ARKANSAS TECH UNIVERSITY

General Education Course Objectives and Learning Outcomes

Course Name:	General Chemistry I	Course Number: CHEM 2124 with CHEM 2120		
Submitted by:	Mariusz Gajewski	Department: Physical Sciences	Deleted: Dr.	
COMMON CO LISTED ON T	DURSE OBJECTIVES AND STU THE SYLLABUS OF EVERY SEC	DENT LEARNING OUTCOMES THAT ARE OR WILL BE FION OF THIS COURSE:		
Course objectives:	CHEM 2124 is designed as a broad, general overview of fundamental chemistry concepts that students will build upon in later courses. CHEM 2120 is a <u>co-requisite</u> for CHEM 2124, designed as an integral support for the course in a laboratory setting.			
Student learning outcomes:	After <u>successful</u> completion of 1. Describe the structure of 2. Apply the system of no structures and physical	CHEM 2124, students will be able to: of an atom and explain periodic trends among the elements, menclature to chemical compounds and describe their properties.		
	 Analyze stoichiometry nuclear. Explain the properties thermochemistry. Boxform concentration 	and balance chemical reactions, including ionic, redox and	Deleted: -	
	 After <u>successful</u> completion of Observe the safety rule 	CHEM 2120, students will be able to: s and regulations to promote a safe laboratory environment.	Deleted: s	
	 Perform and record me and proper units. (supp Analyze data and draw (supports CHEM 2124 1 	asurements with appropriate equipment, correct precision oorts CHEM 2124 Learning Outcomes 1-5) conclusions, which are supported by the experimental data <u>.</u> .earning Outcomes 1-5)		
ADHE ACTS	INFORMATION FOR THIS CO	JRSE (IF APPROPRIATE)		
ACTS Course number:	CHEM 1414		_	
Copy the ACTS course objectives and learning outcomes:	The student will explain, descr. Chemical reactions Gases and the kinetic-m Nuclear chemistry Quantum theory and al Electron configuration Stoichiometry Valence bond theory ar	be, discuss, recognize, and apply knowledge of the following: nolecular theory omic structure and chemical periodicity nd molecular orbital theory		
WHICH ATU	Inorganic Nomenclatur Thermochemistry GENERAL EDUCATION GOAL	e S DOES THIS COURSE FULFILL? (NO MORE THAN TWO)	_	

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Communicate effectively	
Written communication	
Oral communication	
Think critically	Formatted: No underline
Develop ethical perspectives	
Diversity	
Empathy	
Leadership	
√ Apply scientific and quantitative reasoning	
Scientific reasoning	
Quantitative reasoning	
Apply the value of the arts and humanities	
Practice civic engagement	_
DESCRIPTION OF HOW THIS COURSE MEETS THE GENERAL EDUCATION GOALS CHOSEN ABOVE (TO BE INCLUDED ON THE SYLLABUS OF EVERY SECTION OF THIS COURSE)	_
CHEM 2124 supports one of Arkansas Tech University's general education goals:	
 Students will perform representative mole calculations in chemistry, analyze stoichiometry and balance chemical reactions, explain the properties of chemical systems and periodic trends among the elements by applying scientific and quantitative reasoning. 	
CHEM 2120 supports one of Arkansas Tech University's general education goals:	
 Students will perform and record measurements with appropriate equipment, correct precision and proper units (supports CHEM 2124 Learning Outcomes 1-5) by applying scientific and quantitative reasoning. 	