This is an invitation-only 3cp Special Studies Program unit for a small group of 2nd year students. It is a “working seminar”, with every participant presenting one of the lectures and writing a short essay on the topic of their lecture. The audience is expected to ask questions, engage in discussions, and participate in assessing the lectures and the essays.

Convenor Robby Marangell, Carslaw 720. robert.marangell@sydney.edu.au

Time and location Friday 11:00-13:00 weeks 2-13, Eastern Avenue Seminar room 310

Consultation Hours Tuesday 14:00-15:00 or by appointment.


Assessment

- One 45 minute presentation (assessment 25% by staff, 5% by peers). The timetable of presentations will be agreed in Week 3.
- An essay of about 8-10 pages on the same topic, due two weeks after the presentation (assessment 50% by staff, 5% by peers).
- A one page topic outline due to me (electronically) by the end of week 6 (the week after the break) (assessment 5%)
- A 1-2 page referee report on a peer’s essay (assessment 10%) (This will be assigned early in the semester)
- Clarity of presentation, accuracy, attention to detail and good writing/presentation style will be the major criteria for these assessments. The convenor will assist you in preparing your presentation and your essay. In order to pass the unit successfully, you must attend all lectures.

Learning outcomes

By completing the working seminar you will

- practise effective oral and written communication of mathematics;
- learn how to discover and express mathematical ideas;

Reference books

The topic for MATH2916 is ‘Nonlinear Dynamics, Chaos and Fractals’. The main reference for this seminar is:


This book is available on two hour reserve from the Sci-tech library.

Supplementary Texts which you might want to consult are


For some topics you may want to include additional reference books - feel free to consult with me about these, or ask me for suggestions for more.

Advice on writing and presenting mathematics can be found in:

- Terence Tao, *Advice on Writing Papers*, on his Wordpress blog.