

3.00 credits

15.0 h

Q2

Teacher(s)	Evrard Jean-Michel ;
Language :	French
Place of the course	Bruxelles Woluwe
Main themes	Focussed on 9 themes (equivalent to 15 hours of lectures) : Theme 1 : Legislation Theme 2 : Architecture, personnel, environment Theme 3 : Cleaning - disinfection and controls Theme 4 : Packaging and controls Theme 5 : Sterilization methods and controls of the load Theme 6 : Validation of each sterilization method Theme 7 : Quality assurance, tracking and documentation Theme 8 : Prions Theme 9 : Instruments
Learning outcomes	At the end of this learning unit, the student is able to : General objectives : To give the student the theoretical and practical skills to be able to conceive and implement in a hospital institution the whole of the processes related to sterilization, as part of a global quality assurance system. Specific objectives 1. To master, by an in-depth scientific training, the most recent data regarding washing-disinfection and sterilization. 2. To acquire the aptitude to objectively respond to the questions related to the washing-disinfection and sterilization. 3. To tackle on a scientific way the research on washing-disinfection and sterilization. 4. To learn writing a specific procedure.
Evaluation methods	During the evaluation based on a written examination, the student, confronted with original practical problems, must be able to explain and justify the solutions he suggests to put into practice.
Teaching methods	The course makes the link between the legal regulations (Laws, Royal Decrees and Departmental Orders) and the practice experience gained by the students during their training period in a sterilization service.
Content	Plan of the course 1. Introduction a. History b. Definitions 2. Legislation a. Belgian b. European. 3. Quality assurance and tracking 4. Environmental controls a. Air b. Water c. Surfaces d. Hands 5. Premises 6. Personnel 7. Qualitative aspects 8. Quantitative aspects 9. Treatments prior to sterilization a. Chemicals b. Manual treatment

- i. Washing and disinfection
- c. Automated treatment
 - i. Techniques
 - ii. Washing and thermal disinfection
 - iii. Controls of the washing process
 - 1. Thermometric controls
 - 2. Stain tests
 - iv. Controls of thermal disinfection
- 10. Techniques of sterilization**
 - a. Dry heat sterilisation
 - i. Technique and Technology
 - ii. Guideline values
 - iii. Principles for loading and Controls
 - iv. Validation
 - v. Depyrogenation
 - b. Moist heat sterilization
 - i. Technique
 - ii. Guideline values
 - iii. Principles for loading and unloading
 - iv. Controls
 - 1. Physico-chemical indicators
 - 2. Microbiological indicators
 - 3. Thermometric controls
 - v. Validation
 - 1. Surgical instruments
 - 2. Pharmaceutical Productions
 - c. Ethylene Oxide
 - i. Technique
 - ii. Guideline values
 - iii. Controls
 - 1. Physico-chemical indicators
 - 2. Microbiological indicators
 - 3. Thermometric controls
 - iv. Validation
 - d. Hydrogen Peroxide
 - i. Technique
 - ii. Guideline values
 - iii. Controls
 - 1. Physico-chemical indicators
 - 2. Microbiological indicators
 - 3. Thermometric controls
 - iv. Validation
 - e. Radiations
 - i. Gamma Rays
 - ii. Accelerated electrons
 - iii. Physico-chemical indicators
 - iv. Microbiological indicators
- 11. Packaging**
 - a. One-Use packaging
 - i. Types
 - ii. Controls
 - iii. Sealing devices
 - 1. Controls
 - b. Containers
 - i. Controls
- 12. Prions**
 - a. History
 - b. Cleaning and disinfection
 - c. Sterilization
- 13. Maintenance of equipments**
- 14. Treatment of new instruments**
- 15. Specificity of dental instruments**

Faculty or entity in charge	FARM
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Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Advanced Master in Hospital Pharmacy	HOPI2MC	3		