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MODULE DESCRIPTOR

Module Title

Forensic Toxicology And Substances Of Abuse

Reference	AS3066	Version	5
Created	August 2021	SCQF Level	SCQF 9
Approved	June 2002	SCQF Points	15
Amended	August 2021	ECTS Points	7.5

Aims of Module

To allow students the opportunity to display a critical evaluation of evidence, forensic analysis and an application of knowledge gained in toxicological absorption, distribution, metabolism and excretion. In addition to allow students to explore both theoretically and practically with the use of case studies, the legislation surrounding substances of abuse and the analytical procedures within drug abuse analysis, interpretation and presentation of expert evidence.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Discuss and appraise the framework within which forensic toxicologists and forensic drug analysts work.
- 2 Utilise in a coherent manner relevant scientific principles, examples and underlying methodologies to answer specific toxicological and analytical problems.
- 3 Evaluate common strategies for the analysis of toxicological and abused substances and interpret these findings in a form suitable for court.

Indicative Module Content

Definition of poisons and poisoning; study of the time-dose relationship and route of administration; distribution, phase 1 and phase 2 metabolism and elimination. Specimens available and instrumental analysis, e.g. chromatographic and spectrophotometric; case studies interpretation of results and pharmacokinetics; report writing. Substances of abuse; legislation classification, interpretation, sampling, presentation, expert evidence screening and confirmation analysis.

Module Delivery

This is a lecture based module supplemented by tutorials, practical workshops and case studies. External forensic toxicologists and forensic practitioners/ laboratory scientists may be involved in the delivery of material.

Indicative Student Workload	Full Time	Part Time
Contact Hours	40	N/A
Non-Contact Hours	110	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Examination	Weighting:	70%	Outcomes Assessed:	1, 2
Description:	Closed book written examination.				

Component 2

Type:	Coursework	Weighting:	30%	Outcomes Assessed:	3
Description:	A portfolio of all timetabled practical work				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The first grade represents Component 1 (EX1) weighted as major and the second, Component 2 (CW1), weighted as minor. A minimum module grade of D is required for a pass, with compensation of grade E in Component 1 or Component 2 permitted. Non-submission of either component will result in an NS grade.

Module Grade	Minimum Requirements to achieve Module Grade:
A	AA, AB
B	AC, AD, AE, BA, BB, BC, CA
C	BD, BE, CB, CC, CD, DA, DB
D	CE, DC, DD, DE, EA, EB, EC
E	AF, BF, CF, DF, ED, EE, EF, FA, FB, FC, FD
F	FE, FF
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	Successful completion of Stage 2 Forensic and Analytical Science or equivalent.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 FENTON, J.J. *Toxicology, A Case Oriented Approach*. Current Edition. CRC Press.
- 2 DAVIES, S., JOHNSTON, A. and HOLT, D. *Forensic Toxicology: Drug use and misuse*. Current Edition. RSC Publications.
- 3 KING, L. *Forensic chemistry of substance misuse: a guide to drug control*. Current Edition. The Royal Society of Chemistry.
- 4 COLE, M.D. *The Analysis of Controlled Substances*. Current Edition. Wiley.
- 5 NEGRUSZ, A., AND COOPER, G. *Clarke's Analytical Forensic Toxicology*. Current Edition. Pharmaceutical Press.