

MEDICAL PHYSICS

Third Term, Week 1

28 April - 02 May 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>9-10</i>					
<i>10-11</i>					
<i>11-12</i>					
<i>12-13</i>					
<i>13-14</i>					
<i>14-15</i>					
<i>15-16</i>					
<i>16-17</i>					
<i>17-18</i>					

Subjects / Teachers:

MEDICAL PHYSICS

Third Term, Week 2

05 - 09 May 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>9-10</i>	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis
<i>10-11</i>	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis
<i>11-12</i>	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis
<i>12-13</i>	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis
<i>13-14</i>	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis
<i>14-15</i>	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis	Mathematical Image Processing and Analysis
<i>15-16</i>				LASERS in Medicine - Presentations	
<i>16-17</i>				LASERS in Medicine - Presentations	
<i>17-18</i>				LASERS in Medicine - Presentations	

Subjects / Teachers:

Image Processing 30 h): D. Gklotsos, S. Kostopoulos

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Third Term, Week 3

12 - 16 May 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>9-10</i>			Radiation Protection	Radiation Protection	Radiation Protection
<i>10-11</i>		Radiation Protection	Radiation Protection	Radiation Protection	Radiation Protection
<i>11-12</i>		Radiation Protection	Radiation Protection	Radiation Protection	Radiation Protection
<i>12-13</i>		Radiation Protection	Radiation Protection	Radiation Protection	Radiation Protection
<i>13-14</i>		Radiation Protection	Radiation Protection	Radiation Protection	Radiation Protection
<i>14-15</i>					
<i>15-16</i>	Radiation Protection	Radiation Protection	Radiation Protection	Radiation Protection	
<i>16-17</i>	Radiation Protection	Radiation Protection	Radiation Protection	Radiation Protection	
<i>17-18</i>	Radiation Protection	Radiation Protection	Radiation Protection	Radiation Protection	
<i>18-19</i>	LASERS in Medicine - Presentations				
<i>19-20</i>	LASERS in Medicine - Presentations				

Subjects / Teachers:

Radiation Protection (35h-two weeks): *G. Panayiotakis, S. Skiadopoulos, G. Messaris, S. Eustathopoulos*

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Third Term, Week 4

19 - 23 May 2014

Hours	Monday	Tuesday	Wednesday	Thursday	Friday
10-11		STMI (Selected Topics in Medic Imaging): Introduction	STMI: Image Reconstruction (CT)	STMI: Monte Carlo Simulation	Radiation Protection
11-12		STMI: CAD	STMI: Image Reconstruction (CT)	STMI: Monte Carlo Simulation	Radiation Protection
12-13		STMI: CAD	STMI: Imaging Biomarkers	STMI: Image Reconstruction (SPECT-PET)	Radiation Protection
13-14		STMI: CAD	STMI: Imaging Biomarkers	STMI: Image Reconstruction (SPECT-PET)	Radiation Protection
14-15		STMI: CAD		<i>Practical 1</i> (STMI)	
15-16			STMI: Medical Image Quality	<i>Practical 1</i> (STMI)	
16-17		Radiation Protection (Practicals)	STMI: Medical Image Quality	<i>Practical 2</i> (STMI)	
17-18		Radiation Protection (Practicals)	STMI: Algorithms Evaluation	<i>Practical 2</i> (STMI)	
18-19		Radiation Protection (Practicals)	STMI: Algorithms Evaluation		

Subjects / Teachers:

STMI: Introduction, CT Image Reconstruction and Imaging Biomarkers (*lectures*) / L. Costaridou

STMI: Computer Aided Diagnosis (CAD) (*lectures*) / A. Karahaliou

STMI: Monte Carlo Simulation in X Ray-Imaging (*lectures + tutorial*) / G. Spyrou

STMI: Image Reconstruction Algorithms in SPECT and PET (*lectures + tutorial*) / A. Gaitanis

STMI: Image Quality and Evaluation of Image Analysis Algorithms (*lectures*) / S. Skiadopoulos

STMI : Practical: (4h): A. Karahaliou, S. Skiadopoulos and G. Vlachopoulos

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MEDICAL PHYSICS

Third Term, Week 5

26 - 30 May 2014

Hours	Monday	Tuesday	Wednesday	Thursday	Friday
9-10					
10-11		Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Γ. Κύργιας)	Physics of Radiation Therapy II (Γ. Κύργιας)
11-12		Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Γ. Κύργιας)	Physics of Radiation Therapy II (Γ. Κύργιας)
12-13		Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Γ. Κύργιας)	Physics of Radiation Therapy II (Γ. Κύργιας)
13-14		Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Γ. Κύργιας)	Physics of Radiation Therapy II (Γ. Κύργιας)
14-15		Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Γ. Κύργιας)	Physics of Radiation Therapy II (Γ. Κύργιας)
15-16		Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Κ. Κάππας)	Physics of Radiation Therapy II (Γ. Κύργιας)	Physics of Radiation Therapy II (Γ. Κύργιας)
16-17					
17-18					

Subjects / Teachers:

Κ. Κάππας: ICRU 50&62 - Heterogeneities – Brachytherapy - QA procedures in radiotherapy -

Γ. Κύργιας: Medical Aspects of Radiotherapy – Presentation of clinical protocols for different tumor sites (e.g. CNS, prostate, breast, lung etc).

