

Liverpool John Moores University

Title: STUDY OF DISEASE 2
Status: Definitive
Code: **6102BMBMOL** (122472)
Version Start Date: 01-08-2021

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

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Academic Level: FHEQ6 **Credit Value:** 20 **Total Delivered Hours:** 54
Total Learning Hours: 200 **Private Study:** 146

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	38
Workshop	14

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Case Study	Evaluation of a Clinical Case Study	100	2

Aims

This module will provide students with comprehensive biochemistry, physiology and pathology of the liver and the digestive tract, provide details of the diagnostic tests available for investigation of liver and digestive disorders including its treatment, explore the genetic basis of liver and gastrointestinal disorders and introduce the concept of genetic counselling and gene therapy, and to introduce future directions of research into liver and digestive disorders.

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically discuss the physiological and pathological processes associated with the liver, gut and the pancreas, including genetic issues.
- 2 Justify the choice of investigative procedures used in investigating disorders of the above systems.
- 3 Critically discuss the function and structure of the classical laboratory disciplines used in investigating the pathology of the above systems
- 4 Demonstrate the ability to apply critical thinking when presented with a clinical case study

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Case Study Evaluation	1	2	3	4
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Outline Syllabus

Anatomy, physiology, and function of the liver, gut and pancreas (integrated role in metabolism),

Pathology of the liver, Role of the laboratory in investigating Liver disease, concept of liver function tests, classification of "Liver Function Tests".

Gastrointestinal disease, Gastric Function Tests (Basic gastric secretion and pentagastrin stimulation test), Malabsorption / Maldigestion Tests, non-specific versus specific tests.

Gut/Digestion: Anatomy, physiology, function of the gastrointestinal tract, nutritional role, hormonal role, microbiological role in health.

Pancreas, function of pancreas, acute and chronic pancreatitis and its complications, Laboratory findings, Laboratory Diagnosis of Pancreatic Disease, Serum Amylase and Isoenzymes of Amylase, Macroamylasemia, Urinary amylase, Serum Lipase Other Biochemical markers of pancreatitis (Serum calcium, Triglycerides, Plasma glucose, Serum Bilirubin, Serum Methemalbumin

Genetic basis and the role of microbiology in assessing liver, gut and pancreatic disease, genetic counselling, gene therapy, genetic tests available.

Specific Disorders (Celiac Disease, Pernicious Anemia, Cystic Fibrosis), Detection of Occult Blood (HEME)

Role of the Biomedical Scientists in the diagnosis of liver, gut and pancreatic diseases and future directions.

Learning Activities

Lectures will provide in-depth knowledge of the subject whilst the workshops will help in the development of the basic and advanced principles delivered in the lectures.

Notes

The module will be delivered in semester 1 and consists of lectures and workshops.

No specific benchmarks are available for this module, but the learning outcomes at least meet, if not exceed, those stipulated in the relevant qualification descriptors for a higher education qualification at level 6 as defined by QAA, Sept 2015. The module has also been informed by the benchmark statement for Biomedical Science June 2015.

Intake is every September.

The criteria for admission to the module require that candidates meet the criteria for admission to the BSc Biomedical Science programme (32805).

The final award is Certificate of Professional Development in Study of Disease 2, 20 credits at Level 6.

The students have access to a module Blackboard site and the University's other range of electronic support such as access to the electronic library facilities. The module content is regularly updated on the Blackboard site including contemporary reading lists and links to journal articles. Students have access to the community site for Biomedical Science. All students have access to the module leader through phone contact and email. Module and CPD guides are also provided, which provide a range of information.

The programme is assessed and run in line with the Academic Framework

<http://www.ljmu.ac.uk/eaqs/121984.htm>

The module is accredited by The Institute for Biomedical Science (Sept 2016- Aug 2021). The module forms part of the BSc Biomedical Science programme (32805) which was reviewed in April 2016.

The methods for improving the quality and standards of learning are as follows:

- Annual monitoring Review;
- Liaison and feedback from the students;
- Reports from External Examiner;
- Programme team ensuring the module reflects the values of the current teaching and learning strategy;
- Module leader updating knowledge and skills to ensure these remain current and relevant.

The module is included in the programme specification for the BSc Biomedical Science programme (32805). The module is aligned with the same BSc Biomedical Science module for annual monitoring and external examining purposes.