Liverpool John Moores University

Title:	EXPLORING SCIENCE THROUGH INVESTIGATION IN POST INITIAL TEACHER TRAINING
Status:	Definitive
Code:	**6030PITTCP** (119844)
Version Start Date:	01-08-2016
Owning School/Faculty:	Education
Teaching School/Faculty:	Education

Team	Leader
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Academic Level:	FHEQ6	**Credit Value:**	24	**Total Delivered Hours:**	58
Total Learning Hours:	240	**Private Study:**	182		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	6
Off Site	10
Practical	30
Seminar	10
Tutorial	2

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Practice	AS1	(4500 words equivalent)	20	
Report	AS2	(1500 words equivalent)	80	

Aims

This module enables students to extend their understanding of key physics or

chemistry concepts through a range of practical and investigative activities. The module will also enable them to critically reflect on their own learning and on pedagogical strategies for supporting the learning of secondary science through practical and ivestigative work.

Learning Outcomes

After completing the module the student should be able to:

1	Critically reflect on their learning and independently plan to extend their subject knowledge to a level appropriate for teachaing secondary school physics or chemistry.
2	Apply key physics or chemistry concepts to analysis of physical systems during practical activities.
3	Competently and safely assemble and adapt school science practical activities.
4	Identify key pedagogical issues when designing secondary science practical and investigative activities.

Learning Outcomes of Assessments

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

CW	1	2	4
CW	3		

Outline Syllabus

Through conducting and critically evaluating a series of secondary science practical and investigative activities, and reflecting on implications for teaching and learning, the following key areas will be covered:

Key science concepts from A-level Physics or Chemistry
Principles of effective learning of science through practical and investigative work
Key research into school science practical and investigative work
Use of ICT tools
Safety issues in school practical science

Learning Activities

Individual & group practical work (self-directed with staff and peer support) in laboratory and outdoor spaces, whole-class teaching, action learning sets

Notes

The module will be a series of practical sessions in which essential practical skills and experimental techniques are practised.