

## Liverpool John Moores University

Title: TARGET ORGAN TOXICOLOGY  
Status: Definitive  
Code: **6002BMBMOL** (101485)  
Version Start Date: 01-08-2011

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

Team	Leader
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**Academic Level:** FHEQ6      **Credit Value:** 12.00      **Total Delivered Hours:** 25.00  
**Total Learning Hours:** 120      **Private Study:** 95

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	20.000
Online	3.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	2 essay questions out of 4	70.0	2.00
Presentation	AS2	One in class assessment based on independent study.	30.0	

### Aims

*To develop in students an in-depth knowledge of the effects of toxic agents upon various key organ systems of the body, and to study the toxicity of various chemicals of forensic importance.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Discuss the concept and principles of target organ toxicity.
- 2 Discuss the mechanisms of action of specific organ toxicants, and the biochemical and functional changes in the target organs.
- 3 Discuss the mechanisms of action and toxic effects of specific toxicants of forensic importance.

## Learning Outcomes of Assessments

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

EXAM	1	2
Poster presentation	2	3

## Outline Syllabus

*The nature of target organ toxicity.*

*Metabolic, biochemical, functional and pathological changes associated with toxicity in the major organ systems, including the cutaneous, renal, respiratory, cardiovascular, nervous and hepatic systems.*

*The toxicity of some compounds of forensic importance.*

## Learning Activities

Lectures, private study.

## References

<b>Course Material</b>	Book
<b>Author</b>	Timbrell, J.A.
<b>Publishing Year</b>	2008
<b>Title</b>	Principles of Biochemical Toxicology.
<b>Subtitle</b>	
<b>Edition</b>	4rth
<b>Publisher</b>	Informa Healthcare
<b>ISBN</b>	

<b>Course Material</b>	Book
<b>Author</b>	Ballantyne, B., Marrs, T.C., Syversen, T.
<b>Publishing Year</b>	1999
<b>Title</b>	General and Applied Toxicology

<b>Subtitle</b>	
<b>Edition</b>	2nd ed.
<b>Publisher</b>	Macmillan
<b>ISBN</b>	0333698681

<b>Course Material</b>	Book
<b>Author</b>	Klaasen, CD and Watkins, JB
<b>Publishing Year</b>	2003
<b>Title</b>	Casarett and Doull's Essential's of Toxicology
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	McGraw Hill
<b>ISBN</b>	

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### Notes

This module enables the student to gain a detailed understanding of how various agents cause specific organ toxicity and the bodies response to such damage.