# MRGO5101: Principles, Current Diagnosis & Management for Musculoskeletal Disorders, Aging and Degeneration (4 credit units)

骨骼肌肉疾病、老年化及退化原則、診斷及治療

Module Head: Dr. Michael Ong  Last update: 6/11										1/2024							
Session	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Exam
Date	4/9(W)	11/9(W)	14/9(S)	25/9(W)	2/10(W)	9/10(W)	16/10(W)	23/10(W)	30/10(W)	6/11(W)	8/11(F)	13/11(W)	15/11(F)	20/11(W)	22/11(F)	27/11(W)	7/12(S)
Time	1830-2130		AM/PM							1830-2130							PM
Venue	CYT215	CYT215	A Lab	CYT215	CYT215	CYT215	CYT215	CYT215	CYT215	CYT215	YIA402	CYT215	YIA402	CYT215	YIA502	CYT202	WMY406

Theme	Content	Speakers	Session	Date
	Biophysical interventions: vibration, LIPUS, and Shock Wave	Prof. Louis CHEUNG	1	4/9/2024 (W)
Ortho	Application of Bone Densitometry in Bone Health Research Osteoporosis and Assessment of Bone density: DEXA, pQCT, ultrasound bone densitometry	Ms. Vivian HUNG	2	11/9/2024 (W)
Current Diagnosis of Ortho Problems	Functional anatomy in Orthopaedic rehabilitation (with anatomy lab visiting)	Dr. Josephine LAU	3	14/9/2024 (S) CUHK Anatomy Lab 0930-1230 / 1400-1700
Diag	Radiological investigations	Dr. Kenneth CHEUNG	4	25/9/2024 (W)
Current D Problems	Principles of Physical Diagnosis of musculoskeletal problems; and Clinical Diagnostic Skills for Common MSK problems	Dr. Ashley WONG	5	2/10/2024 (W)
2 F	Arthroscopy & Minimal invasive surgery for Joint Injuries and Soft tissue Injuries and Healing	Dr. Michael ONG	6	9/10/2024 (W)
	Upper limb	Dr. WL TSE	7	16/10/2024 (W)
MSK Disorders, Special conditions, Aging and Degeneration	Sarcopenia, Osteoporosis and Aging	Dr. N ZHANG	8	23/10/2024 (W)
itio n	Spine	Dr. Raymond WAN	10	6/11/2024 (W)
MSK Disorders Special conditi Aging and Degeneration	Injuries and fragility fractures	Dr. N TANG	11	8/11/2024 (F)
Disc al co ano	Arthritis	Dr. Dennis WONG	12	13/11/2024 (W)
SK I	Foot and Ankle	Dr. Samuel LING	14	20/11/2024 (W)
⊼ ஜ ஜ g	Infection, Tumor and other bone diseases	Dr. WK CHIU	15	22/11/2024 (F)
Princip les of Rehab.	Assessment of Function & Impairment, and Assessment of Satisfaction & Outcomes	Mr. Simon WONG	9	30/10/2024 (W)
Pr les	Models of Rehabilitation for Musculoskeletal Disorders	Mr. Alexander WOO	13	15/11/2024 (F)
	Student Presentation (Group Presentation)	Assessors: Dr. Samuel LING Dr. Raymond NG	16	27/11/2024 (W)
	Written Examination	·		7/12/2024 (S)

A Lab Anatomy Laboratory, LG/F, Choh-Ming Li Basic Medical Sciences Building, CUHK Venue:

CYT202 Room CYT202, 2/F, Cheng Yu Tung Building, CUHK Campus (near Shatin Hyatt Hotel) CYT215 Room CYT215, 2/F, Cheng Yu Tung Building, CUHK Campus (near Shatin Hyatt Hotel)

Room YIA402, 4/F, Yasumoto Academic Park, Chung Chi College, CUHK Campus YIA402

WMY406 Room WMY406, 4/F, Wu Ho Man Yuen Building, Chung Chi College, CUHK Campus (venue To be confirmed)

#### **Brief Description:**

An introduction to the current techniques and technologies for diagnosis of musculoskeletal disorders and the principles of management, with coverage over non-operative means, alternative medicine, and also principles of surgical intervention especially for arthritis and aged problems.

