

Toxicology and Drug Investigation

Lecture-Nr.: 53910

Type: practical course

Duration: 45 hours per week (duration 4 weeks)

Method of Assessment: analysis and colloquia

ECTS Credit Points: 12

Topics:

The aim of the practical course is the separation, isolation and identification of different drug mixtures. These mixtures can also include current adjuvants of common pharmaceutical products. It is necessary to extract the drug from the galenic preparation. Afterwards, the students have to identify the drugs of the mixture as well as the adjuvants, with the help of several analytical methods (IR-spectroscopy, thin layer chromatography, melting point, qualitative analysis, e.g.). In addition, there are to perform one quantitative analysis and one toxicological analysis (toxic drug in food).

Altogether, there are six analyses with three colloquia. In these colloquia, the students are examined in different pharmaceutical areas (chemical analysis, pharmacology, toxicology, e.g.). All of them have to be passed.

Literature:

1. Einführung und Anleitung zum Praktikum, Toxikologie und Arzneimitteluntersuchungen (Lst. Pharm. Chem. I / Univ. Regensburg).
2. Dominik; Steinhilber: Instrumentelle Analytik. Deutscher Apotheker Verlag Stuttgart.
3. Mutschler; Geisslinger; Kroeme;, Menzel; Roth: Arzneimittelwirkungen. Wissenschaftliche Verlagsgesellschaft mbH Stuttgart.
4. Steinhilber; Schubert-Zsilavec; Roth: Medizinische Chemie. Deutscher Apothekerverlag Stuttgart.
5. Deutsches Arzneibuch, Deutscher Apotheker Verlag.
6. Europäisches Arzneibuch, Deutscher Apotheker Verlag.

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