Course Specifications

General Information

Course name	Patient Planning For Radiotherapy
Course number	AMSR4296
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - To understand different methods of Radiotherapy
2 - To understand basic principle of treatment planning
3 - To discuss the radiobiological effects of radiation therapy
4 - To understand treatment planning methods
5 - To be familiar with treatment planning software

Intended Learning Outcomes

Knowledge and Understanding	* Basic principle of radiotherapy
	* Linear accelerator and simulator machines
Professional Skills	* Methods of dose calculation
	* Radiation protection and quality control
General Skill	* Patient preparation and planning for radiotherapy

Course Contents

1 - Types and methods of radiotherapy
2 - External treatment planning
3 - Linear accelerator and CT simulator
4 - Software application for patient planning
5 - Treatment of tumours
6 - Volume definition and fields determination

Teaching and Learning Methods

1 - Standard lectures
2 - Project Based Learning
3 - Tutorial and animation Videos

Students Assessment

Assessment Method	TIME	MARKS
Assignments	the first trimester	30%
Midterm exam	Week 8	30%
Final Exam	Week 15	40%

Books and References

Course note	Kapoor, R. (2014). Individualized radiation therapy in cancer patients current approaches. In Proceedings of the one hundred and first Indian Science Congress: brief notes on the lectures and presentations
Essential books	Barrett, A., Morris, S., Dobbs, J., & Roques, T. (2009). Practical radiotherapy planning. CRC Press
Recommended books	Haas, O. (1999). Radiotherapy Treatment Planning: New System Approaches