

PX452-45 Astrophysics Project

24/25

Department

Physics

Level

Undergraduate Level 4

Module leader

Steven Boyd

Credit value

45

Module duration

28 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 astrophysics. Usually students work in a pair, within one of astrophysics 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 experience of working on an extended project in a research environment 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 observational, computational, data analytic or theoretical (or indeed a combination of these). Through

discussions with your supervisor 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. You will also prepare a poster describing your project to be presented at an open poster session along with other project posters, at which you will also be required to defend it.

Learning outcomes

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

- To complete a piece of physics research
- To write a scientific report on your work and defend it at a poster session

Indicative reading list

Research journals and books

Subject specific skills

Research skills in physics

Transferable skills

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

Study

Study time

Type	Required
Lectures	2 sessions of 1 hour (0%)
Project supervision	40 sessions of 1 hour (9%)
Private study	408 hours (91%)
Total	450 hours

Private study description

Analysis of techniques and results, discussing with partner, reading and working through research papers, writing interim report and final thesis, preparatory reading (over long vacation), preparing poster and poster presentation for oral defence of the thesis

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

	Weighting	Study time
Dissertation & Report	100%	
Dissertation + Interim Report		

Feedback on assessment

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

Availability

Courses

This module is Core for:

- Year 4 of UPXA-F3FA Undergraduate Physics with Astrophysics (MPhys)