Health Sciences Division
Course Outcomes Assessment

Course Title: BIO 202 Radiation Biology and Protection
Instructor: D. Carroll

STUDENT LEARNING OUTCOMES:

After completing this course, 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: Exams, assignments, presentations, final examination
Validation: Students will pass the course with a 75% or better
85% of the students will correctly answer the designated questions on the final exam.

Final Exam Ques	topic	Sum 2014	%	Sum 2015	%	Sum 2016	%	Sum 2017	%
Numb. Of stud		25		26		26		24	
8	Barriers	25	100	26	100	25	96	100	
11	Dosimeters	25	100	26	100	26	100	100	
41	Ann effect dos	25	100	17	65	14	54	100	
46	Tm, dst, shld	25	100	26	100	26	100	100	
48	Gen pub dose	24	96	15	58	8	31	50	
33	Lat perd leuk	23	92	21	81	25	96	100	
30	Rad induc leuk	21	84	17	65	21	81	100	
25	Rad induc cat	17	68	4	15	18	69	96	
38	Rad induc mal	25	100	20	77	16	62	92	
1	Radiosensitive	25	100	26	100	26	100	100	
49	Holding pt	25	100	23	89	22	85	100	
17	Preg radio	25	100	25	95	22	85	100	
34	Expos switch	24	96	24	94	26	100	100	
50	Exp cord	23	92	23	89	20	77	88	

Results:

All percentages came up overall, but general public effective dose of 5 mSv needs to be stressed