

Drugs of abuse (J000436)

Course size (nominal values; actual values may depend on programme)

Credits	3.0	Study time	90 h	Contact hrs	15.0 h
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Course offerings and teaching methods in academic year 2018-2019

A (semester 2)	Dutch	lecture	15.0 h
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Lecturers in academic year 2018-2019

Van Bocxlaer, Jan	FW03	lecturer-in-charge
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Offered in the following programmes in 2018-2019

Master of Science in Pharmaceutical Care	crdts	offering
	3	A

Teaching languages

Dutch

Keywords

Psychoactive drugs, illicit drugs, prevention, treatment and rehabilitation possibilities

Position of the course

Drug abuse is a phenomenon which not only occurs all over the world but which has also been known throughout the times. Nevertheless, it nowadays receives an ever increasing share of the public attention. The connotation "drug" as it is used here, is associated with the many well known illegal substances which have a profound impact on the psyche of the user. In this course, however, the approach is broader. The various chemicals (licit and illicit) which influence the brain or mind are all addressed in-depth with respect to the way they work on a neuro-biochemical basis, their addictive potential, their presentation and distinctive characteristics as well as their (ab)use. Also the concept addiction in its neuro-biochemical, psychological and social meaning is further elaborated through (among other things) a guest lecture. Finally, attention is given to the existing approaches and possibilities of prevention, social relief work, and rehabilitation, including the potential role of the community pharmacist in all of these. Working his way through the course, it should provide the student with the opportunity to establish a more realistic, critical and scientifically based point of view toward these psychoactive substances which are, unfortunately, too frequently abused, often having devastating effects on the individual as well as the society. This course contributes to a different number of competencies as defined for the particular master. On the one hand a relationship exists with the knowledge competencies defined as 'to have knowledge of the risks involved in being exposed to drugs and xenobiotics' and in particular for the master in Pharmaceutical Care, 'to have insights in the phenomena related to abuse of drugs and other xenobiotics'. At the other hand, this course supports the intended intellectual competencies 'critically interpreting information on drugs and health related products' and 'Prevent, detect and address complex drug related problems' as well as the competency defined as 'Purposive communication with patients, peers, and other key players in the health care business' (competencies in cooperation and communication).

Contents

The course treats all psychoactive chemicals as one single group. This entails compounds which are exclusively used or abused for their psychoactive potential as well as those which, sometimes with great success, present a valuable contribution in health care. We base this approach on the common mechanism by which they exert their activity. Also, continuous experiments take place with the existing legalpharmaceutical psychoactive compounds, although for less acceptable purposes. In a first part of the course, a number of basic principles are briefly brought up to date with respect to the neuron, neurotransmission, the synaptic transmission and agonists/antagonists. Subsequently, three major chapters treat the opiates, stimulants

(especially cocaine and amphetamine), and the psychedelics (e.g. LSD). Finally, some attention is paid to the nowadays again increasingly popular cannabinoids and the rising phenomenon of partydrugs and New Psychotropic Substances. In each case, a descriptive section (presentation, appearance, source, use, etc) as well as the intricate neurobiochemical way of working (limited) and the potential toxicological dangers are presented. Moreover, the concept dependence and the potential approach/treatment/harm reduction strategies are finally addressed and interpreted from a society point of view.

Initial competences

At the start of this course, the student possesses the necessary knowledge which will function as building blocks for the concepts which this course will treat. The basic knowledge needed for this course should be contributed from competences acquired in disciplines such as Human anatomy and general physiology and medicinal chemistry. The student should successfully have completed these courses or have acquired the intended competences in a different, but equally functional way.

Final competences

- 1 To understand the issue “drugs”, related to general pharmaceutical knowledge.
- 2 To have a profound knowledge of the various products which possess a psychopharmacological activity and which potentially may lead to a problematic abuse profile.
- 3 To recognise the most frequently encountered drugs and be familiar with the settings and sociological context which are associated with the use of these products.
- 4 To have adequate knowledge concerning the pharmacology of the various product groups and, from this point of view, to make a reasonable estimation of the dangers, risks, and addictive potential of the products with which one can be confronted in daily practice.
- 5 To have an understanding of the role the pharmacist plays in the medical part of the treatment approach of the problem of drug addiction.
- 6 To provide advice to patients concerning drug related questions and problems.
- 7 To interpret actual points of discussion in our contemporary society related to drugs, drug abuse, treatment, and relevant aspects of policy making.
- 8 To assimilate, in a critical and scientific way, new information or new data concerning new emerging products and embed this information in one’s own professional activities.
- 9 To gain insight in the concept addiction and the impact on the individual and society.
- 10 To have an understanding of the existing possibilities of prevention, treatment and rehabilitation.

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

Access to this course unit via an exam contract is unrestricted

Teaching methods

Lecture

Extra information on the teaching methods

Lectures, guest lectures

Learning materials and price

A syllabus is used and the lecture PowerPoint slides can be downloaded from the web (Minerva).

References

Course content-related study coaching

Communication is possible with the course director (before and after course hours) and data exchange and discussion is stimulated.

Evaluation methods

end-of-term evaluation

Examination methods in case of periodic evaluation during the first examination period

Written examination with open questions, written examination with multiple choice questions

Examination methods in case of periodic evaluation during the second examination period

Written examination with open questions, written examination with multiple choice questions

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation
not applicable

Extra information on the examination methods

The periodic evaluation is a written examination which consists of a mixture of multiple choice questions and open questions.

Calculation of the examination mark