

## COURSE CATALOGUE 2021-2022

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	English
instruction	
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
	<ul> <li>Clinical outplacement (2–4 days)</li> </ul>
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.
	<ul> <li>Be able to produce an optimal 3 D dose distribution.</li> </ul>
	Be able to produce an IMRT dose distribution
	<ul> <li>Be able to argue the choices you made.</li> </ul>
	<ul> <li>Be able to reflect on your products and your process.</li> </ul>



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Mode of delivery,	The following learning methods will be used which requires participation in:
planned activities	Group meetings
and teaching	Lectures
methods	Skills training using with and without lecturer
	Individual study
	<ul> <li>Project and report writing in English</li> </ul>
	<ul> <li>Oral presentations of the report in English</li> </ul>
	Skillslab training
	Practical training on Radiotherapy equipment in the skillslab on CMS
	treatment planning system and Theraview IGRT system
	<ul> <li>Clinical outplacement (max. 2 – 4 days)</li> </ul>
	• Cillical 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-	Prior practical and theoretical experience with RT is necessary to complete
requisites (if	the course.
applicable)	
	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	Study guide Radiotherapy
required reading	Literature in the library Inholland University of Applied Sciences
and/or other learning	Haarlem
resources/tools	
Assessment	Attending to mandatory classes with a satisfactory contribution
methods and criteria	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