

**Program Outcomes Guide
BIO 202**

Directions: Please complete this form to document your progress toward improving student learning. For each item, indicate your progress and your anticipated next steps. Thank you!

Course/Program Title: BIO 202 Radiation Biology

Date: Spring 2013

Program Team: L. Olden

Expected Learning Outcomes:

The student will be able to define and apply the following radiation biology and protection concepts to radiography practice:

- effects of radiation on biological molecules and chromosomes
- cellular and tissue response to radiation
- effects of radiation on major organs and systems
- radiation syndromes, late effects, genetic effects and carcinogenesis
- effects of radiation on fetal development
- risk assessment and Maximum Permissible Dose
- Clinical Radiobiology-diagnostic and therapeutic procedures

Assessment (How do or will students demonstrate achievement of each outcome?)

- quizzes
- unit exams
- comprehensive final exam

Validation (What methods have you used or will you use to validate your assessment?)

- completion of course with an average grade of 75% or higher

Results (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

- 100% (26/26 students) scored 75% or higher
- comprehensive final at least 92% or higher answered designated questions correctly

Follow-up (How have you used or how will you use the data to improve student learning?)

- continue the use of homework assignments and quizzes as this has seemed to be beneficial to students especially when the assignments are due before the material is presented in class

Budget Justification

(What resources are necessary to improve student learning?)

- no additional resources needed at this time

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