



# UNTS - CHEMISTRY CAREER PATHWAY MAP

✓	RECOMMENDED COURSE SEQUENCE	Core Area shown on page 2	SEMESTERS OFFERED	MY PLAN (Semester and Year)	CREDIT HOURS
<input type="checkbox"/>	1. ENGL 1301 <i>Composition I</i>	<a href="#">Core Comm !</a>	F, Sp, Su		3
<input type="checkbox"/>	2. MATH 2412 <b>Pre-Calculus***</b>	<a href="#">Core Math @</a>	F, Sp		4
<input type="checkbox"/>	3. CHEM 1411 <b>General Chemistry I</b>	<a href="#">Core Science #</a>	F, Sp, Su		4
<input type="checkbox"/>	4. PHIL 1301, PHIL 2306, HIST 2311, or HIST 2321*	<a href="#">Core LP&amp;C \$</a>	F, Sp, Su		3
<input type="checkbox"/>	5. HIST 1301 <i>United States History I</i>	<a href="#">Core History %</a>	F, Sp, Su		3
					17 hours
<input type="checkbox"/>	6. GOVT 2305 <i>Federal Government</i>	<a href="#">Core Govt ^</a>	F, Sp, Su		3
<input type="checkbox"/>	7. MATH 2413 <b>Calculus I</b>	<a href="#">Core Math @</a>	F, Sp, Su		4
<input type="checkbox"/>	8. MUSI 1306, ARTS 1301, or DRAM 2366*	<a href="#">Core Arts +</a>	F, Sp, Su		3
<input type="checkbox"/>	9. ECON 2301, GEOG 1303, or SOCI 1301*	<a href="#">Core S&amp;B /</a>	F, Sp, Su		3
<input type="checkbox"/>	10. CHEM 1412 <b>General Chemistry II</b>	<a href="#">Core Science #</a>	F, Sp, Su		4
					34 hours
<input type="checkbox"/>	11. SPCH 1315 or SPCH 1318*	<a href="#">Core Comp 1 &amp;</a>	F, Sp, Su		3
<input type="checkbox"/>	12. ENGL 1302 <b>Composition II**</b>	<a href="#">Core Comm !</a>	F, Sp, Su		3
<input type="checkbox"/>	13. MATH 2414 <b>Calculus II</b>		F, Sp		4
<input type="checkbox"/>	14. PHYS 2425 <b>University Physics I</b>	<a href="#">Core Science #</a>	F, Sp		4
					48 hours
<input type="checkbox"/>	15. GOVT 2306 <i>Texas Government</i>	<a href="#">Core Govt ^</a>	F, Sp, Su		3
<input type="checkbox"/>	16. PHYS 2426 <b>University Physics II</b>	<a href="#">Core Comp 2 &lt;</a>	F, Sp		4
<input type="checkbox"/>	17. BCIS 1305 or ECON 2302*		F, Sp, Su		3
<input type="checkbox"/>	18. HIST 1302 <i>United States History II</i>	<a href="#">Core History %</a>	F, Sp, Su		3
	*** [Associate of Science DEGREE EARNED] ***				61 hours
	NOTE: Check with the Office of Financial Aid as aid may not be available beyond degree completion and/or 60 hours.				

## CAREER OPPORTUNITIES

Career Options: laboratory technician, quality control, quality assurance, laboratory manager, HAZMAT  
Salary Information: <https://www.payscale.com/research/US/Job=Chemist/Salary>

## ADVANCED DEGREES/CREDENTIAL OPPORTUNITIES

Bachelor of Science in Chemistry, Mathematics, Engineering, or Physics

## LINKS TO COLLEGES AND PROFESSIONAL ORGANIZATIONS:

University of Texas at Tyler Department of Chemistry and Biochemistry: <https://www.uttyler.edu/chemistry/>  
American Chemical Society: <https://www.acs.org/content/acs/en.html>

## CONTACT INFORMATION (Click link for [KC Digital Map](#))

Dr. Paul C. Buchanan  
Chair, Dept. of Chemistry and Geology  
BLDG 10, Room 339/341  
(903) 983-8253  
[pbuchanan@kilgore.edu](mailto:pbuchanan@kilgore.edu)

Rhonda Heinsohn  
Academic Advisor Arts/Sciences  
BLDG 19, Room 126  
(903) 983-8122  
[rheinsohn@kilgore.edu](mailto:rheinsohn@kilgore.edu)

Alex Knox  
Academic Advisor Arts/Sciences  
BLDG 19, Room 124  
(903) 983-8155  
[aknox@kilgore.edu](mailto:aknox@kilgore.edu)

Revised March 2022

## READ ALL NOTES CAREFULLY:

- Courses in **bold** have a pre-requisite (previous course required). See [Catalog](#)
  - Courses in *italics* can be taken in any order.
  - ENGL 1301 and the first MATH class may require a co-requisite and/or developmental course depending on TSI Scores.
  - Refer to [KC Catalog](#) for Field of Study and Degree Requirements.
- \* Refer to Core Curriculum and KC Catalog for all possible course options.

\*\* ENGL 2311 may be taken in place of ENGL 1302

\*\*\*MATH 1314 (College Algebra) is a pre-requisite for this course. Approval is needed to begin in MATH 2412.

