# **PX3A1-35 Astrophysics Project**

#### 22/23

**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 astrophysics. 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 observational, 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 astrophysics in detail
- Communicate and analyse the results of a study
- Write a scientific report and defend it at a viva voce examination
- To undertake research in astrophysics

### 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	Required
Lectures	2 sessions of 1 hour (1%)
Project supervision	43 sessions of 1 hour (12%)
Private study	305 hours (87%)
Total	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

	Weighting	Study time
Dissertation & Report	100%	

#### 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-F3F5 Undergraduate Physics with Astrophysics (BSc)
  - Year 3 of F3F5 Physics with Astrophysics
  - Year 3 of F3F5 Physics with Astrophysics