CORE CURRICULUM COMPONENT APPLICATION

CORE COMPONENT AREA	Life and Physical Sciences
COURSE TYPE	Existing Core
DEPARTMENT	**CHEM**
COURSE RUBRIC & NUMBER	1312/1112
COURSE NAME	**GENERAL CHEMISTRY II AND LAB**
CATALOG DESCRIPTION	**1312** **A lecture course that is a continuation of CHEM 1311. Includes solutions, chemical kinetics, acids and bases, equilibrium, electrochemistry, thermodynamics, coordination chemistry, nuclear chemistry, organic chemistry, etc. The student will be involved in reading information or problems and using critical thinking skills and mathematics to organize the information or to arrive at an answer; also requires student writing skills in order to communicate the information acquired in a written format. (ICOs 1, 2, 3, 5) Prerequisites: Math 1314 and a minimum grade of "C" in CHEM 1311. (Credit probably not transferable until CHEM 1112 is successfully completed.)** **1112** **A laboratory course that illustrates and reinforces principles and concepts of CHEM 1312 by use of qualitative and quantitative experiments. Emphasizes interpreting and reporting of data. Stresses facility in handling scientific equipment. Lab fee required. (ICOs 1, 2, 3, 5) Corequisite or prerequisite: CHEM 1312.**
NUMBER OF SECTIONS OFFERED/FALL	**1**
NUMBER OF SECTIONS OFFERED/SPRING	**2**
EXTIMATED ANNUAL ENROLLMENT	**60**
COURSE LEVEL	Freshman
CONTACT PERSON (dept. representative)	**NICHOLE JACKSON**
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DEPARTMENT APPROVAL STATUS	**Select One** - Date Click here to enter a date.
CORE COMMITTEE COMMENTS **(REQUEST FOR ADDITIONAL INFORMATION)**	
CORE COMMITTEE APPROVAL STATUS	Select One - Date Click here to enter a date.

Best practices and accreditation guidelines generally place the faculty in a position of responsibility for curricular decisions.

Indicate below how each learning objective will be supported, what strategies or activities will be used to introduce each objective and how student learning will be assessed.

***NOTE: Component Area Option –**

A. A minimum of 3 SCH must meet the definition and corresponding Core Objectives specified in one of the foundational component areas
B. As an option for up to 3 semester credit hours of the Component Area Option, an institution may select course(s) that:
   i. Meet(s) the definition specified for one or more of the foundational component areas; and
   ii. Include(s) a minimum of three Core Objectives, including Critical Thinking Skills, Communication Skills, and one of the remaining Core Objectives of the institution's choice.

#	THECB CORE OBJECTIVE "ICO"	PROGRAM GOALS/OUTCOMES	COURSE LEARNING OUTCOMES	KEY IDENTIFIERS	LEARNING EXPERIENCE	ASSESSMENT
1	**Critical Thinking Skills** - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information. ***Must be addressed in all core curriculum courses***		1312 3. Identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships.	Be able to describe acid-base strenghts and identify equilibrium capabilities.	Questions on final exam.	This core objective will be assessed by an interdepartmental assessment committee using the Critical Thinking rubric.
2	**Communication Skills** - to include effective development, interpretation and expression of ideas through written, oral and visual communication. ***Must be addressed in all core***		1312 2.Articulate the importance of intermolecular interactions and predict trends in physical properties	Be able to identify solubility trends of compounds in a solvent.	Questions on final exam.	This core objective will be assessed by an interdepartmental assessment committee using the Communication rubric.

	curriculum courses					
3	**Empirical and Quantitative Skills** - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions ***Must be addressed in all Mathematic, Life and Physical Sciences, AND Social & Behavioral Sciences component area core curriculum courses. Optional for all other component areas.***		1112 6. Interpret laboratory results and experimental data, and reach logical conclusions	Be able to identify unknown from a given set of experiments	By completing the Group I and III unknown cation identification in lab notebook.	This core objective will be assessed by an interdepartmental assessment committee using the Empirical and Quantitative Skills rubric.
4	**Teamwork** - to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal. ***Must be addressed in all Communication, Life & Physical Sciences, and Creative Arts component area core curriculum courses. Optional for all other component areas.***		3. Conduct basic laboratory experiments with proper laboratory techniques	Student will be able to follow the steps of a procedure in an experiment to get to desired results.	By completing the Group I and III unknown cation identification in lab notebook.	This core objective will be assessed by an interdepartmental assessment committee using the Teamwork rubric.
5	**Social Responsibility**: to include intercultural competence, knowledge					

	of civic responsibility, and the ability to engage effectively in regional, national, and global communities ***Must be addressed in all Language, Philosophy & Culture, Creative Arts, American History and Government/Political Science, and Social & Behavioral Sciences component area core curriculum courses. Optional for all other component areas.***					
6	**Personal Responsibility** - to include the ability to connect choices, actions and consequences to ethical decision-making. ***Must be addressed in all Communication, Language, Philosophy & Culture, American History and Government/Political Science component area core curriculum courses. Optional for all other component areas.***					
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Critical Thinking Skills

To include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.

Must be addressed in all core courses

Communication Skills

To include effective development, interpretation and expression of ideas through written, oral and visual communication.

Must be addressed in all core courses

Empirical and Quantitative Skills

To include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions.

Must be addressed in all core courses that satisfy the following requirements:

- Mathematics
- Life and Physical Sciences
- Social and Behavioral Sciences
- Some Component Area Options

Teamwork

To include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

Must be addressed in all core courses that satisfy the following requirements:

- Communication
- Life and Physical Sciences
- Creative Arts
- Some Component Area Options

Social Responsibility

To include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national and global communities.

Must be addressed in all core courses that satisfy the following requirements:

- Language, Philosophy and Culture
- Creative Arts
- American History
- Government/Political Science
- Social and Behavioral Sciences
- Some Component Area Options

Personal Responsibility

To include the ability to connect choices, actions and consequences to ethical decision-making.

Must be addressed in all core courses that satisfy the following requirements:

- Communication
- Language, Philosophy and Culture
- American History
- Government/Political Science
- Some Component Area Options