CHEM 1211L - Chemistry Lab I (version 201003L)

Course Title	Course Development	Learning Support
Chemistry Lab I	Standard	No

Course Description

Selected laboratory exercises paralleling the topics in CHEM 1211. The laboratory exercises for this course include measurement, physical and chemical properties of matter, atomic structure, chemical bonding, nomenclature, chemical reactions, stoichiometry and gas laws.

Pre-requisites

Pre-requisites: One Required

MATH 1101 - Mathematical Modeling (201003L)
MATH 1103 - Quantitative Skills and Reasoning (201614L)
MATH 1111 - College Algebra (201003L)

Regstr. Co-requisites

Regstr. Co-requisites: None

True Co-requisites

True Co-requisites: All Required

CHEM 1211 - Chemistry I (201003L)

Course Length

	Lecture Contact Time	Regular Lab Type	Reg. Lab Contact Time	Other Lab Type	Oth. Lab Contact Time	Total Contact Hrs
Contact Hours Per Week	**0 hrs**	**N/A**	**0 hrs**	**Lab**	**3 hrs**	**3 hrs**
Contact Min/Hrs Per Semester	**0 min**		**0 min**		**2250 min**	**45 hrs**

	Lecture Credit Hours	Lab Credit Hours	Total Credit hours	WLU
Semester Credit Hours	**0**	**1**	**1**	**56.25**

Competencies & Outcomes

Order Description

1 **Laboratory Safety**

Order	Description	Learning Domain	Level of Learning
1	Discuss and apply laboratory exercises encompassing the appropriate practice of laboratory precautions and laboratory safety.	Cognitive	Comprehension

2 **Units of Measurement**

Order	Description	Learning Domain	Level of Learning
1	Perform and apply laboratory exercises encompassing units of measurements.	Cognitive	Synthesis

3 **Physical and Chemical Properties of Matter**

Order	Description	Learning Domain	Level of Learning
1	Perform and apply laboratory exercises encompassing physical and chemical properties of matter.	Cognitive	Synthesis

4 **Atomic Structure**

Order	Description	Learning Domain	Level of Learning
1	Perform and apply laboratory exercises encompassing atomic structure.	Cognitive	Synthesis

5 **Chemical Bonding**

Order	Description	Learning Domain	Level of Learning
1	Perform and apply laboratory exercises encompassing chemical bonding.	Cognitive	Synthesis

6 **Nomenclature**

Order	Description	Learning Domain	Level of Learning
1	Perform and apply laboratory exercises encompassing nomenclature.	Cognitive	Synthesis

7 **Chemical Reactions**

Order	Description	Learning Domain	Level of Learning
1	Perform and apply laboratory exercises encompassing chemical reactions.	Cognitive	Synthesis

8 **Stoichiometry**

Order	Description	Learning Domain	Level of Learning
1	Perform and apply laboratory exercises encompassing stoichiometry.	Cognitive	Synthesis

9 **Gas Laws**

Order	Description	Learning Domain	Level of Learning
1	Perform and apply laboratory exercises encompassing gas laws.	Cognitive	Synthesis