

# NORTHERN NEW MEXICO COLLEGE



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| <b>Course Number</b><br><b>Course Name</b>  | RDPR 2233 Radiation Biology   |
| <b>Credit Value</b><br><b>(Breakdown of theory and lab credits)</b>                     | 3 Theory  |
| <b>Catalog Course Description</b>   | Survey of radiobiology: effects of differing types of radiation on matter, different radiations and their properties; detailed modes of action of radiation on biochemical and biophysical systems with emphasis on the large macromolecules of living tissue; nature of radiation damage to long-chain nucleic acid molecules; potential problems from indiscriminate use of radiation therapy and diagnostic x-rays, and nuclear facility accidents; effects of low-level radiation exposure.                   |
| <b>Course Student Learning Outcomes/Objectives /Competencies</b>                        | <ol style="list-style-type: none"> <li>1. Knowledge of the global significance of the history and use of radiation and effects on human health.</li> <li>2. Knowledge of radiation safety techniques to reduce exposure including use of Personal Protective Equipment and monitoring devices.</li> <li>3. Demonstrate knowledge of survey equipment and technique for area surveys and surveys for removable contamination, radioactive decontamination procedures and disposal of radioactive waste.</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. Obtain knowledge and technical skills related to radiation protection and measurements.</li> <li>2. An ability to understand a radiation safety program, needs of workers, and protection of the general public.</li> </ol>   |