

SCIENTIFIC PROGRAMME

Course Director

Catharine Clark

FacultyCatharine Clark
Eduard Gershkevitch
Victor Hernandez
Mo Hussein
Stephen Kry
Sarah Misson-Yates**Guest lecturers (TBC)**Russell Thomas
Tony Palmer (for IAEA)

Monday, 17th April 2023

09:00-09:30	Registration	
09:30-09:45	Welcome and introductions. Background, why this course exists, aims of course, practicalities, expectations, general learning objectives	Catharine Clark
09:45-10:30	Are your RT doses correct? The need for dosimetry audit	Stephen Kry
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Clinical relevance of audit	Sarah Misson-Yates
11:45-12:30	Different types of audit (ref/TPS/E2E)	Catharine Clark
12:30-13:30	<i>Lunch</i>	
13:30-14:15	Choosing the right tools (detectors, phantoms choice)	Victor Hernandez
14:15-15:00	How to design a good audit	Sarah Misson-Yates
15:00-15:30	<i>Coffee</i>	
15:30 - 16:15	Uncertainty budget for audit	Eduard Gershkevitch
16:15 - 17:00	Setting audit tolerances	Mo Hussein

Tuesday 18th April 2023

09:00-09:45	Ion chambers	Russell Thomas
09:45-10:30	Solid state detectors: Microdiamond / Scintillation detectors	Mo Hussein
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Passive detectors OSLDs / TLDs / alanine	Stephen Kry
11:45-12:30	Film dosimetry	Eduard Gershkevitch
12:30-13:30	<i>Lunch</i>	
13:30-14:15	Auditing reference conditions	Victor Hernandez
14:15-15:00	Auditing small fields (SABR/SRS)	Sarah Misson-Yates
15:00-15:30	<i>Coffee</i>	
15:30 - 16:15	End-to-end auditing and using a TPS for dosimetry audit	Mo Hussein
16:15 - 17:00	Auditing brachytherapy	TBC

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Weds 19 th April 2023		
09:00-09:45	Proton dosimetry audit	Russell Thomas
09:45-10:30	Dosimetry audit in clinical trials	Catharine Clark
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Dosimetry audit with motion management	Stephen Kry
11:45-12.30	Auditing other techniques (eg KV CT ???)	Eduard Gershkevitch
12:30-13:30	<i>Lunch</i>	
13:30-15.00	Practical 1 / 2 / 3 / 4	All
15:00-15:30	<i>Coffee</i>	
15:30 - 17.00	Practical 1 / 2 / 3 / 4	All

Thurs 20 th April 2023		
09:00-09:45	Small regional experience of setting up an audit	Victor Hernandez
09:45-10:30	Using a pre-designed audit protocol (Shane)	Eduard Gershkevitch
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Setting up a national dosimetry audit network (top down or bottom up?)	Sarah Misson-Yates
11:45-12.30	Using a QMS system and databases in audit	Mo Hussein
12:30-13:30	<i>Lunch</i>	
13:30-15.00	Practical 1 / 2 / 3 / 4	All
15:00-15:30	<i>Coffee</i>	
15:30 - 17.00	Practical 1 / 2 / 3 / 4	All

Fri 21st April 2023		
09:00-09:45	Lessons learned from dosimetry audits	Stephen Kry
09:45-10:30	Novel audit methodologies I (Seafarer)	Catharine Clark
10:30-11:00	<i>Coffee break</i>	
11:00-11:45	Novel audit methodologies II (complexity metrics and MLC modelling)	Victor Hernandez
11:45-12.30	The future of audit discussion	All
12:30	<i>Close</i>	

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Additional information

	Practical	Faculty	Location/equip
1	Film dosimetry	Eduard Gershkevitch / Ilias Bilas	FilmPro QA, NPL own film conversion and gamma analysis software
2	Reference and small field dosimetry	Sarah Mission-Yates / Russ Thomas	VERT (meeting room)
3	End-to-end SBRT audit and anthropomorphic phantoms	Stephen Kry / Catharine Clark	Elekta Versa HD
4	TPS planning for audits	Mohammad Hussein / Victor Hernandez	Raystation