

# LIBYAN INTERNATIONAL MEDICAL UNIVERSITY

**Form Name : Block Catalogue**

**Revision No. :01/2020**

**Form No. : QAO-OP.17**

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## Basic information:

Program on which the Block is offered	PharmD
Qualification Awarded	BPharmD
Block title - Code - Year	Neurological and Psychological Disorders– 3401– Professional Year II
Block Type	Professional
Total contact Hours / week [47 hrs.]	(Lectures: 4, Lab: 1, Tutorials: 2, TBL: 4.5, PBL: 6.5, Clinical: 2, Self-study: 26, Exams: 1)
ECTS Hours	18
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	9

## Block Description:

This block covers aetiology, pathophysiology, clinical presentation, complications, investigations, clinical assessment, management and treatment of neurological and psychological 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, Pharmacology, Clinical Pharmacology, Pharmacotherapeutics, Medicinal Chemistry, Toxicology, Clinical Pharmacokinetics, Pharmacogenomics, Patient Assessment, Self-care Management, Complementary & Alternative Medicines regarding neurological and psychological disorders.
- Apply clinical pharmacokinetic principles in calculating and monitoring drug doses.
- Analyse the biochemical laboratory results of patients with neurological and psychological disorders.
- Prevent, identify, and resolve drug-induced problems in neurological and psychological disorders.
- Provide drug information, education and evidence-based pharmacotherapy services to patients with neurological and psychological disorders, and to other healthcare professionals.
- Provide patient-centred care as the medication expert.

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- Apply the principles of medical ethics and communication skills on patients with neurological and psychological disorders.

## 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%

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• OSCE	• 10%
<b>Total:</b>	<b>100%</b>
<b>Assessment Schedule:</b>	
<b>Continuous assessment:</b>	<b>During the block</b>
• PBL sessions	Weeks 1-9
• TBL sessions	Weeks 1-9
• Clinical sessions	Weeks 1-9
• Mid-block exam	Week 5
• 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
<b>Examination Regulations:</b>	
<ul style="list-style-type: none"> <li>• If the student absenteeism is more than 25 % he/she cannot attempt the final exam.</li> <li>• The total required percentage to pass this course is at least 60 %</li> </ul>	
<b>List of textbooks and references:</b>	
<ul style="list-style-type: none"> <li>• <b><u>Course Notes:</u></b> <ul style="list-style-type: none"> <li>– 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.</li> </ul> </li> <li>• <b><u>Essential Books(Text Books):</u></b> <ul style="list-style-type: none"> <li>– Harsh Mohan. (2010). Textbook of Pathology. 6<sup>th</sup> Edition. Jaypee Brothers Medical Publisher.</li> <li>– 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</li> <li>– Casarett and Doull's. (2008). Toxicology: the basic science of poisons 7<sup>th</sup> edition.</li> <li>– Foye`s, Principles of Medicinal Chemistry. (2012). 7<sup>th</sup> Edition. Lippincott Williams &amp; Wilkins Publishers.</li> <li>– Larry A. Bauer. (2014). Applied clinical Pharmacokinetics. 3<sup>rd</sup> edition.</li> <li>– Philip Rowe. (2012). Pharmacokinetics. (E-Book)</li> <li>– Edward P. Claus. (2016). Pharmacognosy for Lea &amp; Febiger. 4th edition. University of Minnesota .</li> <li>– Michael Heinrich, Joanne Barnes, Simon Gibbons, Elizabeth M. Williamson (2012). Fundamentals of Pharmacognosy and Phytotherapy. 2nd edition. (E-Book). Elsevier Health Sciences.</li> </ul> </li> </ul>	

