

## Practicing Science Practice

### Summary

We describe a core course for fourth year undergraduate masters students in which they run an internet journal, writing, submitting and refereeing short papers on physics and astrophysics.

**Subject area:** Physical Science

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### Description

The course is intended to (a) reinforce core material in physics, astronomy and space science by encouraging students to apply it in novel contexts (b) to promote an understanding of the way scientific research is communicated (c) to encourage group work

### Type of activity

General physics, astrophysics and space science. Students produce an internet journal.

### Content covered

General physics, astrophysics and space science.

### Application

This is applicable in any area (subject to the difficulty of thinking up suitable open-ended problems at an appropriate level). It provides an interesting way of achieving the three aims under the course description.

### Further comments

The web element provides easy access to material and allows this to be organised in an efficient manner (compared with the paper-based version of the initial trials). Realistically it does not eliminate the need for printed copies, for example for editorial board meetings.

Student responses vary greatly. There is a long learning curve followed sometimes by an overwhelming gush of trivia and in some years by a number of high level original contributions. Clear guidelines are essential for refereeing to avoid the extremes of uncritical acceptance or overly hostile evaluations.

There is one facilitated meeting a week of the groups (for about 90 minutes); otherwise students work in their own time. The module is 10 credits (75 hours).

Staff development is required to prevent academic facilitators from providing too many detailed answers.

Feedback was obtained from a class meeting. Suggestions were largely confined to technical aspects of scheduling and marking. In the first year of implementation there were some comments along the lines of 'why are we doing this instead of being taught

something properly', but these have not been re-iterated in later years (formally or informally) following explicit discussion of the course aims in the induction session.

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