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Third Term, Week 6

02 - 06 June 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>9-10</i>			Nuclear Cardiology	Nuclear Cardiology	MRI
<i>10-11</i>	Nuclear Medicine		Nuclear Cardiology	Nuclear Cardiology	MRI
<i>11-12</i>	Nuclear Medicine		Nuclear Cardiology	Nuclear Cardiology	MRI
<i>12-13</i>			Nuclear Cardiology	Nuclear Cardiology	MRI
<i>13-14</i>			Nuclear Cardiology	Nuclear Cardiology	
<i>14-15</i>			Nuclear Cardiology	Nuclear Cardiology	
<i>15-16</i>			MRI	MRI	
<i>16-17</i>			MRI	MRI	
<i>17-18</i>		Nuclear Cardiology	MRI	MRI	
<i>18-19</i>		Nuclear Cardiology			

Subjects / Teachers:

Nuclear Medicine (2 h) : D. Apostolopoulos

Nuclear Cardiology (12h): P. Georgoulas

MRI (10h) : T. Maris

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Third Term, Week 7

09 - 13 June 2014

Hours	Monday	Tuesday	Wednesday	Thursday	Friday
9-10			Diana Adliene, Professor, Kaunas University of Technology, «Struggling for proper doses»		
10-11					
11-12		Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)
12-13		Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)
13-14		Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)
14-15		Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)
15-16		Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)
16-17		Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)	Physics of Radiation Therapy II (Γ. Τσούγκος)
17-18					

Subjects / Teachers:

Γ. Τσούγκος: Basic principles of radiation biology – Radiobiological modeling – Radiobiological optimization in treatment planning systems – Monte Carlo – Brachytherapy – Particle treatments

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Third Term, Week 8

16 - 20 June 2014

Hours	Monday	Tuesday	Wednesday	Thursday	Friday
9-10					
10-11	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)
11-12	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)
12-13	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)
13-14	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)
14-15	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)
15-16	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)	Physics of Radiation Therapy II (Κ. Θεοδώρου)
16-17					
17-18					

Subjects / Teachers:

Κ. Θεοδώρου: Introduction to Conformal Radiotherapy – Introduction to Treatment Planning Systems – Advanced dose calculation algorithms in TPS - Physical optimization algorithms – IMRT – Clinical applications – Stereotactic radiotherapy .

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Third Term, Week 9

23 - 27 June 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>8-9</i>	EXAMS Pattern Recognition				
<i>9-10</i>					
<i>10-11</i>	EXAMS Physiology	Tele- medici ne	Telemedicine	Telemedicine	Telemedicine
<i>11-12</i>		Tele- medici ne	Telemedicine	Telemedicine	Telemedicine
<i>12-13</i>	Telemedicine	Telemedicine	Telemedicine	Telemedicine	Telemedicine
<i>13-14</i>	Telemedicine	Telemedicine	Telemedicine	Telemedicine	Telemedicine
<i>14-15</i>	Telemedicine	Telemedicine	Telemedicine	Telemedicine	Telemedicine
<i>15-16</i>					
<i>16-17</i>					
<i>17-18</i>					

Subjects / Teachers:

Telemedicine (25 h): P. Asvestas

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Third Term, Week 10

30 June - 04 July 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>9-10</i>					
<i>10-11</i>	EXAMS Electronics		Physics of Ultrasounds	Physics of Ultrasounds	EXAMS Signal Processing
<i>11-12</i>			Physics of Ultrasounds	Physics of Ultrasounds	
<i>12-13</i>		Physics of Ultrasounds	Physics of Ultrasounds	Physics of Ultrasounds	
<i>13-14</i>		Physics of Ultrasounds	Presentations Electrical Properties of the human body		
<i>14-15</i>	EXAMS Mathematical Image Processing and Analysis	Physics of Ultrasounds			
<i>15-16</i>					Exams U/S
<i>16-17</i>					
<i>17-18</i>					

Subjects / Teachers:

Physics of Ultrasounds (U/S) (9 hours): S. Tsandis

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MEDICAL PHYSICS

Third Term, Week 11

07 - 11 July 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>9-10</i>					
<i>10-11</i>		EXAMS Nuclear Medicine			EXAMS Telemedicine
<i>11-12</i>					
<i>12-13</i>					
<i>13-14</i>		EXAMS Electrical Properties of the human body			
<i>14-15</i>					
<i>15-16</i>					
<i>16-17</i>					
<i>17-18</i>					

Subjects / Teachers:

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MEDICAL PHYSICS

Third Term, Week 12

14 - 18 July 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>9-10</i>					
<i>10-11</i>	EXAMS Biostatistics				
<i>11-12</i>					
<i>12-13</i>					
<i>13-14</i>					
<i>14-15</i>					
<i>15-16</i>		EXAMS Anatomy	EXAMS MRI		Exams Radiation Protection
<i>16-17</i>					
<i>17-18</i>					

Subjects / Teachers:

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Third Term, Week 13

21 - 25 July 2014

<i>Hours</i>	<i>Monday</i>	<i>Tuesday</i>	<i>Wednesday</i>	<i>Thursday</i>	<i>Friday</i>
<i>9-10</i>					
<i>10-11</i>	Exams Radiation Therapy II				
<i>11-12</i>					
<i>12-13</i>					
<i>13-14</i>					
<i>14-15</i>					
<i>15-16</i>					
<i>16-17</i>					
<i>17-18</i>					

Subjects / Teachers:

NOTES: