

# PX450-15 Astrophysics Group Project

**22/23**

**Department**

Physics

**Level**

Undergraduate Level 4

**Module leader**

Geetha Balakrishnan

**Credit value**

15

**Module duration**

12 weeks

**Assessment**

100% coursework

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

The researching, evaluation and presentation of scientific information are important skills that you used in the 2nd year Astrophysics Skills module. This project is designed to develop these skills further.

[Module web page](#)

### Module aims

To provide experience of working as a member of a team, of taking responsibility for a component of a team activity and acting as chairperson and secretary. The project also provides the opportunity of studying in-depth some aspect of astrophysics.

### 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.

The class will be divided into groups with about six members. Each group will be allocated a topic in astrophysics which should be wide-ranging and include sub-themes. A member of Academic Staff will act as group mentor. Each group will appoint, in rotation, a chairman and a secretary

from among their number, and will have a formal meeting (with their group mentor) once each week. They may also decide to meet informally (perhaps in sub-groups) if they wish. Having obtained any necessary preliminary information, the group will allocate tasks to the individual members, and review progress on the problem at the subsequent weekly meetings.

Towards the end of the ten weeks each member of the group will give a formal presentation on their part of the problem to the other group members. The group mentor, with one other group mentor, will award a mark for this presentation (25%). The group will then arrange for the production of a joint Report of a maximum of 30 typed pages in which the contributions of the group members are combined together. The Report itself will be assessed by the group mentor and one other group mentor (50%). The group mentor will also award a mark for each student's contribution to the group activities (25%).

The primary function of the mentor (as well as assessing the work done by the individual members and by the group as a whole) will be to provide general advice on the group's strategy for producing the oral presentations and the final report.

## Learning outcomes

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

- Work as a member of a group to assess a complex task and divide the work required between the members of the group
- Achieve competence in a topic of astrophysics (not covered in lecture modules)
- Present results in a written report, which integrates with the contribution of all members of the group
- Discuss the relationship of the results of investigations with others in the group

## Subject specific skills

Knowledge of mathematics and physics. Analysis of research literature

## Transferable skills

Analytical, collaborative, communication, group working, organisational, problem-solving, self-study

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## Study

### Study time

| Type                | Required                   |
|---------------------|----------------------------|
| Project supervision | 11 sessions of 1 hour (7%) |
| Private study       | 139 hours (93%)            |
| Total               | 150 hours                  |

## Private study description

Discussing regularly with other group members, reading and working through research papers and other material, writing and agreeing contribution to group report, preparing group presentation

## Costs

No further costs have been identified for this module.

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## Assessment

You must pass all assessment components to pass the module.

### Assessment group A

|  | <b>Weighting</b> | <b>Study time</b> |
|--|------------------|-------------------|
| Report and Presentation                    | 100%             |                   |
| Production and presentation of the project |                  |                   |

### Feedback on assessment

Written and oral feedback by markers.

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## Availability

### Courses

This module is Core for:

- Year 3 of UPXA-F3FA Undergraduate Physics with Astrophysics (MPhys)