

## MA40001: PTS & Project. Guide 2011 - 2012

### Organisation

Contact information for the lecturers who are responsible for the organisation and teaching of the module is below:

Dr Gunnar Hornig (module leader),  
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### Course content

The following provides a list of learning outcomes for the module.

- Become familiar with basic concepts of Matlab, and its use in solving differential equations. (This part is a prerequisite for the projects in semester 1 and 2)
- Learn how to communicate Mathematics:
  - a) Understand how to structure, set out and typeset a technical report.
  - b) Develop presentation skills for mathematical content.
- Learn various techniques for mathematical modelling based on short case studies.
- Carry out a substantial project and document the work in a project report.

The first four items will be addressed in three weekly class meetings during semester 1. Semester 2 will involve independent study on an assigned project.

### Assessment

The overall assessment will be based on your marks for the Matlab sessions (10%), a written report on a case study (20%), presentation skills sessions (10%), and the final project (60%).

### Pre-requisites

In order to take this course you should have completed the modules MA31002 (Differential Equations) and MA32002 (Mathematical Methods).

## **Your Commitment**

You are expected to attend all classes except on medical grounds or with the special permission of the lecturer. If you are unable to complete elements of the coursework on time on medical grounds, you should inform the module leader and **submit a medical certificate to the School Office.**

## **Study Support**

If you are having difficulty with the coursework you should make an appointment to see the lecturer.

## **Feedback**

At the end of the module you will be asked to complete a confidential questionnaire regarding the content and presentation of the module. This is an important element in the University's Academic Standards procedures.

You may bring matters of concern about the course to the attention of the Mathematics Division Staff/Student Committee, which meets once each semester. A volunteer will act as 4th year representative to sit on the Staff-Student Committee; their name will be posted on BlackBoard.