Staff

Position	Name	Email	Room
Lecturer-in-charge	Professor Thanh Tran	Thanh.tran@unsw.edu.au	RC-4061

Please refer to your Timetable on MyUNSW for your Lecture Tut, Lab enrolment days and times.

Combined Timetable weblink:

MATH3051: https://timetable.unsw.edu.au/2022/MATH3051.html#S3S

MATH5215: https://timetable.unsw.edu.au/2022/MATHKENS.html

Administrative Contacts

Please visit the School of Mathematics and Statistics website for a range of information on School Policies, Forms and Help for Students.

For information on Courses, please go to “Current Students” and either Undergraduate and/or Postgraduate”, Course Homepage” for information on all course offerings,

The “Student Notice Board” can be located by going to the “Current Students” page; Notices are posted regularly for your information here. Please familiarise yourself with the information found in these locations. The School web page is: https://www.maths.unsw.edu.au

If you cannot find the answer to your queries on the web you are welcome to contact the Student Services Office directly.

By email ug.mathsstats@unsw.edu.au

By phone: 9385 7053

Should we need to contact you, we will use your official UNSW email address of in the first instance. It is your responsibility to regularly check your university email account. Please state your student number in all emails.

Course Information

Pre-Requisite : For MATH3051: 12UOC of second year mathematics courses, including MATH2011 or MATH2111 or MATH2069(DN).

We are aware some course exclusions on the Handbook may be different to the School website. We are in the process of updating this information. Meanwhile, students should be following the Handbook course information with the School website information as a supplement.

Course Aims

The course aims to provide students in Applied Mathematics with basic knowledge of Real Analysis and Functional Analysis, particularly topics that are useful for the study of many other Applied Mathematics courses.

Course D escription

The aim of this course is to provide students in Applied Mathematics with basic knowledge of Real Analysis and Functional Analysis, particularly topics that are useful for the study of many other Applied Mathematics courses. In any area of applied research, methods should not be learnt as a black box. Understanding the theory behind the methods requires some abstract mathematics,

CLO2 Compare weak and strong convergence and apply them to the study of numerical approximations.
CLO3 Apply functional analysis tools to solving integral equations and boundary value problems.
CLO4 Apply the concept of Gateaux derivative and the Lagrange multiplier method to solving optimisation problems.
CLO5 Perform the analysis of the Galerkin approximation for linear and non-linear PDEs.

Course Schedule

The course will include material taken from some of the following topics. This is should only serve as a guide as it is not an extensive list of the material to be covered and tho.Tc 0.01 Tw 0.337 0 Td [(lin)-3p3be co