Liverpool John Moores University

Title: APPLIED MATHS 2
Status: Definitive
Code: **3510IFYSP**   (107132)
Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool Business School
Teaching School/Faculty: Liverpool Business School

Team	emplid	Leader
Elizabeth Thompson		Y

Academic Level:	FHEQ3	**Credit Value:**	12.00	**Total Delivered Hours:**	58.00
Total Learning Hours:	120	**Private Study:**	62		

Delivery Options
Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	55.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Written Examination	100.0	3.00

Aims

To introduce mathematical modelling of force combinations, non-linear motion and non-uniform motion related to varying forces.
To facilitate the formative development of students by broadening their knowledge base, deepening their understanding of topics studied and practising appropriate study skills, including problem solving, through the setting of weekly homework assignments and regular class tests.
To develop independent study skills in research, word processing, group work and effective note taking.

Learning Outcomes

After completing the module the student should be able to:

1. Evaluate the resultant effect of combined forces.
2. Use vector methods in simple applications.
3. Investigate the motion and forces on a particle moving along a circular path.
4. Investigate the causes and effects of sudden and cyclic changes in the motion of a particle.

Learning Outcomes of Assessments

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

EXAM   1   2   3   4

Outline Syllabus

Vector methods
Forces as fixed vectors
Further work on Centres of Gravity/Centre of Mass
Further Particle Dynamics

Learning Activities

55 hours of contact time, the balance made up of homework assignments and self-study.

References

Course Material	Book
Author	Heinemann Modular Mathematics, Books M2 and M3
Publishing Year	0
Title	
Subtitle	
Edition	
Publisher	
ISBN	

Notes

this module is for students wishing to do engineering at undergraduate level.