Course Title	Radiotherapy, IMRT Treatment Planning skills and theory
Term	Term 3
Inholland Faculty	Faculty of Health, Sports & Social Work
Course code	Erasmus Radiotherapy (ERG)
Inholland location	Haarlem
Cycle	first cycle / undergraduate / Bachelor level
Number of ECTS	20
Language of instruction	English
Course content	• Radiotherapy physics • Radiobiology in practice • Image recognition • Treatment Planning 3D to IMRT • IGRT • Essay special techniques • Practics in Treatment Planning, from 3D conformal Radiotherapy to IMRT of breast, pelvic and head and neck region • Practics in Radiotherapy Physics • Practics in IGRT techniques • Clinical outplacement (2–4 days)
Lecturer(s)	Coordinator RT: Mirjam Soumokil - de Bree (mirjam.soumokil@inholland.nl)
Learning outcomes	• To develop skills in producing an optimal 3 dimensional and IMRT dose distribution of breast, pelvic and head and neck region • To develop skills in Radiotherapy Physics treatment planning • To develop skills integrating Radiobiology in treatment planning. • To evaluate the products as well as the process of preparation the treatment of these patients. • To develop skills in IGRT techniques. • Further develop communicative and co-operative skills. • Have insight into the role of the Radiotherapy-technician in relation to the organization of a Radiotherapy department in the Netherlands. • Be able to produce an optimal 3 D dose distribution. • Be able to produce an IMRT dose distribution • Be able to argue the choices you made. • Be able to reflect on your products and your process.

Mode of delivery, planned activities and teaching methods	The following learning methods will be used which requires participation in: • Group meetings • Lectures • Skills training using with and without lecturer • Individual study • Project and report writing in English • Oral presentations of the report in English • Skillslab training Practical training on Radiotherapy equipment in the skillslab on CMS treatment planning system and Theraview IGRT system • Clinical outplacement (max. 2 – 4 days) Each student will complete a clinical placement, excursions and 10 weeks of practical placement in skills lab, including general Radiotherapy
Prerequisites and co-requisites (if applicable)	Prior practical and theoretical experience with RT is necessary to complete the course. This course is only available for radiation therapy students (and radiology students under restrictions) from institutes which are member of the Erasmus Radiography Group (ERG). Application only through ERG-coordinator of home-institute.
Recommended or required reading and/or other learning resources/tools	• Study guide Radiotherapy • Literature in the library Inholland University of Applied Sciences Haarlem
Assessment methods and criteria	• Attending to mandatory classes with a satisfactory contribution • Practical examination by marked tasks • Produce an optimal 3 dimensional and IMRT isodose distribution • Evaluate all stages of / in the procedures • Clinical placement • Poster and presentation • Practical exam