

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	Pharmacogenomics – 3202– Foundational Year II
Block Type	Foundational
Total contact Hours / week [31 hrs.]	(Lectures: 6, Lab: 2, Tutorials: 4, Seminars: 2, PBL: 9, Self-study: 6, Exams: 2)
ECTS Hours	12
Pre-requisites for this Block	Fundamentals of Biochemistry, Physiology, Instrumental analysis, Clinical skills, Immunology, Pharmacogenomics, Pharmacy practice and Pathology and English Language.
Week period	6

Block Description:

This block introduces students to principles of genetic mutation, mapping, cloning, different genetic diseases and immunity disorders. This block also deals with general pathology and different metabolic regulatory mechanisms. This clock also covers main principles and aspects of good pharmacy practice & quality control. Students will also understand the principles of research ethics in human & animals. Problem-based learning strategies are used for this block delivery.

Block Objectives:

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

- Explain the physiology of renal and endocrine systems.
- Discuss the principles of a good pharmacy practice.
- Explain the different chromatography method for drug analysis.
- Explain the quality control aspects of analytical methods.
- Discuss the principles of genetic mutation, mapping and cloning.
- Discuss the different immunity disorders in the human body.
- Explain the principles of research ethics in human and animals.
- Discuss the biomedical aspects of lipids.
- Explain the general pathology of different disorders in the human body.
- Perform basic clinical skills.

Learning and Teaching Methods, & Assessment Methods

Learning and Teaching Methods:

- Problem-Based Learning (PBL)
- Lectures
- Tutorials

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- Practice in lab
- Independent study assignments
- Presentations
- Seminars
- Clinical teaching: Clinical skills lab and Simulation.

Assessment methods:

- **Continuous assessment:**
 - Problem Based Learning sessions (Brain-storming/Debriefing)
 - Reports
 - Report Discussion
 - Individual reassurance test (IRAT): MCQs
 - Group reassurance test (GRAT): MCQs
 - Presentations (oral)
 - Practice in lab
 - Open-book/open-web exam
- **End-Block exam:**
 - Written
- **Final-Block exam:**
 - Written
 - Objective structured practical examination (OSPE)
 - Objective structured clinical examination (OSCE)

Weighting of Assessment:

Weighting of Assessment:	
Continuous assessment:	60%
• PBL sessions	• 30%
• Practical sessions	• 10%
• Other Activities (Tutorial/Seminar/Assignments/Moodle Activities)	• 10%
• Mid-block Exam	• 5%
• End-block exam	• 5%
Final Exam:	40%
• Written	• 30%
• OSPE & OSCE	• 10%
Total:	100%

Assessment Schedule:

Assessment Schedule:	
Continuous assessment:	During the block
• PBL sessions	Weeks 1-6
• Practical sessions	Weeks 1-6

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<ul style="list-style-type: none"> Other Activities (Tutorial/Seminar/Assignments/Moodle Activities) 	Weeks 1-6
<ul style="list-style-type: none"> Mid-block exam 	Week 3
<ul style="list-style-type: none"> End-block exam 	At the end of the block
Final exam:	At the end of the year
<ul style="list-style-type: none"> Written 	At the end of the year
<ul style="list-style-type: none"> OSPE & OSCE 	At the end of the block

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):**
 - Christian, G., Dasgupta, P., Schung, K. 2013. *Analytical chemistry*. Willey.
 - Costanzo, L.S., 2014. *Physiology. 5th ed. Philadelphia: Saunders Elsevier*.
 - Denyer, S.P., Hodges, N.A. and Gorman, S.P. eds., 2008. *Hugo and Russell's pharmaceutical microbiology*. John Wiley & Sons.
 - Hall, J.E., 2011. *Guyton and Hall textbook of medical physiology*. Philadelphia, PA: Saunders Elsevier.
 - Kumar S., *Essential of Microbiology*, 1st edition. JP Medical Ltd.
 - Murray, R.K., Granner, D.K., Mayes, P.A., Rodwell, V.W. and Biochemistry, H.S.I., 2003. a LANGE medical book. *Harper's Illustrated Biochemistry*. 26th ed. New York: McGraw-Hill Companies, Inc.
 - Pamela, C.C., Richard, A.H. and Denise, R.F., 2005. *Lippincotts illustrated reviews biochemistry*. Lippincott Williams & Wilkins, Baltimore.
 - Rubin, E. and Reisner, H.M. eds., 2009. *Essentials of Rubin's pathology*. Lippincott Williams & Wilkins.
 - Russell P.J., 2006. *iGenetics a molecular approach*. 3rd edition. Pearson /Benjamin Cummings.
 - Rules, M.H.R.A., 2007. *Guidance for Pharmaceutical Manufacturers and Distributors*.
 - Sandle, T., 2015. *Pharmaceutical Microbiology: Essentials for Quality Assurance and Quality Control*. Woodhead Publishing.

