Introduction to Chemistry

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| **C-ID Number** | CHEM 101 |
| **Discipline** | Chemistry |
| **Date Approved** | August 07, 2013 |

## General Course Description

This course is a survey of basic chemistry topics.  This course is intended as preparation for major’s chemistry, allied health, and general education.

## Minimum Units

4 (1 unit of lab)

## Any rationale or comments

## Advisories/Recommendations

## Course Content

Matter – Atoms and Elements
Nomenclature
Measurement
Chemical Bonds
Chemical Reactions
Stoichiometry
Energy and States of Matter
Gas Laws
Aqueous Systems
Solutions
Acids, bases and salts

## Laboratory Activities

Laboratory Activities: Laboratory activities will support the range of topics covered in lecture including chemical laboratory safety, qualitative and quantitative experiments. It is expected that this will be explicitly covered in the course outline of record.

## Course Objectives

At the conclusion of this course, the student should be able to:

Analyze the fundamental features of chemistry including measurement, mathematical conversion of measured physical properties such as mass, volume, density, pressure, temperature, solutions, concentrations and dilutions;
Demonstrate knowledge of the qualitative features of chemistry including physical and chemical properties, naming and writing chemical formulas of compounds and evaluating chemical reactions;
Differentiate typical acid and base formulas and compare/contrast the behavior associated with acids and bases;
Analyze chemical reactions to quantitatively determine theoretical yield

## Prerequisites

Beginning Algebra

## Corequisites

None

## Methods of Evaluation

Examinations Homework Lab work Portfolios Projects Written papers and/or reports Quizzes

## Sample Textbooks

Tro, Introductory Chemistry
Zumdahl, Introduction to Chemistry – A Foundation
Bell, Chemical Exporations:  Lab Text for Intro Chemistry

## Notes