

Course Unit	Aseptic technology in Pharmacy		Field of study	-	
Bachelor in	Pharmacy		School	School of Health	
Academic Year	2023/2024	Year of study	3	Level	1-3
Type	Semestral	Semester	2	Code	9549-803-3206-00-23
Workload (hours)	108	Contact hours	T -	TP 30	PL 22,5
			TC -	S -	E -
			OT 7,5	O -	

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Andreia Ricardo Rodrigues, Olívia Rodrigues Pereira

### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. Have knowledgs in Artificial Nutrition and chemotherapy.
2. Interpret Artificial Nutrition prescriptions and chemotherapy plans
3. Knowledge methods and thecnics leads to aseptic produccion mainly Artificial Nutrition, Cytotoxic medicins and ophtalmic solutions preparation.
4. Cleared about standard procedures and quality indicators in aseptic manipulation.

### Prerequisites

Before the course unit the learner is expected to be able to:  
None

### Course contents

Notions of antiseptis, desinfeccon and sterilization. Aseptic medicin manipulation, Parenteric Nutrition and Cytotoxic manipulation.

### Course contents (extended version)

1. Theoretical-Practical Learning:
  - 1. 1. Disinfeccon and sterilization 1. 1 Microbiology: bacterias, virus e fungals
  - 1. 2 Disinfeccon and Anti-sepsis 1. 3 Sterilization
  - 2. 1. Aseptic medicin manipulation 2. 1 Equipment, Matherial and workers
  - 2. 2 Protocols procedures 2. 3 Quality indicators
  - 3. 1. Parenteric Artificial Nutrition 3. 1 Introduccion nutrition 3. 2 Equipaments
  - 3. 3 Methods ans thecnics for Parenteric Nutrition 3. 4 Quality control
  - 4. 1. Cytotoxic preparation 4. 1 Introduccion
  - 4. 2 Equipaments 4. 3 Methods ans thecnics for Cytotoxics manipulation
  - 4. 4 Quality control 4. 5 Procedure in shed (Emergency's Kit)
2. Practical Learning:
  - Uniform and decontamination procedures
  - Pratical exercises in parenteral nutrition and citotoxics
  - Methods and thecniques of Artificial Nutrition preparation
  - Methods and thecniques of Cytotoxic preparation
  - Methods and thecniques of other sterile solutions preparation

### Recommended reading

1. Cavallini, M. E. , Bisson, M. P. (2002) Farmácia hospitalar. Brasil: Manole
2. Prista, N. , Alves, A. C. , Morgado, R. (2008) Tecnologia Farmacêutica, III vol. (5.ª ed. ) Lisboa: Fundação Calouste Gulbenkian
3. Gomes M. J. V. M. e Reis A. M. M. (2001) Ciências farmacêuticas, Uma abordagem em Farmácia Hospitalar. Brasil: Atheneu
4. Mahan L. K. , Escott-Stump S. ( 2010) Krause, Alimentos, Nutrição e Dietoterapia. (12ª ed) Brasil: Roca
5. www. dgs. pt/ www. infarmed. pt/ www. who. int/en/; www. ema. europa. eu/ema/; www. ordemfarmaceuticos. pt/

### Teaching and learning methods

Theoretical-Practical Learning: Expositive method; Practical Learning: Demonstration and simulation of intravenous mixtures and other solutions.

### Assessment methods

1. 1 - (Regular, Student Worker) (Final)
  - Intermediate Written Test - 45%
  - Intermediate Written Test - 15%
  - Practical Work - 40%
2. 2 - (Regular, Student Worker) (Supplementary, Special)
  - Final Written Exam - 60%
  - Practical Work - 40%

### Language of instruction

1. Portuguese
2. Portuguese, with additional English support for foreign students.

### Electronic validation

Andreia Ricardo Rodrigues, Olívia Rodrigues Pereira	Isabel Cristina Jornal Freire Pinto	Luis Migue Fernandes Nascimento	Adília Maria Pires da Silva Fernandes
03-04-2024	17-04-2024	17-04-2024	23-04-2024