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| <b>Course Number</b><br><b>Course Name</b>  | BIOL 2110L Principles of Biology: Cellular and Molecular Biology Lab   |
| <b>Credit Value</b><br><b>(Breakdown of theory and lab credits)</b>                     | 1 Lab  |
| <b>Catalog Course Description</b>   | You will experiment with techniques and methods in molecular and cell biology to support concepts in lecture.  |
| <b>Course Student Learning Outcomes/Objectives/Competencies</b>                         | <ol style="list-style-type: none"> <li>1. Describe and apply the scientific method to solve problems in biological context</li> <li>2. Demonstrate knowledge of laboratory safety skills and procedures.</li> <li>3. Practice principles of scientific method while conducting laboratory activities and experiments.</li> <li>4. Perform laboratory activities using relevant laboratory equipment, chemical reagents, and supplies to observe biological specimens, to measure variables, and to design and conduct experiments.</li> <li>5. Operate light microscopes, prepare wet mount slides, and use stains.</li> <li>6. Exhibit ability to use pipettes and other volumetric measuring devices, chemical glassware, balances, pH meters or test papers, spectrophotometers, and separation techniques, such as chromatography and/or electrophoresis to perform activities relevant to other course competencies.</li> <li>7. Analyze and report data generated during laboratory activities and experiments.</li> </ol> |
| <b>College-Wide Student Learning Outcomes measured (General education courses only)</b> |  |
| <b>Program Student Learning Outcomes measured</b>                                       | <ol style="list-style-type: none"> <li>1. Provide students with broad conceptual background in biological sciences which will enable them to attain an understanding of organismal form, function, diversity, evolution, ecology, mendelian and molecular genetics, cell structure, function and physiology and molecular processes.</li> </ol>  |