

## Liverpool John Moores University

Title: ADVANCES IN PHYTOTHERAPY  
Status: Definitive  
Code: **7000MCPHAR** (113111)  
Version Start Date: 01-08-2012

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

Team	Leader
Melissa Russell	Y

**Academic Level:** FHEQ7      **Credit Value:** 10.00      **Total Delivered Hours:** 27.00  
**Total Learning Hours:** 100      **Private Study:** 73

### Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	16.000
Off Site	6.000
Seminar	3.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination: essay-type questions	70.0	2.00
Essay	AS2	Coursework: 2000-word essay with seminar	30.0	

### Aims

*To facilitate an appreciation of the part herbs have played in the development of modern medicine.*

*To consider problems relating to the supply, production, quality control, toxicity and contamination of herbs.*

*To relate the biological activity of herbs with their active constituents and their potential as sources of medicinal agents.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Communicate results of research relating to the exploitation of plants as medicinal agents;
- 2 Critically evaluate data concerning the quality and safety of herbal medicinal products, including issues of toxicity, herb-drug interactions and safe use;
- 3 Critically review the biological action of phytotherapeutic agents in relation to their proposed active constituents;
- 4 Display mastery in the problematic area of production and regulation of herbal medicinal products.

## Learning Outcomes of Assessments

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

EXAM	1	2	3	4
Essay with associated seminar	1	3		

## Outline Syllabus

*The place of herbs in history as a major contributory element in orthodox, allopathic and medical practice.*

*Taxonomy and plant classification.*

*Biological activity in relation to major active constituents (alkaloids, flavonoids, glycosides, sesquiterpene lactones).*

*Phytochemicals used in phototherapy.*

*The evolution of phytotherapy, learned behaviour vs inherited characteristics.*

*Relationship between phytotherapy and animal self-medication.*

*Medicinal plant biotechnology.*

*Phylogenetic relationships in the search for medicinal agents.*

*Future trends in phytotherapy.*

*The medicinal plants industry; quality control and production of Herbal Medicinal Products.*

*Regulation and safety of Herbal Medicinal Products.*

*Toxicity problems with herbs; herb-drug interactions, pharmacovigilance.*

## Learning Activities

Professional visits and demonstrations (modern herb garden and herbarium).

Written presentation with seminar.

## References

<b>Course Material</b>	Book
<b>Author</b>	Barnes, J.
<b>Publishing Year</b>	2007
<b>Title</b>	Herbal Medicines,
<b>Subtitle</b>	
<b>Edition</b>	3rd Edn,
<b>Publisher</b>	Pharmaceutical Press, London,
<b>ISBN</b>	0853696233.

<b>Course Material</b>	Book
<b>Author</b>	Ebadi, M. S.
<b>Publishing Year</b>	2002
<b>Title</b>	Pharmacodynamic basis of herbal medicine,
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	CRC Press, Boca Raton,
<b>ISBN</b>	0849307430.

<b>Course Material</b>	Book
<b>Author</b>	Ernst, E.
<b>Publishing Year</b>	2000
<b>Title</b>	Herbal medicine:
<b>Subtitle</b>	a concise overview for professionals,
<b>Edition</b>	
<b>Publisher</b>	Butterworth-Heinemann, Oxford,
<b>ISBN</b>	0750645407.

<b>Course Material</b>	Book
<b>Author</b>	Harkness, R.
<b>Publishing Year</b>	2003
<b>Title</b>	Mosby's handbook of drug-herb and drug-supplement interactions,
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Mosby, London,
<b>ISBN</b>	0323020143.

<b>Course Material</b>	Book
<b>Author</b>	Heinrich, M.
<b>Publishing Year</b>	2004
<b>Title</b>	Fundamentals of pharmacognosy and phytotherapy,
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Churchill Livingstone, Edinburgh,
<b>ISBN</b>	0443071322.

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<b>Course Material</b>	Book
<b>Author</b>	Iwu, M. M.
<b>Publishing Year</b>	2002
<b>Title</b>	Ethnomedicine and drug discovery,
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Elsevier,
<b>ISBN</b>	044450852X.

<b>Course Material</b>	Book
<b>Author</b>	Mills, S.
<b>Publishing Year</b>	2000
<b>Title</b>	Principles and practice of phytotherapy
<b>Subtitle</b>	modern herbal medicine,
<b>Edition</b>	
<b>Publisher</b>	Churchill Livingstone, Edinburgh; London,
<b>ISBN</b>	0443060169.

<b>Course Material</b>	Book
<b>Author</b>	Samuelsson, G.
<b>Publishing Year</b>	1999
<b>Title</b>	Drugs of natural origin
<b>Subtitle</b>	a textbook of pharmaconosy,
<b>Edition</b>	4th Edn,
<b>Publisher</b>	Apotekarsocieteten,
<b>ISBN</b>	9186274813.

<b>Course Material</b>	Book
<b>Author</b>	Trease, G. E.
<b>Publishing Year</b>	2002
<b>Title</b>	Trease and Evans pharmacognosy,
<b>Subtitle</b>	
<b>Edition</b>	15th Edn,
<b>Publisher</b>	W. B. Sanders, London,
<b>ISBN</b>	0702026174.

<b>Course Material</b>	Book
<b>Author</b>	Wainwright, M.
<b>Publishing Year</b>	2009
<b>Title</b>	Photosensitisers in biomedicine
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	John Wiley + Sons Ltd, London,
<b>ISBN</b>	9780470510605.

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## **Notes**

This module provides an overview of the development of herbal medicine practices. It offers an introduction to the use of herbs, pointing to the sources of further information, biological activity in relation to active principles, issues of toxicity and herb-drug interaction, and production methods for medicinal plants. Recent research relating to the outline syllabus will be considered with the use of primary literature sources.