## Kilgore College Core Curriculum

### **! Communication (6 hours)**

[ENGL 1301 \(T\) - Composition I AND](#)  
[ENGL 1302 \(T\) - Composition II OR](#)  
[ENGL 2311 \(T\) - Technical and Business Writing](#)

### **@ Mathematics (3 hours)**

[MATH 1314 \(T\) - College Algebra](#)  
[MATH 1316 - Plane Trigonometry](#)  
[MATH 1324 \(T\) - Mathematics for Business and Social Sciences](#)  
[MATH 1325 \(T\) - Calculus for Business and Social Sciences](#)  
[MATH 1332 \(T\) - Contemporary Mathematics](#)  
[MATH 1342 \(T\) - Elementary Statistical Methods](#)

[MATH 1350 \(T\) - Mathematics for Teachers I](#)  
[MATH 2412 \(T\) - Pre-Calculus Math](#)  
[MATH 2413 \(T\) - Calculus I](#)  
[MATH 2414 \(T\) - Calculus II](#)  
[MATH 2415 \(T\) - Calculus III](#)

### **# Life and Physical Sciences (6 hours)**

[BIOL 1406 \(T\) - Biology for Science Majors I](#)  
[BIOL 1407 \(T\) - Biology for Science Majors II](#)  
[BIOL 1408 \(T\) - Biology for Non-Science Majors I](#)  
[BIOL 1409 \(T\) - Biology for Non-Science Majors II](#)  
[BIOL 2401 \(T\) - Human Anatomy and Physiology I](#)  
[BIOL 2402 \(T\) - Human Anatomy and Physiology II](#)  
[BIOL 2404 \(T\) - Anatomy & Physiology](#)  
[BIOL 2406 \(T\) - Environmental Biology](#)  
[ENVR 1401 \(T\) - Environmental Science I](#)  
[CHEM 1405 \(T\) - Introductory Chemistry I](#)  
[CHEM 1406 \(T\) - Introductory Chemistry I \(allied health emphasis\)](#)  
[CHEM 1411 \(T\) - General Chemistry I](#)  
[CHEM 1412 \(T\) - General Chemistry II](#)

[GEOL 1301 \(T\) - Earth Sciences for Non-Science Majors I \(lecture only\)](#)  
[GEOL 1403 \(T\) - Physical Geology](#)  
[GEOL 1404 \(T\) - Historical Geology](#)  
[GEOL 1405 \(T\) - Environmental Science](#)  
[PHYS 1303 \(T\) - Stars and Galaxies \(lecture only\)](#)  
[PHYS 1401 \(T\) - College Physics I](#)  
[PHYS 1402 \(T\) - College Physics II](#)  
[PHYS 1403](#)  
[PHYS 1404 \(T\) - Solar System](#)  
[PHYS 1405 \(T\) - Elementary Physics I](#)  
[PHYS 2425 \(T\) - University Physics I](#)  
[PHYS 2426 \(T\) - University Physics II](#)

### **\$ Language, Philosophy & Culture (3 hours)**

[ENGL 2322 \(T\) - British Literature I](#)  
[ENGL 2323 \(T\) - British Literature II](#)  
[ENGL 2326 \(T\) - American Literature](#)  
[ENGL 2332 \(T\) - World Literature I](#)  
[ENGL 2333 \(T\) - World Literature II](#)  
[HIST 2311 \(T\) - Western Civilization I](#)  
[HIST 2312 \(T\) - Western Civilization II](#)  
[HIST 2321 \(T\) - World Civilizations I](#)  
[HIST 2322 \(T\) - World Civilizations II](#)  
[PHIL 1301 \(T\) - Introduction to Philosophy](#)  
[PHIL 2306 \(T\) - Introduction to Ethics](#)

### **+ Creative Arts (3 hours)**

[ARTS 1301 \(T\) - Art Appreciation](#)  
[ARTS 1303 \(T\) - Art History I](#)  
[ARTS 1304 \(T\) - Art History II](#)  
[DANC 2303 \(T\) - Dance Appreciation](#)  
[DRAM 1310 \(T\) - Theatre Appreciation](#)  
[DRAM 2362](#)  
[DRAM 2366 \(T\) - Film Appreciation](#)  
[MUSI 1306 \(T\) - Music Appreciation](#)  
[MUSI 1307 \(T\) - Music Literature](#)

### **% American History (6 hours)**

[HIST 1301 \(T\) - United States History I](#)  
[HIST 1302 \(T\) - United States History II](#)

### **^ Government/Political Science (6 hours)**

[GOVT 2305 \(T\) - Federal Government](#)  
[GOVT 2306 \(T\) - Texas Government](#)

### **& Component Area Option 1 (3 hours)**

[SPCH 1315 \(T\) - Public Speaking](#)  
[SPCH 1318 \(T\) - Interpersonal Communication](#)

### **/ Social and Behavioral Sciences (3 hours)**

[ECON 2301 \(T\) - Principles of Macroeconomics](#)  
[ECON 2302 \(T\) - Principles of Microeconomics](#)  
[GEOG 1303 \(T\) - World Regional Geography](#)  
[PSYC 2301 \(T\) - General Psychology](#)  
[PSYC 2314 \(T\) - Lifespan Growth and Development](#)  
[SOCL 1301 \(T\) - Introductory Sociology](#)  
[SOCL 1306 \(T\) - Social Problems](#)  
[TECA 1354 \(T\) - Child Growth and Development](#)

### **< Component Area Option 2 (3 hours)**

Any additional course listed in the core curriculum above or [BCIS 1305](#) or [MATH 1351](#) or [EDUC 1300](#)