

## 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	Renal Disorders– 3305– Professional Year I
Block Type	Professional
Total contact Hours / week [46 hrs.]	(Lectures: 3, Lab: 1, Tutorials: 2, TBL: 4.5, PBL: 6.5, Clinical: 2, Self-study: 26, Exams: 3)
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 renal 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, Pharmacotherapeutics, Clinical Pharmacokinetics, Clinical Biochemistry, Pharmacogenomics, Patient assessment, self-care management, and Complementary and Alternative Medicine regarding renal disorders.
- Apply clinical pharmacokinetic principles in calculating and monitoring drug doses.
- Analyse the biochemical laboratory results of patients with renal disorders.
- Prevent, identify, and resolve drug-induced problems in renal disorders.
- Provide drug information, education and evidence-based pharmacotherapy services to patients with renal 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 renal 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:

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

# 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
<b>Final exam:</b>	<b>At the end of the year</b>
• 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):**

- Allan Gaw. (2013). clinical biochemistry an illustrated colour text. Fifth edition. China.
- Larry A. Bauer. (2014). Applied clinical Pharmacokinetics. 3<sup>rd</sup> edition.
- Philip Rowe. (2012). Pharmacokinetics. (E-Book)
- Sandosh Padmanabhan. (2014). Handbook of Pharmacogenomics and Stratified Medicine. 1<sup>st</sup> Edition. Academic Press USA.
- Richard Lifton (2008) Genetic Diseases of the Kidney. 1st Edition. Academic Press
- Reisner, H. (2013). Essentials of Rubin's Pathology. Lippincott Williams & Wilkins.
- Rhonda Jones. (2016). Patient assessment in pharmacy practice.3<sup>rd</sup> edition.
- Karen Whalen, Richard FinkeThomas A. Panavelil, 2015, Lippincott Illustrated Reviews: Pharmacology, 6<sup>th</sup> Edition
- Roger Walker, Cate Whittlesea. 2012, Clinical Pharmacy and Therapeutics, 5<sup>th</sup> edition, Elsevier Ltd. London, UK. International ISBN – 978-0-7020-4294-2.
- Paul M. Dewick. (2002) (Medicinal Natural Products: A Biosynthetic Approach). 3rd edition. John Wiley & Sons.
- Lawrence Tierney, Sanjay Saint, Mary Wholey. (2011). Current Essentials of Medicine. 4<sup>th</sup> Edition. McGraw Hill Medical.
- B. G. Katzung,(2018) Basic & Clinical Pharmacology, Fourteenth Edition, United States of America: McGraw-Hill Education,

- **Recommended Books:**

- Geoffrey Beckett (2013). Clinical Biochemistry. 8<sup>th</sup> edition. Malaysia.

# LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :4 of 5

- John E. Murphy. (2017). Clinical pharmacokinetics. 6<sup>th</sup> edition. American Society of Health-System.
- Leon Shargel. (2016). Applied Biopharmaceutics and Pharmacokinetics. 7th Edition.
- Despina Sanoudou (2012). Clinical Applications of Pharmacogenetics. First edition. USA
- David N. Cooper and Jian-Min Chen. (2012). Mutations in human genetic disease. First edition. Croatia.
- Debmalya Barh and Dipali Dhawan. (2013). Omics (Pharmacogenomics) for Personalized Medicine. Springer New Delhi Heidelberg New York Dordrecht London. 3<sup>rd</sup> edition.
- Meyer and Tyndale. (2005). Pharmacogenomics. Second Edition. Toronto, Ontario, Canada. United States of America.
- Antonarakis and Motulsky. (2010). Human genetics Problems and Approaches. 4th Edition. Spain.
- Richard N. Herrier, et al. (2015). Patient assessment in pharmacy.
- Karen J Tietze. (2012). Clinical skills for pharmacist. Third edition.
- Michael Heinrich, Joanne Barnes, Simon Gibbons, Elizabeth M. Williamson (2012). (Fundamentals of Pharmacognosy and Phytotherapy E-Book) Elsevier Health Sciences. 2nd edition.
- Bruneton Jean. (2008). (Pharmacognosy, Phytochemistry, Medicinal Plants). Lavoisier .2nd Edition.
- Andrew chevalier. (2016). Encyclopedia of Herbal Medicine. Penguin Random House. 3<sup>rd</sup> Edition.
- P. KUMAR, M. CLARK (2016) Kumar & Clark's Medical Management and Therapeutics, 9th edition, China: Elsevier Ltd.
- S. H. Ralston, I. D. Penman, M. W.Strachan, R. P. Hobson (2018) Davidson's Principles and Practice of Medicine, 23rd edition 2018, Elsevier Ltd.
- **Periodicals and websites:**
  - Nature Reviews Drug Discovery
  - Drug Discovery Today
  - Reetze-Bonorden P, Böhler J, Keller E. (1993). Drug dosage in patients during continuous renal replacement therapy. Pharmacokinetic and therapeutic considerations. 24(5):362-379.
  - Flora T Musuamba and Roger Verbeeck (2009). Pharmacokinetics and dosage adjustment in patients with renal dysfunction. 65(8):757-773
  - Suraksha Agrawal. (Genetic contribution and associated pathophysiology in end-stage renal disease. The Application of Clinical Genetics. Page 68–80.
  - [www.gxmd.com/calculate/](http://www.gxmd.com/calculate/)
  - Electrolyte imbalance. Comprehensive Cancer Center.

## LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :5 of 5

### 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.