介紹診斷和治療骨骼肌肉疾病的最新科技和技術,包括非手術治療、另類醫學療法,與及手術治療原理,尤其針對骨關節炎和老化疾病。

#### **Learning Outcome:**

The student should be able to understand and apply:

- 1. Current techniques and technologies for diagnosis of musculoskeletal disorders
- 2. The principles of management, with coverage over non-operative means and alternative medicine
- 3. Principles of surgical intervention especially for arthritis and aged problems.

### Attention: University policy and regulations on honesty in academic work

Attention is drawn to University policy and regulations on honesty in academic work, and to the disciplinary guidelines and procedures applicable to breaches of such policy and regulations. Details may be found at <a href="http://www.cuhk.edu.hk/policy/academichonesty/">http://www.cuhk.edu.hk/policy/academichonesty/</a>.

With each assignment, students will be required to submit a signed declaration that they are aware of these policies, regulations, guidelines and procedures.

- In the case of group projects, all members of the group should be asked to sign the declaration, each of whom is responsible and liable to disciplinary actions, irrespective of whether he/she has signed the declaration and whether he/she has contributed, directly or indirectly, to the problematic contents.
- For assignments in the form of a computer-generated document that is principally text-based and submitted via VeriGuide, the statement, in the form of a receipt, will be issued by the system upon students' uploading of the soft copy of the assignment.

Assignments without the properly signed declaration will not be graded by teachers.

Only the final version of the assignment should be submitted via VeriGuide.

The submission of a piece of work, or a part of a piece of work, for more than one purpose (e.g. to satisfy the requirements in two different courses) without declaration to this effect shall be regarded as having committed undeclared multiple submissions. It is common and acceptable to reuse a turn of phrase or a sentence or two from one's own work; but wholesale reuse is problematic. In any case, agreement from the course teacher(s) concerned should be obtained prior to the submission of the piece of work.

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### **Assessment:**

1. Student Presentation (20%)

Students will be assigned into groups of 4-5 students, with more than 2 professionals in each group.

Group	Topic			Students		
1	IX	CHONG HS Samuel (OT)	LEE LY Zoe (PT)	NG KC Alex (MBBS)	WONG CH Ryan (PT)	WU YS Celina (PT)
2	III	AU YEUNG HC Oscar (Nurse)	CHAN TK Jacky (PT)	LAU HW Winnie (OT)	WONG HC Kelvin (PT)	
3	Х	CHENG WC Matthew (PT)	LAU Ying Lun (Nurse)	POON PH Matthew (OT)	WONG KY Ruby (PT)	
4	- 1	CHEUNG WS Fion (PT)	MOK Timothy HL (PT)	PUN TW Eunice (OT)	WONG KY Queennie (Nurse)	WONG WC Rachel (PT)
5	IV	CHU SL Jeffery (PT)	PANG S Christy (PT)	TANG Cinlin Celine (OT)	WU YT Alysia (PT)	ZHOU HY Rosier (SR)
6	VI	CHEN Yuting (SR)	CHU WS Yvonne (PT)	SIU CH George (PT)	WONG PY Andy (P&O)	
7	П	HUI Long Yiu (PT)	LAU TP Wilson (P&O)	SO HL Helaina (PT)	WAN SK Stanley (Podiatrist)	YANG Michelle (PT)
8	VII	KWOK KY Janet (PT)	TANG CL Jackson (PT)	WANG Yixuan (RT)	YEUNG KL Danny (OT)	YU WY Celina (Nurse)
9	V	CHAN HW Bouby (PT)	LAM CW Matthew (PT)	TING HS Ellen (PT)	WAN HL Simon (OT)	
10	VIII	LAM YM Steven (PT)	LIU Jingyi (SR)	TIK Naomi Yin (OT)	TSANG SH Chris (P)T	

Each group will present for 10 minutes (plus 5 minutes Q&A) in session 15. Here below are the topics for your preview:

	<u>Topics</u>
I.	Radiological investigation used in musculoskeletal medicine
	Scope: Discuss different types of investigation modality use in musculoskeletal medicine. Their basic principle and basic science. Clinical application. Cost-
	effectiveness
II.	Biophysical intervention in musculoskeletal medicine
	Scope: What is currently available? What can it be use for? The basic science behind these technologies. Their efficacy and outcome
III.	Current guideline in the management of fragility hip fractures
	Scope: Review of the management of fragility hip fractures, from the initial injury, hospital management and post-operative rehabilitation care to
	secondary prevention
IV.	Overview of patient reported outcome measurements (PROM)
	Scope: What are they? Why should be use it? who should be use it on? Should these form parts of performance index?
V.	Current guideline in the management of osteoporosis
	Scope: Review of the management of osteoporosis in the community, how does it compare between HK and the rest of the world
VI.	Scoliosis exercise - what's the evidence
VII.	Application of 3D printing in Orthosis
VIII.	Tele rehabilitation - current practice and guideline
IX.	Application of MSK ultrasound in rehabilitation
X.	Sports injury: the pathway to return to play

Presentation date: 27/11/2024 (Wed)

More details and the topics will be released in session 1

## 2. Written Examination (80%)

The written Examination covers all the contents of the lectures.

