

SCIENTIFIC PROGRAMME AND WORKING SCHEDULE

Course Directors:

Eduard Gershkevitsh

Faculty:

Marion Essers

Shaista Hafeez

Louise Murray

Tom Depuydt

Michael Gubanski

Milan Tomsej

Stephanie Peeters

PRE-RECORDED LECTURES (45 minutes each)

The following lectures will be available few weeks in advance for participants to study at their own pace **prior** to the webinar. To access the lectures the students must complete an **ENTRY EXAM**, which consists of a multiple-choice questionnaire for a self-assessment.

Lecture	Speaker
Imaging for GTV definition	S. Hafeez
Imaging for treatment preparation and planning	M. Gubanski
Volumes in EBRT and introduction to GTV definition	S. Hafeez
Clinicians: Basics of radiation physics for clinicians	E. Gershkevitsh
Physicists: Modern dose calculation algorithms	M. Tomsej
Clinicians: Principles of Radiotherapy Equipment	E. Gershkevitsh
Physicists: Oncological Concepts	S. Peeters
PTV margin calculation	M. Essers
Field junctions: how, when, and alternatives	S. Hafeez / B. Heijmen
Radiation Protection and risk analysis	E. Gershkevitsh
Commissioning and QA/QC of equipment and software	M. Tomsej
Clinicians: Physical principles of advanced Radiotherapy	M. Essers
Physicists: Reference Dosimetry	E. Gershkevitsh
Radiobiology in the clinic	L. Murray
Brachytherapy	S. Hafeez
Radiotherapy dose and induction of secondary tumours	M. Gubanski
Adaptive Radiotherapy	S. Hafeez

LIVE WEBINARS 27 SEPTEMBER – 1 OCTOBER

Participants will have the opportunity to meet with the faculty during interactive live webinar sessions. Invitations to the teleconferences will be sent prior to the webinars.

ENTRY EXAM

DAY 1 – MONDAY 27 SEPTEMBER

Time	Lecture	Speaker	Moderator
14.00 – 14.15	Welcome and Introduction to the course	Course director	All teachers
14.15 – 15.00	IMRT - Physics aspects	T. Depuydt	M. Gubanski
15.00 – 15.45	IMRT - Clinical application and impact	M. Gubanski	T. Depuydt
15.45 – 16.00	<i>Coffee break</i>		
16.00 – 16.45	Stereotactic radiotherapy - radiobiology, clinical application and impact	S. Peeters	M. Tomsej
16.45 – 17.30	Stereotactic radiotherapy - physics aspects	M. Tomsej	S. Peeters
17.30 – 17.45	<i>Coffee break</i>		
17.45 – 18.00	Summary of Imaging & volumes in RT*	S. Hafeez	All teachers
18.00 – 18.15	Q&A	All teachers	

DAY 2 – TUESDAY 28 SEPTEMBER

Time	Lecture	Speaker	Moderator
14.00 – 16.00	Homework: Discussions on H&N case	TBA	
16.00 – 16.15	<i>Coffee break</i>		
16.15 – 17.00	IGRT – equipment for in-room imaging	L. Murray	M. Essers
17.00 – 17.45	IGRT – tumor set-up correction strategies	M. Essers	L. Murray
17.45 – 18.00	<i>Coffee break</i>		
18.00 – 18.15	Summary of Radiotherapy equipment*	E. Gershkevitsh	All teachers
18.15 – 18.30	Q&A	All teachers	

DAY 3 – WEDNESDAY 29 SEPTEMBER

Time	Lecture	Speaker	Moderator
14.00 – 16.00	Homework: Discussions on lung case	TBA	
16.00 – 16.15	<i>Coffee break</i>		
16.15 – 17.00	Clinicians: Dose calculation principles	T. Depuydt	M. Essers
	Physicists: QA for advanced delivery techniques	M. Tomsej	E. Gershkevitsh
17.00 – 17.45	Clinicians: Calculation of dose in the TPS	T. Depuydt	M. Essers
	Physicists: Non-reference dosimetry	E. Gershkevitsh	M. Tomsej
17.45 – 18.00	<i>Coffee break</i>		
18.00 – 18.15	Summary of Commissioning, QA and radiation protection*	M. Tomsej	All teachers
18.15 – 18.30	Q&A	All teachers	

DAY 4 – THURSDAY 30 SEPTEMBER

Time	Lecture	Speaker	Moderator
14.00 – 16.00	Homework: Discussions on breast case	TBA	
16.00 – 16.15	<i>Coffee break</i>		
16.15 – 17.00	Implementing patient-specific QA	T. Depuydt	L. Murray
17.00 – 17.45	Challenges in dose prescription and plan evaluation	L. Murray	T. Depuydt
17.45 – 18.00	<i>Coffee break</i>		
18.00 – 18.15	Summary of Adaptive radiotherapy*	S. Hafeez	All teachers
18.15 – 18.30	Q&A	All teachers	

DAY 5 – FRIDAY 1 OCTOBER

Time	Lecture	Speaker	Moderator
14.00 – 14.45	Rotational therapy and flattening filter free dose delivery	M. Essers	T. Depuydt
14.45 – 15.30	Physics aspects of proton-, ion-, and electron beam therapy	T. Depuydt	M. Essers
15.30 – 15.45	<i>Coffee break</i>		
15.45 – 16.30	Clinical aspects and evidence for particle therapy and other novel technology	S. Peeters	M. Gubanski
16.30 – 16.45	Summary of Radiobiology and Secondary cancers*	L. Murray, M. Gubanski	All teachers
16.45 – 17.00	Q&A	All teachers	
	EXIT EXAM		

* - Refers to pre-recorded lectures