

Development of Graduate-Level Nuclear Safety Course Modules and Radiation Protection Laboratory Exercises (Year 3)

Executive Summary

The purpose of this project is four-fold: (1) continuation of the development of stand-alone radiation physics modules at the graduate level, (2) continuation of the development of radiation biology training modules at the graduate level, (3) continuation of NRC regulation compliance modules pertaining to radiation protection in radionuclide therapy and brachytherapy, and (4) continuation of the development of radiation physics laboratory modules based on the state-of-the-art radiation detector technologies and computer simulation laboratory. We anticipate that the final course modules will meet the rapidly-changing educational and training needs of nuclear safety and radiation protection programs in this country. To the best of our knowledge, no educational modules exist in the public domain comparable to our proposal. We believe that a major benefit would be the dissemination of new information and sharing of laboratory modules from one of the nation's top academic institutions and medical centers with regard to radiation protection design and clinical practices along with the cutting-edge knowledge of radiation physics and laboratory exercises.

This is a third-year proposal and we will continue to build upon educational modules already developed in the first two years and plan to make improvements by: (1) the addition of narration to the presentations, (2) deployment to the Web in downloadable format initially and (3) subsequent conversion to a streaming audio/visual format which will not require downloading.

Principal Investigator: Terry Yoshizumi, yoshi003@mc.duke.edu