

長庚大學 醫學影像暨放射科學系博士班 必選修科目表 (107 學年度入學學生適用)
Chang Gung University, Medical Imaging and Radiological Sciences
Curriculum for PHD Program (2018 ~2019) 2018.4.26 revised

必/選修 Required/ Elective	科目名稱 Course Title	學分 Credit	開課年級 year	上學期 Fall	下學期 Spring	備註 Note
必修 Required Courses	書報討論一 Seminar (1)	1	1	1		
	書報討論二 Seminar (2)	1	1		1	
	書報討論三 Seminar (3)	1	2	1		
	書報討論四 Seminar (4)	1	2		1	
	放射與核物理 Radiation and Nuclear Physics	3	1	3		
	影像解剖及生理學 Radiological Anatomy and Physiology	3	1		3	
	生物統計學 Biostatistics	3	1		3	
	科學倫理與論文寫作 Scientific Ethics and Writing	2	2		2	
選修 Elective Courses	診斷影像物理實驗 Physics Measurements in Diagnostic Imaging Lab	2	1		2	偶數學年度開課 Offered bi-annually
	放射治療物理實驗 Lab-Radiotherapy Physics	2	1		2	奇數學年度開課 Offered bi-annually
	磁共振造影 Magnetic Resonance Imaging: Basic Principles and Applications	3	1		3	偶數學年度開課 Offered bi-annually
	醫學輻射劑量學 Medical Radiation Dosimetry	3	1		3	
	醫學保健物理 Medical Health Physics	3	1	3		
	放射治療物理 Physics of Radiotherapy	3	1	3		
	輻射生物學 Radiobiology	3	1		3	
	放射診斷物理 Diagnostic Imaging Physics	3	1	3		偶數學年度開課 Offered bi-annually
	核子醫學物理暨藥物學 Physics and Pharmaceuticals in Nuclear Medicine	3	1		3	偶數學年度開課 Offered bi-annually
	醫學影像處理 Medical Imaging Processing	3	1	3		偶數學年度開課 Offered bi-annually
	功能性磁共振造影 Functional MRI	2	1	2		奇數學年度開課 Offered bi-annually
	超音波影像學 Ultrasound Imaging	3	1	3		偶數學年度開課 Offered bi-annually
	醫學影像處理特論 Special Topics in Medical Image Processing	3	1	3		奇數學年度開課 Offered bi-annually
	診斷影像物理特論 Special Topics in Diagnostic Imaging Physics	3	1	3		奇數學年度開課 Offered bi-annually
	放射藥物學特論 Special Topics in Radiopharmaceuticals	3	1	3		奇數學年度開課 Offered bi-annually
	臨床醫學物理實習(影像物理) Clinical Practicum of Medical Physics-Diagnostic Imaging	2	2	2		暑假上課 Summer school
	臨床醫學物理實習(治療物理) Clinical Practicum of Medical Physics-Radiation Therapy	2	2	2		暑假上課 Summer school
	進階放射治療物理 Advanced Radiotherapy Physics	3	2		3	偶數學年度開課 Offered bi-annually
	分子影像學 Molecular Imaging	3	2	3		奇數學年度開課 Offered bi-annually
	粒子放射治療 Particle Radiotherapy	3	2		3	奇數學年度開課 Offered bi-annually
	放射藥物開發及藥理神經學應用 Radiotracer Development for Pharmacology and Neurology Studies	3	2	3		

	輻射度量 Radiation Detection and Measurement	3	1	3		偶數學年度開課 Offered bi-annually
	醫學影像系統 Biomedical Imaging System	3	2	3		
屆別: 第四屆 Class of 2017 1. 畢業學分: 33 學分 (含論文 <u>6</u> 學分)。 Core total: 33 Credits (with PhD Dissertation 6 Credits)。 2. 必修: <u>15</u> 學分 (不含論文)。 Required Courses: <u>15</u> Credits (without PhD Dissertation) 3. 選修: <u>12</u> 學分。 Elective Courses: <u>12</u> Credits。 4. 其他 (Others): A. 醫學院各所開設之「生物統計學」及「高等生物統計學」可擇一選修, 至多承認 3 學分。 Biostatistics or Advanced Biostatistics offered by all departments in medical school will be acknowledged at most 3 credits. B. 博士生選修外所課程, 經指導教授同意後均可承認學分。 Courses in other departments with supervisor's agreement will be acknowledged. C. 論文 6 學分於學位考試後給予。 PhD Dissertation with 6 credits will be awarded after degree examination. D. 逕升博士班之學生, 畢業時需修滿最少 30 學分 (不含論文 6 學分)。 PhD students admitted following direct admission track should complete course work of minimum 30 credit hours. Additional 6 credit hours are necessary for the dissertation.						

所長:

課程召集人:

經辦: