

2018-2019

DRAD6206 – Molecular imaging and medical cyclotron

Topic	Teaching mode (e.g. Lecture, Tutorial, Lab, Practicals)
S1: Physics of Molecular Imaging	Lecture
S2: PET Cameras	Lecture
S7: Cyclotrons	Lecture
S8: Practical: Operation of a Medical Cyclotron	Lecture
S9: Radiochemistry 1 (Basic & Radiochemistry)	Lecture
S10: Radiochemistry 2 (C11 – Radiochemistry & Metal radionuclides)	Lecture
S11: Automated Synthesizer	Lecture
S12: Practical – Operation of automated synthesizer	Lecture
S13: Radiation Dosimetry & Protection in PET	Lecture
S4: Image Reconstructions in PET (OSEM, AC and SC)	Lecture
S14: Pharmacy Rules & GMP	Lecture
S16: Practical: Quality Assurance and Acceptance Testing of PET-CT	Practical
S17: Clinical Application of FDG PET	Lecture
S18: Clinical Application of C11 PET	Lecture
S19: Tracer Kinetic (Receptor Model, Gene Probes, Receptor Gene Imaging, multimodality)	Lecture
S20: Molecular Basis of new radiochemical development	Lecture
S3: Data Acquisition & Performance Evaluation of PET	Lecture
S15: Quality Assurance in Molecular imaging	Lecture
S5: Quantitative Techniques in PET (SUV, Compartment & dynamic modelling)	Lecture
S6: Coregistration with Functional Images	Lecture

Assessment method: 40 % in-course assessment
30 % final examination
30 % others (please specify): Test