

Faculty of Medicine



FARM1303 Biochimie médicale

[20h] 2 credits

Teacher(s): Teresinha Leal, Marianne Philippe, Marie-Françoise Vincent, Pierre Wallemacq (coord.)
Language: French
Level: First cycle

Aims

Initiate the 2nd cycle student to the indication and interpretation of major biochemistry laboratory tests used to reach a diagnosis, to follow a known pathology or to prevent the occurrence of a possible pathology.

This lecture is proposed together with a series of biohuman oriented lectures (general pathology, microbiology, haematology, medical semiology,#) or more fundamental lectures (general biochemistry, analytical chemistry,#), in agreement with the EEC pharmaceutical guidelines emphasizing the role of the pharmacist as a true health adviser.

Main themes

The lecture starts by an introduction to the different biological matrices, the preanalytical requirements and the performances assessment of a laboratory test (sensitivity, specificity, reproducibility). Serum proteins (dysproteinemia, inflammatory syndrome...), renal function (glomerular or tubular dysfunctions), pancreatic exocrine and endocrine (diabetes) function, hepatobiliary function (cholestasis, cytolysis, clinical enzymology#), central or peripheral anemia (deficiency, lack of production or excess of destruction#), cardiovascular risk markers, and some of the major metabolic diseases will be reviewed in distinct chapters.

Content and teaching methods

In order to reach the objectives stated above, each major biological function will be preceded by a brief physiopathological overview followed by the main laboratory tests able to investigate the integrity of the function. The lecture is completed by some laboratory demonstrations involving some major biochemistry tests (enzymatic reactions, spectrophotometric analyses, #) frequently used in clinical practice together with the interpretation of their results.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Pre-requisite: a first cycle of study within a medical or para-medical university faculty (eg Biochimie FARM1120, Anatomie-Physiologie, pathologie, chimie analytique#)

Evaluation: written exam

Support: most of the lectures are given as power-point slides show, accessible on the university web-site iCampus, or as recorded CD on request, and accompanied by some syllabi.

Lectures are presented by several lecturers, and the laboratory demonstrations are supervised by teaching assistants.

The Department of Clinical Pathology (Biochemistry, haematology, microbiology) of the University Hospital St Luc offers each year to students in pharmacy the possibility to perform a one- or two-month probationary period.

Other credits in programs

FARM13BA	Troisième année de bachelier en sciences pharmaceutiques	(2 credits)	Mandatory
TOX21	Première licence en sciences biomédicales (toxicologie)	(2 credits)	Mandatory