Universidade de Évora

Open call rules

Applications for Admission: Curso de formação em Aspirina®: do princípio químico à sua ação (Aspirin® : from chemical principle to its action)
Academic Year 2024/2025

1. The program is promoted by

Universidade de Évora - Escola de Ciências e Tecnologia

2. Coordenador(a)

Paula Cristina Gonçalves Pereira Galacho (pcg@uevora.pt)

3. Program description

Aspirin® is one of the world's most important and successful medicines and is included in the World Health Organization's list of essential medicines. Interesting facts include its inclusion in the Guinness Book of World Records in 1950 as the world's most popular painkiller and, in 1969, in the self-medication kit that the Apollo 11 astronauts took to the moon. Since its synthesis over 100 years ago, it has improved the quality of life. If, on the one hand, its therapeutic action is an unquestionable asset, on the other hand, Aspirin® is an example for teaching various contents in the areas of Chemistry and Pharmaceutical Sciences while also allowing integration with good safety practices in laboratories and environmental sustainability. In this training course, with a strong theoretical-practical component and laboratory practice, in addition to the historical context and importance of Aspirin® for society, the essential aspects of the chemistry involved in obtaining the active ingredient of the drug and the physical processes of purification and extraction will be covered, as well as the methods of analysis and characterization of the compound. The pharmacological characterization of Aspirin®, in pharmacokinetic and pharmacodynamic terms, will also be covered.

4. Objectives

- Know, adopt, and implement the basic principles of safety practices in laboratories.
- Recognize and substantiate the importance of Aspirin® in clinical therapy.
- Know and understand the chemical basis of synthesizing the active ingredient in Aspirin®.
- Plan the laboratory synthesis, extraction, purification, and analysis of the active ingredient in Aspirin®.
- Synthesize, extract, purify, and analyze the active ingredient of Aspirin® obtained in the laboratory.

▪ Pharmacologically characterize Aspirin, particularly in terms of pharmacokinetics and pharmacodynamics.
▪ Relate and integrate the production of the active ingredient of Aspirin® into the 12 Principles of Green Chemistry and the 2030 Agenda for Sustainable Development.
▪ Acquire a global vision between the theoretical foundations in Chemistry and Pharmaceutical Sciences, Laboratory Practice, and the Social Impact of Aspirin®.
▪ Researching and communicating in science: preparing and presenting a poster.

5. General conditions of access and admission

i **General conditions**

Be over 18 years old and resident permit. If you do not have Portuguese nationality, you must have a residence permit and tax payer number .

ii **Specific admission conditions**

- Degree or attending a university course in Chemistry, Pharmaceutical Sciences and related areas.
- Pharmacy technician or assistant technician course
- Scientific-humanistic degree in Science and Technology or similar

iii **Required academic qualifications** Secondary education (12th year of complete education) or equivalent

iv **Necessary documentation**

a) identification document;
b) document(s) proving the qualifications required in the Announcement for access to the course;
c) document proving the IBAN of the bank account held by the candidate, in which the name of the holder is mentioned;
d) proof of residence permit, in the case of foreign students;
e) document with tax identification number, in the case of foreign students;
f) if applicable, proof of unemployment;

6. Selection Process

Date of application submission.

7. Maximum number of admissions

- Maximum number of admissions: 16

Course taught in Portuguese

8. Minimum number of students

Minimum number of students: 6

9. Tuition fee

- Tuition fee: 150,00 €

This course is covered by the PRR's Adult Impulse. Students can receive two prizes: the participation prize, equal in value to the course fee, and the completion prize (according to Regulation), to be paid into a bank account held by the student.

10. ECTS

- Number of ECTS of the program: 3

11. Learning Type

b-Learning

12. Schedule type

Labor

13. Classes location

Universidade de Évora. cChemistry and biochemistry Department

14. Classes schedule (week days and schedule)

1st online session, 21th May in the afternoon.
Remaining sessions on Friday afternoons.

15. Program Dates

- Program Start Date: May 21, 2025
- Program End Date: June 27, 2025

16. Application Dates

- Applications Start Date: March 31, 2025
- Applications End Date: May 6, 2025
- Announcement of Results (until): May 12, 2025
- Enrollments Start Date: May 12, 2025
- Enrollments End Date: May 14, 2025

April 16, 2025

The Rector

Hermínia Vasconcelos Vilar