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- Current Medical Diagnosis & Treatment. 59<sup>th</sup> Edition.
- Essential of Kumar & clarks clinical medicine. (2018). 6<sup>th</sup> Edition.
- Karen Whalen, Richard Finke Thomas A. Panavelil. (2015). Lippincott Illustrated Reviews: Pharmacology. 6<sup>th</sup> Edition.
- Lawrence Tierney, Sanjay Saint, Mary Wholey. (2011). Current Essentials of Medicine. 4<sup>th</sup> Edition. McGraw Hill Medical.
- **Recommended Books:**
  - Stantý Davidson. (2018). Davidson's Principle & Practical of Medicine. 23<sup>rd</sup> edition.
  - Harrison Principle of Internal Medicine. (2017). 20<sup>th</sup> edition.
  - Graham L. Patrick. (2005). Introduction to Medicinal Chemistry. Oxford University Press.
  - Graham L. Patrick. (2013). An Introduction to Medicinal Chemistry. 4<sup>th</sup> Edition. Oxford University Press.
  - Wilson and Gisvold's. (2011). Textbook of Organic Medicinal and Pharmaceutical Chemistry. 12<sup>th</sup> Edition. Wolters Kluwer Health/Lippincott Williams & Wilkins Publishers.
  - G. Thomas. Medicinal Chemistry: An introduction. Wiley
  - 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.
  - Bruneton Jean. (2008). Pharmacognosy, Phytochemistry, Medicinal Plants. 2nd Edition. Lavoisier.
  - Despina Sanoudou. (2012). Clinical Applications of Pharmacogenetics. First edition. USA
  - Debmalýa Barh and Dipali Dhawan. (2013). Omics (Pharmacogenomics) for Personalized Medicine. Springer New Delhi Heidelberg New York Dordrecht London. 3<sup>rd</sup> edition.
  - Davidson's principle & practical of medicine. (2018). 23<sup>rd</sup> Edition.
  - Harrison principle of internal medicine. (2017). 20<sup>th</sup> Edition.
  - James Ritter, Lionel Lewis, Timothy Mant, Albert Ferro. Goodman & Gilman's: The Pharmacological basis of Therapeutics. 12<sup>th</sup> Edition. McGraw Hill Education.
  - Gary Hammer, Stephen McPhee. (2014). Pathophysiology of Disease: An Introduction to Clinical Medicine. 7<sup>th</sup> Edition. McGraw Hill Lange
  - Kumar, Abbas, Aster. (2018). Robbins Basic Pathology. 7<sup>th</sup> Edition. McGraw Hill Lange
- **Periodicals and websites:**
  - Nature Reviews Drug Discovery
  - Drug Discovery Today

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- Lei, Hong, Nima Toosizadeh, Michael Schwenk, Scott Sherman, Stephen Karp, Saman Parvaneh, Esther Esternberg, and Bijan Najafi. "Objective Assessment of Electro-acupuncture Benefit for Improving Balance and Gait in Patients with Parkinson's Disease (P3. 074)." *Neurology* 82, no. 10 Supplement (2014): P3-074.
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- Book: Easy Homeopathy written by Edward Shalts, M.D., D.Ht.
- Article: Toss The Tylenol, *Great Life Magazine*, Lauren Feder, M.D.

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- C Gilman. The Applications of Pharmacogenomics to Neurological Disorders. Current Molecular Medicine. 2014.14:880-890.
- [www.drugbank.ca/drugs](http://www.drugbank.ca/drugs)
- [www.pdr.net](http://www.pdr.net)
- [www.RxList.com](http://www.RxList.com)
- <https://www.healthline.com/health/paroxetine-oral-tablet>
- [https://www.accessdata.fda.gov/drugsatfda\\_docs/label/2016/204223s006lbl.pdf](https://www.accessdata.fda.gov/drugsatfda_docs/label/2016/204223s006lbl.pdf)
- <https://www.medsafe.govt.nz/profs/Datasheet/d/dblMorphinesulphbpinj.pdf>
- <https://www.healthline.com/nutrition/valerian-root#section2>
- <https://lierre.ca/blog/is-cupping-good-for-anxiety>
- <https://www.healthline.com/health/acupuncture-for-anxiety#takeaway>
- <https://wa.kaiserpermanente.org/kbase/topic.jhtml?docId=hn-2258008>
- <https://www.healthline.com/health/homeopathy-for-anxiety#treatments>
- <https://www.bridgestorecovery.com/blog/how-acupuncture-can-treat- depression-by-restoring-bodily-energy/>
- <https://www.acupuncture.org.uk/a-to-z-of-conditions/a-to-z-of- conditions/1277-depression.html>
- <https://herbpathy.com/Uses-and-Benefits-of-Evolvulus-Alsinoides-Cid618>
- <https://www.healthline.com/health/caffeic-acid>
- <https://www.verywellhealth.com/the-benefits-of-bacopa-89039>
- <https://hemlocklily.wordpress.com/2016/04/11/common-groundsel-senecio- vulgaris>
- <http://www.spicesmedicinalherbs.com/senecio-vulgaris.html>
- <https://www.epilepsysociety.org.uk/diet-and-nutrition#.XWQ66S7XLIU>.

## 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.