# NORTHERN NEW MEXICO COLLEGE

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| **Course Number Course Name** | CHEM 2120 Integrated Organic and Biochemistry Lab |
| **Credit Value (Breakdown of theory and lab credits)** | 1 Lab |
| **Catalog Course Description** | This course provides experiences with the physical properties and laboratory synthesis of organic compounds. Includes exercises in the preparation, separation, isolation, and characterization of biologically derived molecules. |
| **Course Student Learning Outcomes/Objectives /Competencies** | 1. Identify and name basic organic compounds.<br>2. Construct/draw organic compounds from the names.<br>3. Predict the products of certain organic chemical reactions from reagents and conditions presented.<br>4. Recognize and name the four basic bioorganic units and certain of their derivatives and macromolecules.<br>5. Compare and contrast the function and location of the four bioorganic units and their macromolecules and cofactors.<br>6. Draw/recognize stereochemistry and explain its relevance to bioorganic molecules.<br>7. Discuss the pathways and functions of some of the cellular metabolic processes.<br>8. Recognize and describe metabolic cellular processes and macromolecular structure with respect to health and/or disease states. |
| **College-Wide Student Learning Outcomes measured (General education courses only)** | |
| **Program Student Learning Outcomes measured** | 1. The Student should be able to analyze and solve problems using a formal critical thinking based on the scientific inquiry.<br>2. The student should be able to work in a laboratory setting following safety and standard chemical lab protocols. Synthesizing and Characterizing organic and inorganic compounds, planning and executing experiments. |