MRGO6306 Robotic Rehabilitation Therapy 機器人康復治療 (2 credit units)

2024/25

Module Head: Professor Herman Lau

Session	1	2	3	4	5	6	7	8	Exam
Date	9/5/25 (F)	16/5/25 (F)	3/6/25 (Tue)	4/6/25 (W)	7/6/25 (Sat)		14/6/25 (Sat)		21/6/25 (S)
Time	1830-2130	1830-2130	1830-2130	1830-2130	1000-1300	1400-1700	1000-1300	1400-1700	PM
Venue	OLC SR	YIA605	OLC SR	OLC SR	CYT214		CUHKMC RC		Tbc

Contents

Mini-module	Topic	Speaker	Session	Time slot
Neuroplasticity principles	1. Principles of Neuroplasticity 2. Principles of Gait 3. Locomotor Training 4. Traditional Physiotherapist Practice in Neuroplasticity Rehabilitation	Ms. Eva CHUN	1	9/5/2025 (Fri)
Introduction of Robotics technology	Introduction to Robotics for Rehabilitation – End effector based robotic rehabilitation Introduction to Robotics for Rehabilitation – Exoskeleton based robotic rehabilitation Researches and Cases	Ms. Eva CHUN	2	16/5/2025 (Fri)
Applications in Robotic Rehabilitation	EksoNR exoskeleton clinical application, EksoNR application and skills lab	Dr Tiffany CHOI	3	3/6/2025 (Tue)
Indications in Robotic Rehabilitation	Exoskeleton for treating Stroke	Dr Ivan Su / Prof. Mayte Vega	4	4/6/2025 (Wed)
	Exoskeleton for treating Cerebral palsy			
	Exoskeleton introduction and implementation Exoskeleton for treating multiple sclerosis	Prof. WEE Seng Kwee	5	7/6/2025 (Sat) 10:00 – 13:00
	Spinal Cord Stimulator and Robotic Rehabilitation		6	14:00 – 17:00
Practicum	Robotic rehabilitation for Real Patient Cases (1) Upper Limb Robot	Mr. Benjamin LAU	7	14/6/2025 (Sat) 10:00 – 13:00
	Robotic rehabilitation for Real Patient Cases (2) Exoskeleton		8	14:00 – 17:00

Venue:

OLC SR	Seminar Room, Orthopaedic Learning Center, 1/F, Li Ka Shing Specialist Clinic (North Wing), Prince of Wales Hospital, Shatin
CYT214	CYT 214, Cheng Yu Tung Building, CUHK Campus, 9 Chak Cheung Street, Shatin (near Hyatt Hotel)
YIA605	YIA 605, Yasumoto International Academic Park, Chung Chi College, CUHK Campus, Shatin
CUHKMC RC	Alex Wong Sports Medicine and Rehabilitation Centre, 1/F, CUHK Medical Center, Shatin

Brief Description:

Introduction of Robotic Rehabilitation for Neuroplasticity Rehabilitation and therapeutic application of exoskeleton for rehabilitation

介紹以機器人康復治療的神經可塑性康復，及外骨骼在康復中的治療應用。

Learning Outcome:

Students will understanding the followings:

1. Principles Neuroplasticity and Rehabilitation;
2. Principles of Robotic Rehabilitation and its application;
3. Updated with the Latest information of Robotic Rehabilitation Technology

Speakers:

Professor Herman LAU (Module Head)	PhD (PolyU), MPhil (PolyU), MPA (Mgt. & Tech.), PGDipAppSc (Syd.), ProfDipPhysio (PolyU), Hon FMSHP Director of Allied Health Services, CUHK Medical Centre Adjunct Associate Professor, JC School of Public Health and Primary Care, Faculty of Medicine, the Chinese University of Hong Kong Honorary Professor, Hong Kong Metropolitan University Professor of Practice, School of Health Sciences, St Francis University
Dr. Tiffany CHOI	DHSc (Physio) (HKPolyU), MSc SMHS (CUHK), Prof Dev Dip (Accupuncture for Physiotherapists) (HKBU), BSc (Hon) Physio (HKPolyU), RPT Associate Professor of Practice, Programme Leader of BSc (Hon) in Physio., S. K. Yee School of Health Sciences, St Francis University
Ms. Eva CHUN	MSc Health Services Management (CUHK), MSc Manipulative Physiotherapy (PolyU), BSc (Hon) PT (PolyU), Registered Physiotherapist Physiotherapist, CUHK Medical Centre
Prof. Mayte Vega	20 years neuropediatrics clinical experience. 12 years experience with robotic devices for children and adult. Master in Pediatrics, San Pablo CEU University, Madrid. Osteopath C.O , The University of Alcalá de Henares, School of Osteopathy of Madrid. Associate Professor, Physiotherapy in Pediatrics, Francisco de Vitoria University, Madrid. Professor at Pediatric Master, San Pablo University, Madrid. Professor at Pediatric Master Ostheopath, School of Ostheopathy of Madrid.
Dr Ivan SU	DHSc (PolyU), Registered Physiotherapist Head of Professional and Programme Development, SAHK
Mr. Benjamin LAU	MSc in Manipulative Physiotherapy (PolyU), BSc (Hon) in Physiotherapy (PolyU) Registered Physiotherapist, CUHK Medical Center
Professor WEE Seng Kwee	PhD (Neurorehabilitation), University of Southampton, United Kingdom Associate Professor, Singapore institute of Technology Principle Physiotherapist, Tan Tock Seng Hospital, Singapore