

DARA Unit 1 Training: Interim Course Work

The DARA course tutors ask our students to submit a short piece of "interim course work" in the form of a ~5 page essay.

Submitting this interim course work is strongly advisable. It will not be marked in a quantitative sense but detailed feedback will be offered by the course tutor. If/when it comes to asking for references from course tutors - having some evidence of what you can do, when you have sufficient time, will be most useful.

I attach the same set of astrophysics topics offered previously in Zambia and Nairobi. However, since the balance of the Nairobi course is different from Zambia (more radioastronomy), I will be pleased to receive essays on topics related to any material in Unit 1. By choosing an essay topic in which you are really interested this interim course work will not prove to be work at all - just fun!

The deadline for receipt of Nairobi interim course work is 31 December 2018.

Guidelines

Professional reports are not crammed together, spacing makes them easier to read. Thus do not pare down margins - stick to the standard MS-WORD margins - and do not use small fonts - use 11 or 12 pt.

The 5 page limit includes

- i) a nicely laid out title heading and author name
- iii) a clear structure i.e.
 - a beginning (e.g. "introduction", setting the scene);
 - a middle (the meat of the essay which should have heading & sub-headings;
 - an end (a brief round up of the main points to remind the reader and leave on a clear note).
- ii) several diagrams/illustrations/pictures with a self-contained caption under each one (all with correct attribution please if they are downloaded)
- iii) A short list of any references you have used - at the end

Pay attention to your English grammar/syntax. The best way to check this is to have at least one other person read it before you hand it in.

- It should go without saying that we don't want cut-and-pasted web-based articles!

You should be capable of turning material into your own distinctive words.

Essay assignments

5 pages *maximum* on one of the following topics:

- The case for and against dark matter
- Gravitational waves
- Asteroid impacts on the earth
- The earth's magnetic field
- The origin of the earth-moon system
- The life and achievement of... (a famous, dead astronomer)
- Gravitation waves
- The Accelerating Universe
- Dark Energy
- Extrasolar planets and the habitable zone
- Star formation
- Stellar nucleosynthesis & the origin of elements
- Galaxy formation and evolution
- Supermassive Black Holes
- The history of interferometry (or radio astronomy)
- The cosmic distance ladder
- A mission that has explored the solar system (e.g. Mars, Jupiter, Saturn...)
- The search for extraterrestrial intelligence