

Syllabus, FYS-KJM4710

Chapter 1: Ionizing radiation, description of radiation fields. 18 pages.

Chapter 2: Quantities for describing interactions. Not part VI. 14 pages.

Chapter 3: Attenuation. Page 38-46. 8 pages.

Chapter 4 : Charged particle equilibrium. 17 pages.

Chapter 5: Absorbed dose in radioactive media. Page 80-100. 20 pages.

Chapter 6: Radioactive decay. Page 101- 115 (not part VIII and IX). 14 pages

Chapter 7: Gamma interactions. 34 pages.

Chapter 8: Charged particle interactions. 41 pages.

Chapter 9 : X-ray production. 26 pages.

Chapter 10 : Cavity theory. Not section on Spencer's theory (part V), Fano Theorem (part VII) and other cavity theories (part VIII). 22 pages.

Chapter 11: Dosimetry fundamentals. 26 pages.

Chapter 12: Ionization chambers. Only Page 292-295 and 339-343. 8 pages.

Chapter 14: Integrating dosimeters. 42 pages.

Chapter 16: Neutrons. Page 463-479. 17 pages.

Chapter by P. Rinard. Neutron interactions with matter. Page 357-371. 14 pages.