

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :1 of 8

Basic information:

Program on which the Block is offered	PharmD
Qualification Awarded	BPharmD
Block title - Code - Year	Infectious Diseases– 3301– Professional Year I
Block Type	Professional
Total contact Hours / week [52 hrs.]	(Lectures: 6, Lab: 3, Tutorials: 3, TBL: 4.5, PBL: 6.5, Clinical: 2, Self-study: 26, Exams: 2)
ECTS Hours	14
Pre-requisites for this Block	Fundamentals of Medicinal Chemistry, Fundamentals of Pharmacology, Anatomy, Histology, Physiology, Biochemistry, Pathology, Pharmacogenomics Primer Course, Pharmaceutical Microbiology, Biopharmaceutics, Pharmaceutical Calculations, Drug Quality Assurance, Biotechnology, Pharmacy Practice, and Clinical Skills.
Week period	7

Block Description:

This block covers aetiology, pathophysiology, clinical presentation, complications, investigations, clinical assessment, management and treatment of infectious diseases. 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, Medicinal Chemistry, Toxicology, Clinical Pharmacokinetics, Clinical Biochemistry, Microbiology, Pharmacogenomics, Patient assessment, self-care management, and Complementary & Alternative Medicine regarding infectious diseases.
- Apply clinical pharmacokinetic principles in calculating and monitoring drug doses.
- Analyse the biochemical laboratory results of patients with infectious diseases.
- Prevent, identify, and resolve drug-induced problems in infectious diseases.
- Provide drug information, education and evidence-based pharmacotherapy services to patients with infectious diseases, 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 infectious diseases.

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :2 of 8

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
 - Mid-block exam (MCQs, problem solving, short notes)
- **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%
• Mid-block exam	• 2.5%
• End-block exam	• 5%
Final Exam:	30%
• Written	• 20%
• OSCE	• 10%
Total:	100%

Assessment Schedule:

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :3 of 8

Continuous assessment:	During the block
• PBL sessions	Weeks 1-7
• TBL sessions	Weeks 1-7
• Clinical sessions	Weeks 1-7
• Mid-block exam	Week 4
• 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):**
 - William F. Wright. (2018). Essential of Clinical Infectious Disease. 2nd edition.
 - Anne Ballinger. (2018). Essential of Kumar & Clarks Clinical Medicine. 6th edition.
 - Foye`s, Principles of Medicinal Chemistry. (2012). 7th Edition, Lippincott Williams & Wilkins Publishers.
 - Kumar, S. (2016). Essentials of microbiology. JP Medical Ltd.
 - Bauman, R. W., Machunis-Masuoka, E., & Cosby, C. D. (2012). Microbiology: with diseases by body system. Benjamin Cummings.
 - 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.
 - Larry A. Bauer. (2014). Applied clinical Pharmacokinetics. 3rd edition.
 - Philip Rowe. (2012). Pharmacokinetics. (E-Book)
 - Paul M. Dewick. (2002) (Medicinal Natural Products: A Biosynthetic Approach). 3rd edition. John Wiley & Sons.
 - Michael Heinrich, Joanne Barnes, Simon Gibbons, Elizabeth M. Williamson (2012). (Fundamentals of Pharmacognosy and Phytotherapy E-Book) Elsevier Health Sciences. 2nd edition.

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :4 of 8

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- Sandosh Padmanabhan. (2014). Handbook of Pharmacogenomics and Stratified Medicine. 1st Edition. Academic Press USA.
- 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
- Casarett and Doull's. (2008). Toxicology: The Basic Science of Poisons 7th edition.
- Allan Gaw. (2013). Clinical Biochemistry an Illustrated Colour text. Fifth edition. China.
- 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
 - Elliott, T., Casey, A., Lambert, P. A., & Sandoe, J. (2012). Lecture Notes: Medical Microbiology and Infection. John Wiley & Sons.
 - Murray, P. R., Rosenthal, K. S., & Pfaller, M. A. (2015). Medical microbiology. Elsevier Health Sciences.
 - Bauman, R. W., Machunis-Masuoka, E., & Cosby, C. D. (2018). Microbiology: with diseases by body system. Benjamin Cummings.
 - Garcia, L. S. (2007). Diagnostic medical parasitology. American Society for Microbiology Press
 - John E. Murphy. (2017). Clinical pharmacokinetics. 6th edition. American Society of Health-System.
 - Bruneton Jean. (2008). (Pharmacognosy, Phytochemistry, Medicinal Plants). Lavoisier .2nd Edition.
 - Michel Tibayrenc. (2017). Genetics and Evolution of Infectious Diseases.2nd Edition. USA
 - Ronald J Trent. (2012). Genes, Environment and Inheritance. Molecular Medicine. 4th Edition. USA

LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :5 of 8

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- 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
- Geoffrey Beckett (2013). Clinical Biochemistry. 8th edition. Malaysia.
- P. KUMAR, M. CLARK (2016) Kumar & Clark's Medical Management and Therapeutics, 9th edition, China: Elsevier Ltd.
- **Periodicals and websites:**
 - Nature Reviews Drug Discovery
 - Drug Discovery Today
 - Medina M Castillo-Pino E. (2019). An Introduction to epidemiology and burden of urinary tract infections. Ther Adv Urol. 2019 Jan-Dec; 11: 1756287219832172.
 - Irja Lutsar, George H. McCracken, Jr., and Ian R. Friedland. (1998). Antibiotic Pharmacodynamics in Cerebrospinal Fluid: Vol 27, Issue 5, Pages 1117–1129
 - Kenneth C. Cundy, Brent G. Petty, John Flaherty, Peggy E. Fisher, Michael A. Polis, Matthew Wachsman, Paul S. Lietman, Jacob P. Lalezari, Michael J. M. Hitchcock, And Howard S. Jaffe. (1995). Clinical Pharmacokinetics of Cidofovir in Human Immunodeficiency Virus-Infected Patients: Vol. 39, No. 6, page 1247–1252.
 - Fabian Yuh Shiong Kong, Patrick Horner, Magnus Unemo and Jane S. Hocking. (2019). Pharmacokinetic considerations regarding the treatment of bacterial sexually transmitted infections with azithromycin: a review
 - [Courtney Ierano](#), [Jo-Anne Manski Nankervis](#), [Rod James](#), Arjun Rajkhowa, [Trisha Peel](#), and [Karin Thursky](#). (2017). Surgical antimicrobial prophylaxis: 40(6), page 225-229.
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 - Fachini-Queiroz, F. C., R. Kummer, et al. (2012). "Effects of thymol and carvacrol, constituents of Thymus vulgaris L.essential oil, on the inflammatory response." Evidence-Based Complementary and Alternative Medicine 2012.
 - Maroyi, A. (2017). "Lippia javanica (Burm. f.) Spreng.: Traditional and commercial uses and phytochemical and pharmacological significance in the African and Indian Subcontinent." EvidenceBased Complementary and Alternative Medicine 2017
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LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :6 of 8

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LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :7 of 8

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LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

Form Name : Block Catalogue

Revision No. :01/2020

Form No. : QAO-OP.17

Page :8 of 8

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- <https://www.lybrate.com/topic/hangover-5-best-homemade-remedies-for-it/8fe0cb07243a52f34191f18f5d532f15>.
- <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.