

**Regional Training Course on Quality Assurance of Physical and Technical Aspects in Radiotherapy,
Argonne National Lab, USA
February 18 – Mar 1, 2013**

Schedule Week 1: February 18 – Mar 1, 2013

Day Time	Monday February 18	Tuesday February 19	Wednesday February 20	Thursday February 21	Friday February 22	Saturday February 23	Sunday February 24
9:00-10:00	Opening Ceremony Intro. To Rad Therapy Process (JFA) The need for QA (WFH) 10:00 – 10:30 (Safety)	Photon Interactions, Charged Particle Interactions Electron Interactions (Will Hanson)	Cavity Theory Radiation Dosimeters Calibration of Photon and Electron Beams Standards, Traceability TRS-277, TRS-398 (Saiful Huq)	Electron Beam Dosimetry (J. Antolak)	Acceptance Testing (G. Ibbott)	Labs at Northwest Community Hospital Cobalt Lab= “Dry Lab” Group A: HDR/LDR GroupB:Photons/Cobalt Group C: Electron (F. Aguirre) (P. Alvarez, P. Balter)	Labs at Northwest Community Hospital Electrons, HDR/LDR Photons/Cobalt (F. Aguirre) (P. Alvarez, P. Balter)
10:30-10:45	Group Photo						
	Coffee/Tea Break						
10:45-12:00	Basics-decay, Atomic & Nuclear Structure, Prod. of X- Rays, Interactions, dependence on E & Z coefficients	Continued (Will Hanson)	Continued (Saiful Huq)	Continued	Continued	Continued	Continued
12:00-1:00	Lunch Break						
1:00-3:00	Introduction, Quantities and units, Atomic & Nuclear Structure, Exponential behavior, Prod. Of X-Rays	Dosimetric Quantities (Will Hanson)	Continued (Saiful Huq)	Photon Beam Dosimetry (M. Salehpour)	Commissioning RT equipment Physics Dosimetry Equipment (G. Ibbott)	Continued	Free
3:15-3:30	Coffee/Tea Break						
3:30-5:00	Continued (Will Hanson)	Continued (Will Hanson)	Continued (Saiful Huq)	Continued	Commissioning Treatment Planning Systems mu calculations (G. Ibbott)	Continued	Free

**Regional Training Course on Quality Assurance of Physical and Technical Aspects in Radiotherapy,
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February 12 – 23, 2013**

Schedule Week 2: February 12 – 23, 2013

Day Time	Monday February 25	Tuesday February 26	Wednesday February 27	Thursday February 28	Friday March 1
9:00-10:30	Conformal RT, IMRT (G. Ezzell)	Brachy: Sources, Calib, Commissioning (Thomadsen)	Radiation Therapy Imaging Equipment Simulation Immobilization, Mold Room Techniques (J. Van Dyk)	Radiobiology (D. Followill,)	Exam, Evaluation (W. Hanson)
10:30-10:45	Coffee/Tea Break				
10:45-12:00	Conformal RT, IMRT Transitioning from 1D to 2D to 3D (G. Ezzell)	Continued	Special Procedures (TSI, TBI) (Van Dyk)	Accident Prevention in Radiotherapy (Mitic)	Continued
12:00-1:00	Lunch Break				
1:00-2:00 2:00-3:00	Special Procedures (SRS, SBRT) (P. Balter)	Brachy: Treatment Planning (Thomadsen)	IAEA Cooperation activities in radiotherapy (J. Van Dyk) Quality Assurance (D. Followill,)	Radiation Safety (R. Kudchaker)	Exam Discussion (W. Hanson) Course Closing
3:15- 3:30	Coffee/Tea Break				
3:30-5:00	QA of Imaging Equipment for RT (P. Balter)	Continued	Orthovoltage Dry Lab (D. Followill)	Q & A Review (W. Hanson)	