

南台科技大學 98 學年度第 2 期課程資訊

課程名稱	醫用超音波
課程編碼	20M08601
系所代碼	02
開課班級	碩研電機一甲 碩研生醫一甲
開課教師	陳培展
學分	3.0
時數	3
上課節次地點	五 2 3 4 教室 A302
必選修	選修
課程概述	Introduction to ultrasound physics, instrumentation, and applications in medicine and biology
課程目標	The goal has been to provide a text on the subject which is suitable for students requiring knowledge of the physics and instrumentation to complement and aid study of the clinical use of diagnostic ultrasound.
課程大綱	
英文大綱	<ol style="list-style-type: none"> 1.Introduction 2.Nature of Ultrasound 3.Propagation in tissue 4.Beam shapes and Transducers 5.A scan Instrumentation 6.Statics B-Scan 7.Real-time Scanners 8.M-Mode 9.Others Scanners and Probes 10.Measurements of Size 11.Doppler Ultrasound Physics and Instruments 12.Doppler Ultrasound Measurement 13.Digital Storage, Scan Converts and Data Processing 14.Image Artifacts 15.Performance Checks 16.Bioeffects, Dosimetry and Safety
教學方式	課堂教授,分組討論,口頭報告,實務操作,
評量方法	作業/習題練習,口頭報告,課堂討論,課程參與度(出席率),
指定用書	Physics and Instrumentation of Diagnostic Medical Ultrasound
參考書籍	超聲診斷設備原理與設備 馮若 中國醫藥科技出版社
先修科目	無

教學資源	1.blackboard 2.可攜式超音波檢測儀(Sonic 1200 s/HR) 3. 超音波脈波發射/接收儀(Panametric PR 5058)
注意事項	
全程外語授課	0
授課語言 1	華語
授課語言 2	
輔導考照 1	
輔導考照 2	