Liverpool John Moores University

Title:	FURTHER STUDIES IN BIOLOGY & CHEMISTRY
Status:	Definitive
Code:	**3505BELSC** (118684)
Version Start Date:	01-08-2011
Owning School/Faculty:	Arts, Professional and Social Studies
Teaching School/Faculty:	Bellerby's College - Brighton

Team	Leader
Jarmila Hickman	Y

Academic Level:	FHEQ3	**Credit Value:**	12.00	**Total Delivered Hours:**	68.50
Total Learning Hours:	120	**Private Study:**	51		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	55.000
Practical	11.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Module Examination	100.0	2.50

Aims

Acts as an extension module, allowing students a further opportunity to further their knowledge and understanding of basic principles of Biology and Chemistry. It will, in particular, introduce students to additional topics in Plant Biology, Ecology, Genetics and Inorganic Chemistry.

Learning Outcomes

After completing the module the student should be able to:

1 Demonstrate through written assignments an enhanced knowledge of Genetics, Ecology and Plant Biology.
2 Present chemical data and ideas in a clear and accurate form.
3 Describe how inorganic chemical reactions work and the main factors which affect them.
4 Describe the important elements, and the trends in their properties, of the Periodic Table.
5 Recall relevant information and deploy it effectively under tst and/or examination conditions.

Learning Outcomes of Assessments

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

EXAM	1	2	3	4	5

Outline Syllabus

1. Genetics including concept of the gene, heredity and genetics, evolution, gene technology
2. Ecology with reference to human ecology and eco-systems, pollution and conservation
3. Plant Biology – structure, plant growth and development, plant reproduction, transport, water balance and temperature control
4. Physical properties and chemical reactions of certain elements and their compounds
5. Redox 2 – electrode potentials, disproportionate reactions, corrosion and a storage cell
6. Transition metal chemistry – electronic configurations, characteristic properties of transition metals, catalysis

Learning Activities

Tutor-led theory lessons to small classes, practical tasks carried out under laboratory conditions, formative assignments, class tests and terminal module examination.

References

Course Material	Book
Author	Toole, G and S
Publishing Year	1999
Title	Understanding Biology for Advanced Level
Subtitle	
Edition	4th Edition
Publisher	

ISBN	9780748739578

Course Material	Book
Author	Adds, J et al
Publishing Year	2004
Title	Genetics, Evolution and Diversity
Subtitle	
Edition	
Publisher	Nelson Thornes Advanced Science
ISBN	

Course Material	Book
Author	Adds, J et al
Publishing Year	2000
Title	Exchange and Transport, Energy and Ecosystems
Subtitle	
Edition	
Publisher	Nelson Thornes Advanced Science
ISBN	

Course Material	Book
Author	Chapman, B
Publishing Year	2003
Title	Structure, Bonding and Main Group Chemistry
Subtitle	
Edition	2nd Edition
Publisher	
ISBN	97807487765590

Course Material	Book
Author	Chapman, B
Publishing Year	2003
Title	Organic Chemistry, Energetics, Kinetics and Equilibrium
Subtitle	
Edition	2nd Edition
Publisher	
ISBN	9780748776566

Course Material	Book
Author	Beavon, R and Jarvis, A
Publishing Year	2003
Title	Periodicity, Quantitative Equilibria and Functional Group Chemistry
Subtitle	
Edition	2nd Edition
Publisher	
ISBN	9780748776573

Course Material	Book
Author	Jarvis, A
Publishing Year	2004
Title	Transition Metals, Quantitative Kinetics and Applied Organic Chemistry
Subtitle	
Edition	2nd Edition
Publisher	Nelson Advanced Science series
ISBN	9780748776580

Notes

Enables students to further their studies in Biology and Chemistry and broaden the background that they would be able to bring to a range of science and related degrees.