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- Truant, A.L., 2016. *Manual of commercial methods in clinical microbiology*. John Wiley & Sons.
- Tietze K. J. 2012. *Clinical skills for pharmacists " A patient-focused approach"*. 3rd edition. Elsevier mosby. USA.
- Walliman, N. (2006) *Social Research Methods*, London: Sage.
- **Periodicals and websites:**
 - Becker's Usmle. (2013).Lecture Notes Biochemistry, Genetics. Available online: <https://www.scribd.com/document/320574453/Becker-s-USMLE-Step-1-Lecture-NotesBiochemistry-Genetics-2013-UnitedVRG>
 - Kumar, V., Abbas, A.K. and Aster, J.C., 2017. *Robbins Basic Pathology E-Book*. Elsevier Health Sciences.
 - Human Resources. 2018. *Developing Excellent Researchers: HR Excellence in Research*. Available online: <https://www.ncl.ac.uk/hr/about/researchers/concordat>
 - PennState, *Ethical Dimensions of Renewable Energy and Sustainability Systems*. Available online: <https://www.e-education.psu.edu/bioet533/node/654>
 - Sattar, H.A., 2016. *Fundamentals of pathology: Medical course and step 1 review*. Pathoma.com.
 - HRPP Guidelines.2007. *Researcher Responsibilities*. Available Online: https://www.irb.purdue.edu/docs/207_responsibilities.pdf
 - Watson, D.G., 2005. *Pharmaceutical Analysis E-Book: A Textbook for Pharmacy Students and Pharmaceutical Chemists*. Elsevier Health Sciences.
 - Brown A. *Animal ethics. Learning to give*. Available online: <https://www.learningtogive.org/resources/animal-ethics>
 - World animal protection. *Global animal network " connecting and inspiring professionals worldwide"* available online: <https://www.globalanimalnetwork.org/>.
 - Animal ethics infolink. Available online: <https://www.animaethics.org.au/>
 - Science. *Ethical and policy issues of human cloning*. Available online: <http://science.sciencemag.org/content/277/5323/195.full>
 - Scholars at Harvard. Available online: <https://scholar.harvard.edu/>
 - BBC website. *Animal ethics*. Available online: <http://www.bbc.co.uk/ethics/animals/>
 - Boutwell L. Norman K. 2015. *A Pharmacist's Guide for Smoking Cessation*. Alabama Pharmacy Association. Available online: www.aparx.org/resource/resmgr/CEs/CE_Winter_Smoking_Cessation.pdf

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- Royal Pharmaceutical Society. 2013. Improving patient outcomes, " the better use of multi-compartment aids.
- McRobbie H. and McEwen A. 2005. Helping smokers to stop: advice for pharmacists in England. National Institute for Health and Clinical Excellence, Royal Pharmaceutical Society of Great Britain and PharmacyHealthLink. Available online: <http://www.ncsct.co.uk/usr/pub/helping-smokers-stop-guidance-for-pharmacist-in-england.pdf>
- Yoshizuka, K., Knapp, K.K., Shane, P.A. and Lu, D.H., 2015. Inserting Pharmacists in Primary Care Roles in an Ambulatory Care Setting.
- Blenkinsopp, A., Paxton, P. and Blenkinsopp, J., 2013. *Symptoms in the pharmacy: a guide to the management of common illness*. John Wiley & Sons.
- Safety and quality. Clinical Skill Assessment: Temperature, Pulse and Respiration Measurement Available online: <https://www.safetyandquality.gov.au/wp-content/uploads/2012/02/RPA-clinical-skills-assessment-Temp-pulse-and-resps.pdf>

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.