

Chemical Criminalistics (B000255)

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

Credits	4.0	Study time	120 h	Contact hrs	45.0 h
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Course offerings and teaching methods in academic year 2018-2019

A (semester 2)	Dutch	lecture	42.5 h
		demonstration	2.5 h

Lecturers in academic year 2018-2019

Stove, Christophe	FW03	lecturer-in-charge
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Offered in the following programmes in 2018-2019

Master of Science in Criminological Sciences	crdts	offering
	4	A

Teaching languages

Dutch

Keywords

nihil

Position of the course

The purpose of this course is to give the student an overview of how the diverse scientific disciplines can contribute to criminalistic investigation. An attempt is made to introduce the basic techniques and to highlight their importance to students with a minimal knowledge of chemistry, geology, physics and biology. This course is organized in such a way that it shows **great complementarity with the course Medical Criminalistics.**

Contents

After an introduction about the historical background, the following themes will be dealt with: evidence or pieces of persuasion, the investigation of physical characteristics, the organic analysis (with emphasis on chromatography and spectroscopy in all aspects of criminalistics), the inorganic analysis, the serological analysis, microscopy, investigation of controverted documents, fibre and paint investigation, DNA-profiling and alcohol in traffic.

Prime attention will be given to the toxicological analysis and its interpretation. Using "real-life" cases and examples, the importance, possibilities and limitations of the techniques will be discussed.

To illustrate the aforementioned topics, a guided tour will be organised in the laboratories dealing with criminalistic research.

Initial competences

Basic knowledge of natural sciences at secondary school level.

Final competences

- 1 - explain the basics of the techniques that are applied in criminalistics;
- 2 - explain why/how a criminological report comes to a particular conclusion;
- 3 - make a correct estimation about the relative importance of certain evidence in a criminological report.

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in 'Starting Competences'

Conditions for exam contract

Access to this course unit via an exam contract is unrestricted

Teaching methods

Demonstration, lecture

Extra information on the teaching methods

Ex cathedra.

Learning materials and price

Chemical Criminalistics: notes (print-outs of the presentations) will be available from Prof. Dr. C. STOVE, approximate cost: 10 euro. Supplementary supporting material (videos, ...) will be available via MINERVA.

References

Criminalistics, An introduction to forensic science, 7th Edition (2001), R. Saferstein, Pearson Education, Prentice Hall, ISBN 0-13-013827-4

Criminalistics: Forensic Science and Crime, 1st Edition (2007), J. Girard, Jones and Bartlett Publishers, Sudbury, MA, ISBN-13: 978-0-7637-3529-6

Criminalistics: Forensic Science, Crime and Terrorism, 2nd Edition (2011), J. Girard, Jones and Bartlett Publishers, Sudbury, MA, ISBN-13: 978-1-4496-1619-9

Course content-related study coaching

Students are offered the possibility to ask questions after the courses or by electronic means.

Evaluation methods

end-of-term evaluation

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

Written examination

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

Written examination

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Calculation of the examination mark