

## Liverpool John Moores University

Title: PHYSICS 1  
Status: Definitive  
Code: **3500IFYSP** (107122)  
Version Start Date: 01-08-2011

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

Team	Leader
Elizabeth Thompson	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: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	55.000
Practical	11.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	AS1	Class tests and homework assignments	15.0	
Practice	AS2	Practical tasks and assessments	10.0	
Exam	AS3	Module Examination	75.0	2.50

### Aims

*To prepare students for Engineering degree courses with a basic knowledge of atomic physics, materials, heat and gases and oscillations and waves.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Describe the main ideas and methods of the physics involved and apply these to solve problems.
- 2 Describe phenomena in terms of geometrical, pictorial and mathematical models.
- 3 Demonstrate an appreciation of the theoretical structure of the subject by applying this to the techniques of experimental physics.
- 4 Explain how the physics involved may be used in everyday life to solve practical problems.
- 5 Use data in a consistent set of units.

### Learning Outcomes of Assessments

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

CW	1	2	4	
CW	3	5		
EXAM	1	2	4	5

### Outline Syllabus

1. *Waves, including properties, sound, reflection and refraction, electromagnetic waves and photo-electric effect.*
2. *Matter, looking at materials, heat and gases and the structure of the atom.*

### Learning Activities

Tutor-led lessons to small classes, practical tasks and assessments, regular formative assignments, class tests and terminal module examination.

### References

<b>Course Material</b>	Book
<b>Author</b>	Adams and Allday
<b>Publishing Year</b>	2000
<b>Title</b>	Advanced Physics
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	OUP Oxford
<b>ISBN</b>	9780199146802

<b>Course Material</b>	Book
<b>Author</b>	Akrill, Bennet and Millar
<b>Publishing Year</b>	2000

<b>Title</b>	Practice in Physics
<b>Subtitle</b>	
<b>Edition</b>	3rd edition
<b>Publisher</b>	Hodder Murray
<b>ISBN</b>	9780340758137

<b>Course Material</b>	Book
<b>Author</b>	Nelkon and Parker
<b>Publishing Year</b>	1995
<b>Title</b>	A Level Physics
<b>Subtitle</b>	
<b>Edition</b>	
<b>Publisher</b>	Heinemann
<b>ISBN</b>	9780435923037

### Notes

Module aims to prepare students for Engineering course at university. It provides basic knowledge in key areas and theoretical materials and an opportunity to test these in laboratory based practical tasks, while developing essential practical skills.