Module Handbook

Module Name:	**Health Physics and Radiative Protection**
Module Level:	Undergraduate
Abbreviation, if applicable:	FIB 310
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester/term:	5th / Third Year
Module coordinator(s):	Dr. Suryani Dyah Astuti, M.Si
Lecturer(s):	Prof. Dr. Ir. Suhariningsih
Language:	Bahasa Indonesia
Classification within the curriculum	~~Compulsory Course~~ / Elective Studies
Teaching format / class hours per week during semester:	2 hours lectures (50 min / hour)
Workload:	2 hours lectures, 2 hour structural activities, 2 hours individual study, 14 week per semester, and total 78 hours per semester ~2.6 ECTS
Credit Points:	2
Requirements:	Modern Physics, Biophysics
Learning goals/competencies:	Knowledge: to understand the relationship between the microscopic interactions with cell responses, deterministic and stochastic effects, radiation detection equipment and radiation protection. Skills: - to communicate scientific topic according radiation detection equipment and radiation protection in oral and written
Content:	After following this course, the students have able to understand the relationship between the microscopic interactions with cell responses, deterministic and stochastic effects, radiation detection equipment and radiation protection. The course will provide some general topics includings: Shielding: The nature and design, Statistics nuclear enumeration, Monitoring of radiation for personnel, Exposure to internal, Dispersion environment, Biological effects, Regulations concerning radiation protection, Waste disposal of low and high degrees and The non-ionizing radiation
Attribut soft skill	Active and good communication
Study/exam achievements:	Students are considered to be competent and pass if at least get 40 of maximum mark of the exams (UTS dan UAS), structured activity (group discussion). Final score (NA) is calculated as follow: 15% assignment 1 + 15% assignment 2 + 35% UTS + 35% UAS Final index is defined as follow: A : 75 - 100

	AB : 70 - 74.99 B : 65 - 69.99 BC : 60 - 64.99 C : 55 - 59.99 D : 40 - 54.99 E : 0 - 39.99
Forms of Media:	Slides and LCD projectors, whiteboards
Learning Methods	Lecture, assessments and group discussion
Literature:	1. ICRP No. 60. 1990 *Recommendations of International Commission on Radiological Protection*. (Elsevier Science, 1990) 2. Herman Cember and Thomas E. Jhonson, *Introduction to Health Physics*. 4th ed., (McGraw Hill. New York, NY. 2009). 3. RL. Kathren, *Radiation Protection*. (Adam Hilger LTD., Bristol, 1985). 4. D. A. Gollnick. Basic Radiation Protection Technology. 2nd ed. (Pacific Radiation Corporation, Altadena, CA, 1993
Notes:	*Total ECTS = {(total hours workload × 50 min) / 25 hours Each ECTS is equals with 25 hours.