

Liverpool John Moores University

Title: Forensic Toxicology
Status: Definitive but changes made
Code: **6016FSBMOL** (117420)
Version Start Date: 01-08-2019

Owning School/Faculty: Pharmacy & Biomolecular Sciences
Teaching School/Faculty: Pharmacy & Biomolecular Sciences

Team	Leader
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Academic Level: FHEQ6 **Credit Value:** 24 **Total Delivered Hours:** 48
Total Learning Hours: 240 **Private Study:** 192

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	25
Practical	15
Seminar	6

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	as1	closed book exam	50	2
Practice	as2	practical reports	25	
Report	as3	lab notes	25	

Aims

To develop knowledge and practical experience of toxicological and controlled drug analysis within the context of forensic science.

After completing the module the student should be able to:

1. Explain the nature and physiological effects of selected drugs and poisons;
2. Critically evaluate the choice of analytical procedure employed for the analysis of selected drugs.
3. Analyse and critically discuss the results of appropriate analysis of poisons and patterns of poisoning;
4. Carry out laboratory analysis of a range of drugs and related samples using appropriate methods.
5. Report the results of a toxicological and drug analysis in the appropriate fashion

Learning Outcomes

After completing the module the student should be able to:

- 1 Explain the nature and physiological effects of selected drugs and poisons
- 2 Critically evaluate the choice of analytical procedure employed for the analysis of selected drugs
- 3 Analyse and critically discuss the results of appropriate analysis of poisons and patterns of poisoning
- 4 Carry out laboratory analysis of a range of drugs and related samples using appropriate methods
- 5 Report the results of a toxicological and drug analysis in the appropriate fashion

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

closed book exam	1	2	3
practical reports	2	4	5
lab notes	4	5	

Outline Syllabus

The module is divided into areas relating to forensic toxicology and drug analysis:

- *Classification, description and effects of drugs (including cannabis, cocaine, heroin, amphetamines, LSD, barbiturates, date rape drugs, prescription drugs, legal highs)*
- *Controlled substances legislation (the Misuse of Drugs Act, 1971 and related Acts/Amendments)*
- *Current issues in forensic toxicology and drug analysis*
- *Pharmacokinetics and Pharmacodynamics*
- *Samples, sampling and sequence of analytical procedures*
- *Application of analytical techniques for the analysis of drugs and toxicological samples (e.g. blood, urine, oral fluid, etc.)*
- *Drugs in Sport*
- *Drug testing (e.g. Drink/Drug Driving)*
- *QA and QC laboratory procedures*

- *Case Studies*

Learning Activities

Lectures
Practicals
Seminars
Problem based learning

Notes

All lecture material will be made available to the students via blackboard.