

Liverpool John Moores University

Title: FORENSIC SCIENCE
Status: Definitive
Code: **4000FSBMOL** (101536)
Version Start Date: 01-08-2011

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

Team	Leader
Suzzanne McColl	Y
Philip Gilhooley	

Academic Level: FHEQ4 **Credit Value:** 12.00 **Total Delivered Hours:** 30.00
Total Learning Hours: 120 **Private Study:** 90

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	26.000
Online	1.000
Seminar	3.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	AS1	Phase Test	60.0	1.00
Portfolio	AS2	Group project	40.0	

Aims

To introduce the students to a variety of procedures and methods used in forensic investigations.

Learning Outcomes

After completing the module the student should be able to:

- 1 give a resume of the various branches of forensic science and types of forensic evidence including the use of statistical methods for evaluation of evidence.
- 2 describe in some detail the methods of investigation applied by forensic scientists.
- 3 evaluate the significance of forensic evidence in certain hypothetical cases.
- 4 appreciate the work of scientific support personnel at crime scenes.

Learning Outcomes of Assessments

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

CW test	1	3	4
CW presentation	2	3	

Outline Syllabus

- *the history of forensic science.*
- *trace evidence: recovery, statistical analysis.*
- *explosions and fires: Chemistry of fires, use of accelerants/fuels, types of explosives, chemistry of explosives, explosive devices, trace recovery, safety.*
- *alcohol analysis: legislation, effects, dose-response curves, detection.*
- *drugs and alcohol, methods of analysis.*
- *Questioned documents.*
- *Body Fluids: tests for blood, semen, saliva, protein polymorphism. DNA analysis.*
- *forensic toxicology: poisons and drugs of abuse, effects, legislation, analysis.*
- *RTA and ballistic analysis using simple physical methods.*
- *Interpretation of evidence.*
- *case studies.*

Invited speakers

Learning Activities

lectures, including problem based learning, equipment demonstrations, self-study, group work.

References

Course Material	Book
Author	Andrew Jackson and Julie Jackson
Publishing Year	2005
Title	Forensic Science
Subtitle	
Edition	

Publisher	Pearson
ISBN	0130432512

Course Material	Book
Author	Langford et al
Publishing Year	2005
Title	Practical skills in Forensic Science
Subtitle	
Edition	
Publisher	Pearson Prentice Hall
ISBN	0131144006

Course Material	Book
Author	Peter White (ed.)
Publishing Year	2005
Title	Crime scene to court
Subtitle	The essentials of forensic science
Edition	
Publisher	The Royal Society of Chemistry
ISBN	0854046569

Notes

The module provides an introduction to the methodology and working practices of forensic scientists.