Date: 7/12/2024 (Sat) Time: 14:00 – 16:00 (tbc)

Venue: WMY406, CUHK Campus (tbc)

## **Speakers:**

эреакегэ.	
Dr. Michael ONG	MBChB, MRCS, FRCS (Orth)
(module head)	Assistant Professor, Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong
Prof. Louis CHEUNG	BSc, PhD, Postgrad Cert (Biostatistics)
PIOI. LOUIS CHEONG	Professor (non-clinical), Department of Orthopaedics & Traumatology, The Chinese University of Hong Kong
Ms. Vivian HUNG	M.Phil (CUHK), B.Sc (Hon)(University of Toronto)
IVIS. VIVIAII HUNG	Research Associate, Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong
Dr. Josephine LAU	BSc (Human Biology), MPhil (Anatomy), PhD (Ophthalmology and Visual Sciences)
Di. Josephine LAO	Lecturer, Department of Biomedical Sciences, The Chinese University of Hong Kong
Dr. Kenneth CHEUNG	BSc, MB BS, PhD (UCL), FRCR
DI. Refilletti Cheding	Radiologist, Department of Interventional Imaging and Radiology, Prince of Wales Hospital / North District Hospital
Dr. Ashley WONG	MBChB
DI. ASIIIEY WONG	Resident, Department of Orthopaedics and Traumatology, Prince of Wales Hospital
Dr. WL TSE	MBChB(CUHK), FRCSEd, FRCSEd(Orth), FHKCOS, FHKAM (Orthopaedic Surgery)
DI. WL 13E	Consultant, Department of Orthopaedics and Traumatology, Prince of Wales Hospital
Dr. N ZHANG	BSc (SDU), MSc (SJTU), PhD (CUHK)
DI. IN ZHANG	Assistant Professor, Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong
Mr. Simon WONG	MAIS, MBA, BA, PDOT
IVII. SIIIIOII VVONG	Principal Occupational Therapist, Occupational Therapy Department, CUHK Medical Centre
Dr. Raymond WAN	MB ChB (CUHK); MRCSEd, FRCSEd(Orth), FHKAM (Orthopaedic Surgery), FHKCOS
DI. Kayınıonu WAN	Specialist, Department of Orthopaedics and Traumatology, Prince of Wales Hospital
Dr. N TANG	MBChB(CUHK), FRCS(Edin), FRCSEd(Orth), FHKCOS, FHKAM (Orthopaedic Surgery)
DI. IN TAING	Consultant, Department of Orthopaedics and Traumatology, Prince of Wales Hospital.
Dr. Dennis WONG	MBBS (H.K.), MRCSEd, FRCSEd (Ortho.), FHKCOS, FHKAM (Orthopedic Surgery)
DI. Dellilis WONG	Resident, Department of Orthopaedics and Traumatology, Alice Ho Miu Ling Nethersole Hospital
Dr WK CHILL	MB BS (HKU); MRCSI, FRCSEd(Orth), FHKCOS, FHKAM (Orthopaedic Surgery)
Dr. WK CHIU	Associate Consultant, Department of Orthopaedics and Traumatology, Prince of Wales Hospital
Dr. Camual LINC	MBChB (CUHK), ChM (Edin), FHKCOS, FRCSEd (Orth), FHKAM (Orth)
Dr. Samuel LING	Assistant Professor, Department of Orthopaedics and Traumatology, The Chinese University of Hong Kong
Mr. Alexander MOO	MBA in Health Care (CUHK), MMedSc. (HKU), BSc. Physiotherapy (PolyU), Prof. Dip. Acupuncture (HKBU)
Mr. Alexander WOO	Principal Physiotherapist, CUHK Medical Centre
Dr. Daymand NC	MBChB, FHKAM (Orthopaedic Surgery)
Dr. Raymond NG	Specialist, Department of Orthopaedics Rehabilitation, Tai Po Hospital
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