open.michigan

Unless otherwise noted, the content of this course material is licensed under a Creative Commons Attribution 3.0 License.

Copyright 2008, University of Michigan.

The following information is intended to inform and educate and is not a tool for self-diagnosis or a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional. You should speak to your physician or make an appointment to be seen if you have questions or concerns about this information or your medical condition. You assume all responsibility for use and potential liability associated with any use of the material.

Material contains copyrighted content, used in accordance with U.S. law. Copyright holders of content included in this material should contact open.michigan@umich.edu with any questions, corrections, or clarifications regarding the use of content. The Regents of the University of Michigan do not license the use of third party content posted to this site unless such a license is specifically granted in connection with particular content objects. Users of content are responsible for their compliance with applicable law. Mention of specific products in this recording solely represents the opinion of the speaker and does not represent an endorsement by the University of Michigan.

Viewer discretion advised: Material may contain medical images that may be disturbing to some viewers.

UNIVERSITY OF MICHIGAN

CC BY

Musculoskeletal Sequence
October 8-26, 2007

General Themes

1. Muscle Physiology
2. Embryology of the musculoskeletal system
3. Muscle Metabolism
4. Histology of the musculoskeletal system
5. Gross Anatomy of the musculoskeletal system
6. Radiology of the musculoskeletal system

Overall Sequence Intended Learning Outcomes (ILOs)

Knowledge

1. Understand the fundamental principles of muscle physiology and clinical problems of abnormal muscle physiology.

2. Understand the processes involved in development of the musculoskeletal system and commonly encountered developmental abnormalities.

3. Understand the biochemical basis of muscle metabolism and clinical issues of abnormal muscle metabolism.

4. Be able to identify the cells and tissues of the musculoskeletal system and understand their functions, important relationships, and associated common clinical problems.

5. Be able to identify the anatomical components of the musculoskeletal system and understand their functions, important relationships, and associated common clinical problems.

6. Understand the fundamental principles and applications of modern imaging techniques and be able to identify normal musculoskeletal anatomy using common clinical imaging modalities.

Skills

1. Become proficient at recognizing the cells and tissues of the musculoskeletal system.

2. Become proficient at anatomical dissection and recognition of anatomical structures.

3. Become proficient at recognizing anatomical structure using common imaging modalities.

4. Become proficient at presenting anatomical and clinical information in a concise and precise manner.

Professionalism

1. Approach peer teaching with commitment to quality and responsibility to peers.

2. Approach peer evaluation with responsibility and commitment to quality improvement.

3. Approach human dissection with commitment to learning and respectful treatment of body donors.

Faculty for the Musculoskeletal sequence

Thomas R. Gest, PhD, Sequence Director
Associate Professor of Anatomical Sciences

Andrew Barnosky, MD
Clinical Assistant Professor of Emergency Medicine

Catherine Brandon, MD, MS
Assistant Professor of Radiology

Clifford L. Craig, MD
Clinical Associate Professor of Orthopedic Surgery

Michael DiPietro, MD
Professor of Radiology

Jeffrey Innis, MD, PhD
Associate Professor, Pediatrics and Communicable Diseases

David Jamadar, MD
Clinical Associate Professor of Radiology

Sun-Kee Kim, PhD
Associate Professor of Cell and Developmental Biology

Lawrence R. Kuhns, MD
Professor of Radiology

Joe Metzger, PhD
Professor of Physiology and Internal Medicine

Paul A. Weinhold, PhD
Professor of Biological Chemistry

Required Experiences

In the Musculoskeletal sequence there are several required experiences. In the **RARE** circumstance where a student cannot attend, the student must contact their class counselor in advance (or as soon as possible in an emergency) to request a deferral. (Please do NOT contact sequence directors with requests for or explanations of deferrals.) Absences will be approved or denied by class counselors based on the same guidelines used for Quiz and Exam deferrals. Should you obtain a deferral from your class counselor, make up instructions for the required experiences (found below) should be followed.

For the Required Patient Presentations on 10/22 & 10/24, the remediation will be watching the video and a 2-page response paper describing the patient presentation. This is due to Dr. Gest by 5 PM on 10/26/07.

For the Physiology Small Groups, the remediation will be writing answers to the small group question. This is due to Dr. Metzger by 5 PM on 10/26/07.

Grading

There will be 2 quizzes (beginning on 10/12 and 10/19) and a final exam for the musculoskeletal sequence, beginning on 10/26. On the quizzes, there will be 2 or 3 questions from each lecture or learning module of that week. There will both written and practical portions of the final exam. On the written portion of the final exam, there will be approximately 2 questions from each lecture or learning module already covered on a quiz, and approximately 4 questions from each lecture or learning module given in the week of the final exam. On the practical exam for gross anatomy, there will be approximately 4 questions for each laboratory session.

All quiz and exam questions are worth 1 point. All points will be added together at the end of the sequence, and a minimum of 75% will constitute a passing grade.