3 semester hours of chemistry courses (CHE 4580, Biochemistry I is recommended) _____

B. Physics (10 semester hours)

PHY 1150	_____ (5)	Analytical Physics I (<i>Co: MAT 1110</i>)
PHY 1151	_____ (5)	Analytical Physics II (<i>Co: MAT 1120</i>)

C. Mathematics (8 semester hours)

MAT 1110	_____ (4)	Calculus with Analytic Geometry I (<i>Pre: MAT 1025 w/min grade C-</i>)
MAT 1120	_____ (4)	Calculus with Analytic Geometry II (<i>Pre: MAT 1110 w/min grade C-</i>)

D. Education (6 semester hours) Minimum "C" grade is required in both these courses.

G S 4403	_____ (3)	Teaching Science in Middle and High Schools [WID] (<i>Pre: RC 2001</i>)
G S 4404	_____ (3)	The Meaning & Nature of Science [WID] (<i>Pre: RC 2001; Sr. standing</i>)

E. Other Science (8 semester hours)

BIO 1801	_____ (4)	Biological Concepts I (<i>Co: CHE 1101</i>)
GLY 1101	_____ (4)	Introduction to Physical Geology

IV. MINOR (optional)

V. ELECTIVES (taken to total 122 hours for the degree)..... 2
2 semester hours of free electives must be outside the major discipline. 122