PX3A0-35 Physics Project (BSc)

23/24

Department Physics Level Undergraduate Level 3 Module leader Steven Boyd Credit value 35 Module duration 22 weeks Assessment 100% coursework Study location University of Warwick main campus, Coventry

Description

Introductory description

The project gives students the opportunity to develop their own ideas in a particular field of interest. Usually students work in pairs, within one of our research groups and alongside postgraduate students and other members of staff. The experience of working more independently should be valuable to students' future careers, whether they intend to work as scientists or not, and can help students make their career choices.

Module web page

Module aims

To provide an experience of working on an extended 'research-like' project in collaboration with a supervisor and, typically, with a partner

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

You will work, normally in pairs, on an extended project which may be experimental, computational or theoretical (or indeed a combination of these). Through discussions with your supervisor and

partner you will establish a plan of work which you will frequently review as you progress. In general, the project will not be closely prescribed and will contain an investigative element. Over the Christmas vacation you will independently write an interim report which will be marked and returned (with feedback) by your supervisor. At the end of the second term, you will again independently write a final report, which will be assessed by two independent members of academic staff, who will also examine you in a viva voce examination.

Learning outcomes

By the end of the module, students should be able to:

- To study an area of physics in detail
- · Communicate and analyse the results of a study
- Write a scientific report and defend it at a viva voce examination
- To undertake physics research

Indicative reading list

Research journals and books

Research element

Research project

Subject specific skills

Research skills in physics

Transferable skills

Analytical, communication, IT, organisational, problem-solving, self-study

Study

Study time

Туре

Lectures Project supervision Private study Total

Required

2 sessions of 1 hour (1%) 43 sessions of 1 hour (12%) 305 hours (87%) 350 hours

Private study description

Analysis of techniques and results, discussing with partner, reading and working through research papers, writing reports, preparing for oral defence in the viva, taking/generating data

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A

Dissertation & Report

Weighting 100% Study time

Feedback on assessment

Written feedback provided by supervisor (end of term 1), written and verbal feedback written from the two independent assessors of the dissertation.

Availability

Courses

This module is Core for:

- UPXA-F300 Undergraduate Physics (BSc)
 - Year 3 of F300 Physics
 - Year 3 of F300 Physics
 - Year 3 of F300 Physics
- Year 3 of UPXA-F303 Undergraduate Physics (MPhys)

This module is Option list B for:

- UPXA-GF13 Undergraduate Mathematics and Physics (BSc)
 - Year 3 of GF13 Mathematics and Physics
 - Year 3 of GF13 Mathematics and Physics
- Year 4 of UPXA-GF14 Undergraduate Mathematics and Physics (with Intercalated Year)