UCLouvain

wfarm2196

2026

Rational therapeutic choices (Introduction to evidence-based medicine and pharmacoeconomy)

4.00 credits	30.0 h + 10.0 h	Q1

Teacher(s)	Henrard Séverine ;Spinewine Anne (coordinator) ;
Language :	French
Place of the course	Bruxelles Woluwe
Main themes	- Evidence-based medicine: basic principles; primary and secondary sources of information: methodology and critical appraisal; - Methodology of experimental and observational studies relative to the efficacy and safety of medicines, and critical appraisal; - Methodology of secondary sources of information (systematic reviews, meta-analysis, clinical guidelines), and critical appraisal - Basic principles in pharmacoeconomy and applications to pharmacotherapy - Basic principles relative to health insurance, and to economic factors influencing the use of medicines in Belgium and in Europe
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 At the end of the course, students should be able: - To explain the concept of clinical evidence, and the relative strength of different levels of evidence including data from the scientific literature and other sources of information (such as summary of product characteristics, data from the pharmaceutical industry, recommendations from health authorities,); - To explain the concept of clinical therapeutic guidelines, and to elaborate on their use in clinical practice ; - To explain the basic principles of pharmacoeconomy and to explain how it can contribute to make rationale therapeutic choices ; - To explain the economic and political principles underlying decisions relative to the use of medicines in Belgium and in Europe, and to debate on the role that pharmacists have with that respect.
Evaluation methods	The assessment of learning achievements includes a written examination with theoretical and practical questions relating to both parts of the course (EBM and pharmacoeconomics). Information-seeking skills are assessed by means of practical questions in which the student uses a computer with access to the sources of information seen in the course. For this part, a mock test is offered with standard questions. These questions are then corrected by the teacher with the students, specifying the level of mastery and rigour expected, to enable students to realise what is expected and therefore to be able to adapt their study of the subject accordingly. The final mark is the weighted average of the marks for the 2 parts. In the final mark, the EBM part is worth 12/20 and the pharmacoeconomics part is worth 8/20. However, given that the two parts enable different skills and knowledge to be acquired from those defined in the learning outcomes for the course, a mark of less than 8/20 for the EBM or pharmacoeconomics part will result in a failing grade for the whole of the course.
Teaching methods	This course includes a mixed approach including in-person lectures, some homework (reading, online exercises), and the mandatory participation in face-to-face seminars. Teachers pay special attention to making as much as possible the link between theory and practice by illustrating their statements with up-to-date examples concerning different types of drugs and health products.
Content	Part 1. Evidence-based medicine - basic principles of evidence-based medicine; Primary sources of information (experimental and observational studies); secondary and tertiary sources of information (systematic reviews, meta-analysis, clinical practice guidelines, consesus meetings, other sources of information); drug advertising. - each part is adressed according to the following questions: what is the evidence? Where can I find them ? How to analyze them critically ? Part 2. Pharmacoeconomy Introduction to the Belgian health care system; principles and methods in pharmacoeconomy and in health economic evaluation; drug reimbursement and pricing in Belgium.
Other infos	The participation to the seminars is mandatory. In accordance with Article 72 of the RGEE, the teachers can propose to the jury to object to the registration to the course examination for a student who would not have attended at least 75% of these activities. Reading comprehension of scientific English is necessary to achieve the learning outcomes.
Faculty or entity in charge	FARM

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Statistics: Biostatistics	BSTA2M	4		
Master [120] in Pharmacy	FARM2M	4		