

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :1 of 5

Basic information:

Program on which the Block is offered	PharmD
Qualification Awarded	BPharmD
Block title - Code - Year	Musculoskeletal Disorders– 3403– Professional Year II
Block Type	Professional
Total contact Hours / week [49 hrs.]	(Lectures: 5, Lab: 1, Tutorials: 2, TBL: 4.5, PBL: 6.5, Clinical: 2, Self-study: 26, Exams: 2)
ECTS Hours	6
Pre-requisites for this Block	Fundamentals of Pharmacology, Anatomy, Histology, Physiology, Biochemistry, Pathology, Pharmacogenomics Primer Course, Biopharmaceutics, Pharmaceutical Calculations, Drug Quality Assurance, Biotechnology, Pharmacy Practice, and Clinical Skills.
Week period	3

Block Description:

This block covers aetiology, pathophysiology, clinical presentation, complications, investigations, clinical assessment, management and treatment of musculoskeletal disorders. Problem-Based learning and Team-Based learning strategies are utilized in this block to assist in combining clinical expertise, patient characteristics and medical evidence for clinical decision-making.

Block Objectives:

By the end of this Block the student should be able to:

- Demonstrate comprehensive knowledge, and clear understanding of Pathophysiology, Clinical Pharmacology, Clinical Biochemistry, Clinical Pharmacokinetics, Pharmacotherapeutics, Medicinal Chemistry, Parasitology, Pharmacogenomics, Patient Assessment, Self-care Management, Complementary and Alternative Medicine regarding musculoskeletal disorders.
- Apply clinical pharmacokinetic principles in calculating and monitoring drug doses.
- Analyse the biochemical laboratory results of patients with musculoskeletal disorders.
- Prevent, identify, and resolve drug-induced problems in musculoskeletal disorders.
- Provide drug information, education and evidence-based pharmacotherapy services to patients with musculoskeletal problems, and to other healthcare professionals.
- Provide patient-centred care as the medication expert.
- Apply the principles of medical ethics and communication skills on patients with musculoskeletal disorders.

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :2 of 5

Learning and Teaching Methods, & Assessment Methods

Learning and Teaching Methods:

- Problem-Based Learning (PBL)
- Team-Based Learning (TBL)
- Lectures
- Tutorials
- Practice in lab
- Independent study assignments
- Presentations
- Clinical teaching: Clinical skills lab, Simulation, Field trips.

Assessment methods:

- **Continuous assessment:**
 - Problem Based Learning sessions (Brainstorming/Debriefing)
 - Reports
 - Individual reassurance test (IRAT): MCQs
 - Group reassurance test (GRAT): MCQs
 - Problem solving (mini cases)
 - Presentations (oral/ poster/brochure)
 - Practice in lab
 - Clinical sessions
 - Open-book/open-web exam
- **End-Block exam:**
 - Written
- **Final-Block exam:**
 - Written
 - Objective structured clinical examination (OSCE)

Weighting of Assessment:

Continuous assessment:	70%
• PBL sessions	• 25%
• TBL sessions	• 25%
• Clinical sessions	• 12.5%
• End-block exam	• 7.5%
Final Exam:	30%
• Written	• 20%
• OSCE	• 10%
Total:	100%
Assessment Schedule:	
Continuous assessment:	During the block

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :3 of 5

• PBL sessions	Weeks 1-3
• TBL sessions	Weeks 1-3
• Clinical sessions	Weeks 1-3
• End-block exam	At the end of the block
Final exam:	At the end of the year
• Written	At the end of the year
• OSCE	At the end of the year

Examination Regulations:

- If the student absenteeism is more than 25 % he/she cannot attempt the final exam.
- The total required percentage to pass this course is at least 60 %

List of textbooks and references:

- **Course Notes:**

- PowerPoint presentations, videos and other materials related to lectures, tutorials and practical sessions are uploaded to the Moodle by experts on weekly basis according to teaching schedule.

- **Essential Books(Text Books):**

- Anne Ballinger. (2018). Essential of Kumar & Clarks Clinical Medicine. 6th edition.
- Current Medical Diagnosis & Treatment. 59th Edition.
- Foye`s, Principles of Medicinal Chemistry. (2012). 7th Edition, Lippincott Williams & Wilkins Publishers.
- Bogitsh, B. J., Carter, C. E., & Oeltmann, T. N. (2018). Human parasitology. Academic Press.
- Gupte, S. (2010). The Short Textbook of Medical Microbiology: Including Parasitology. Jaypee Brothers Medical Publishers.
- Edward P. Claus. (2016).(Pharmacognosy) for Lea & Febiger, University of Minnesota . 4th edition.
- Michael Heinrich, Joanne Barnes, Simon Gibbons, Elizabeth M. Williamson (2012). (Fundamentals of Pharmacognosy and Phytotherapy E-Book) Elsevier Health Sciences. 2nd edition.
- Karen Whalen, Richard Finke Thomas A. Panavelil. (2015). Lippincott Illustrated Reviews: Pharmacology. 6th Edition.
- Lawrence Tierney, Sanjay Saint, Mary Wholey. (2011). Current Essentials of Medicine. 4th Edition. McGraw Hill Medical.
- Harsh Mohan. (2010). Textbook of Pathology. 6th Edition. Jaypee Brothers Medical Publisher.
- Roger Walker, Cate Whittlesea. 2012, Clinical Pharmacy and Therapeutics, 5th edition, Elsevier Ltd. London, UK. International ISBN – 978-0-7020-4294-2.

