



SEXUALLY TRANSMITTED INFECTIONS

CU characterization:

CU name:

Sexually Transmitted Infections

Scientific area acronym:

MB/MV (Medical Bacteriology/Medical Virology)

Duration:

Semiannual

Working hours:

168

Contact hours:

40

ECTS:

6

Observations:

Teacher in charge and respective teaching load in the CU:

Liliana Rodrigues – 32 hours

Other teachers and respective teaching load in the CU:

Filomena da Luz Martins Pereira – 6 hours

João Mário Brás da Piedade – 2 hours

João Borges da Costa – 2 hours

Rita Gameiro – 2 hours

Sofia Santos Costa – 2 hours

Intended learning outcomes (knowledge, skills and competences to be developed by the students):

At the end of the Curricular Unit, students should:

1. Understand, analyse and discuss the epidemiology, prevention, and control of sexually transmitted Infections (STI).
2. Know the main characteristics of the etiological agents of STI.
3. Acquire knowledge about the pathogenesis and clinical and syndromic management of STI.



4. Perform autonomously, and carefully, the techniques used in the laboratory diagnosis of STI and interpret the obtained results.
5. Prepare scientific presentations.

Syllabus:

Theoretical contents:

1. Introduction to STI epidemiology, prevention and control, epidemiological surveillance programs and syndromic approach.
2. Special characteristics of bacterial agents of STI.
3. Laboratory diagnosis of urethritis, cervicitis, vaginitis and genital ulcers.
4. Antimicrobial resistance in *Neisseria gonorrhoeae* and *Mycoplasma genitalium*. Development of new therapeutical strategies.
5. Infection by human papilloma virus, and hepatitis B and C viruses.
6. Genital herpes, genital ulcers and cutaneous manifestations of STI.

Practical contents:

1. Analysis of clinical cases.
2. Laboratory diagnosis of *Neisseria gonorrhoeae*, *Chlamydia trachomatis*, *Mycoplasma genitalium*, *Treponema pallidum* and vaginal infections.
3. Culture and identification of *N. gonorrhoeae* and determination of minimum inhibitory concentrations of antibiotics.
4. Molecular biology techniques in the laboratory diagnosis of STI.

Evidence of the syllabus coherence with the CU intended learning outcomes:

The STI curricular unit program was developed so that students know and understand the various aspects of STI in terms of their importance, epidemiology, prevention, clinical approach and microbiological aspects. These contents will be taught in theoretical classes and, later, during the and practical classes, students will have the opportunity to use and apply the concepts learned in the execution of various procedures used in the laboratory diagnosis of STIs, thus consolidating the learning experience.

Teaching methodologies (including assessment):

The teaching methodologies consist of theoretical classes taught using an expository method, encouraging interaction and dialogue with students. In practical classes, students should work individually or in groups of two. Practical classes will be taught based on problem solving (clinical history) taking into account the knowledge learned in theoretical classes. Students must perform a practical laboratory work on a topic to be delivered in the form of a clinical history and perform laboratory techniques for laboratory diagnosis.

Students with at least 2/3 of attendance will be evaluated based on two evaluation parameters: a seminar presentation during which they must justify the techniques they performed in the practical laboratory work and interpret the results obtained with them (40% of the final evaluation); and written exam with multiple choice questions about the contents of theoretical, and practical classes (60% of the final evaluation). Students with a minimum evaluation of 9.5

values (evaluation scale between 0 and 20 values) in both evaluation components will be approved.

Evidence of the teaching methodologies coherence with the CU intended learning outcomes:

Theoretical presentation classes aim to teach the main concepts related to STI: their importance, epidemiology, prevention, clinical approach and microbiological aspects. These theoretical contents are taught through an expository method with an incentive to student participation so that they learn and understand the topics taught (Learning Objectives 1-3). During practical classes, students perform and acquire experience in the techniques used in the laboratory diagnosis of STI in order to ensure the alignment of teaching methodologies with the learning objective 4. Finally, the preparation and performance of the presentation of the practical work in seminars will allow improving the ability to understand, analyse and discuss scientific topics, thus demonstrating the coherence of the teaching methodology with the learning objective 5.

References for consultation / mandatory existence:

- World Health Organization. (2024). Updated recommendations for the treatment of *Neisseria gonorrhoeae*, *Chlamydia trachomatis* and *Treponema pallidum* (syphilis), and new recommendations on syphilis testing and partner services. Geneva: World Health Organization; 2024.
- World Health Organization. (2021). Guidelines for the management of symptomatic sexually transmitted infections. World Health Organization, Geneva, Switzerland.
- Unemo, Magnus, Ballard, Ronald, Ison, Catherine, Lewis, David, Ndowa, Francis. *et al.* (2013). Laboratory diagnosis of sexually transmitted infections, including human immunodeficiency virus. World Health Organization, Geneva, Switzerland.
- Holmes, K., Sparling, P., Stamm, W., Piot, P., Wasserheit, J., Corey, L. and Cohen, M. (2007) Sexually Transmitted Diseases. 4th Edition, McGraw-Hill Professional Publishing, New York.
- International Union against Sexually Transmitted Infections. STI Treatment European Guidelines: <https://iusti.org/treatment-guidelines/>