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :4 of 5

- Allan Gaw. (2013). Clinical Biochemistry an Illustrated Colour text. Fifth edition. China.
- Despina Sanoudou. (2012). Clinical Applications of Pharmacogenetics. First edition. USA
- Sandosh Padmanabhan. (2014). Handbook of Pharmacogenomics and Stratified Medicine. 1st Edition. Academic Press USA.
- Geoffrey Beckett (2013). Clinical Biochemistry. 8th edition. Malaysia.
- Casarett & Doull's Toxicology: The Basic Science of Poisons 6th edition.
- B. G. Katzung,(2018) Basic & Clinical Pharmacology, Fourteenth Edition, United States of America: McGraw-Hill Education,

• Recommended Books:

- Stantny Davidson. (2018). Davidson's Principle & Practical of Medicine. 23rd edition.
- Harrison Principle of Internal Medicine. (2017). 20th edition.
- Graham L. Patrick. (2005). Introduction to Medicinal Chemistry, Oxford University Press.
- Graham L. Patrick. (2013). An Introduction to Medicinal Chemistry, Fourth Edition, Oxford University Press.
- Wilson and Gisvold's. (2011). Textbook of Organic Medicinal and Pharmaceutical Chemistry. Twelfth Edition, Wolters Kluwer Health/Lippincott Williams & Wilkins Publishers.
- G. Thomas. Medicinal Chemistry: An introduction. Wiley.
- Garcia, L. S. (2007). Diagnostic medical parasitology. American Society for Microbiology Press
- Bruneton Jean. (2008). (Pharmacognosy, Phytochemistry, Medicinal Plants). Lavoisier. 2nd Edition.
- James Ritter, Lionel Lewis, Timothy Mant, Albert Ferro. Goodman & Gilman's: The Pharmacological basis of Therapeutics. 12th Edition. McGraw Hill Education.
- Antonarakis and Motulsky. (2010). Human genetics Problems and Approaches. 4th Edition. Spain.
- David N. Cooper and Jian-Min Chen (2012). Mutations in human genetic disease. First edition. Croatia.
- Gary Hammer, Stephen McPhee. (2014). Pathophysiology of Disease: An Introduction to Clinical Medicine. 7th Edition. McGraw Hill Lange.
- Kumar, Abbas, Aster. (2018). Robbins Basic Pathology. 7th Edition. McGraw Hill Lange.
- H. P. Rang, J. M. Ritter, R. J. Flower, G. Henderson (2016) RANG & DALE'S Pharmacology, eight edition 2016, China : Elsevier Ltd.
- D. L. Longo, A.S. Fauci, D. L. Kasper, S. L. Hauser, J. L. Jameson, J. Loscalzo,(2018)Harrison's M A N U A L O F M E D I C I N E, 20th edition , McGraw-Hill Companies,

• Periodicals and websites:

- Nature Reviews Drug Discovery
- Drug Discovery Today

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :5 of 5

- Naomi Schlesinger. Diagnosis of Gout: Clinical, Laboratory, and Radiologic Findings. Am J Manag Care. 2005;11:S443-S450.
- [d. türck](#), [w. roth](#), [u. busch](#). (1996). a review of the clinical pharmacokinetics of meloxicam. 35(1): page 13-16.
- d. turck, w. roth and u. busch. (1996). review of the clinical pharmacokinetics of meloxicam.
- [vito pavone](#), [gianluca testa](#), [serena m. c. giardina](#), [andrea vescio](#), [domenico a. restivo](#), and [giuseppe sessa](#). (2017). pharmacological therapy of osteoporosis: a systematic current review of literature. 8:803.
- Aloe vera, African flowering plants database". Conservatoire et Jardin botaniques de la Ville de Genève. Retrieved 19 November 2017.
- www.drugbank.ca/drugs
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5682013/>
- <https://www.aafp.org/afp/1999/0215/p925.html>
- <https://www.webmd.com/vitamins/ai/ingredientmono-202/bilberry>
- <https://www.verywellhealth.com/the-benefits-of-bilberry-88315>
- <https://www.indigo-herbs.co.uk/natural-health-guide/benefits/eyebright>
- <https://www.healthline.com/nutrition/eyebright#eye-health>
- <https://vitagene.com/supplements/compounds/berberine>
- <https://www.verywellhealth.com/oregon-grape-benefits-4590368>
- <https://www.medicalnewstoday.com/articles/265800.php>
- <https://www.backtobasicsamarillo.com/using-cupping-therapy-treat-various-skin-conditions>
- <https://www.lybrate.com/topic/eczema-5-homeopathic-remedies-for-treating-it>
- <https://www.healthbenefitstimes.com/gulanha-tinospora>
- <https://www.cdc.gov/>

Block Policies:

Code of conduct

Please refer to LIMU code of ethics <http://limu.edu.ly/images/11/ethcode.pdf>

Academic integrity

Please be aware that cheating, plagiarism, in-class disruption and dishonesty are vigorously prosecuted and that LIMU has a zero-tolerance policy.