Course overview

- MATH2089 consists of two components: *numerical methods* and *statistics*.
- MATLAB is used extensively in both components.
- You cannot pass this course unless you have achieved a mark of at least 40 in both components. (You can get the grade *UF – Unsatisfactory Fail*.)
- Course staff
  - *Dr Quoc Thong Le Gia* – lecturer for Numerical Methods <qlegia@unsw.edu.au>, RC-2084.
    Consultations: Mondays 1.30-2.30pm or by appointment.
  - *Dr Gery Geenens* <ggeenens@unsw.edu.au> - RC-2053
    lecturer for Statistics.
  - You have a tutor for Numerical Methods and a tutor for Statistics.

- Classes per week
  - 5-hour of lectures per week in CLB-7
  - Monday 10:00–12:00 (Weeks 1,3 – 11): Numerical Methods
  - Tuesday 12:00–14:00 (Weeks 1–10): Statistics
  - Wednesday 15:00–16:00 (Weeks 1,3,5,7,9: Numerical Methods, Weeks 2,4,6,8,10: Statistics)
  - 1-hour Statistics tutorial: Weeks 1–10.
  - 1-hour Numerical Method tutorial: Weeks 1–10.

  Each tutorial is either held in a class room or in the lab RC-G012, depending on the week – see the schedule in the course outline

  Before your lab in Week 1, you should make sure that you can logon to the computers in RC-G012 using your zID and zPass.
- Online quizzes administered through Maple TA
  You will need to enrol online in "MATH 2089 Numerical Methods and Statistics, T2 2019", and do the quizzes – see course web page for further instructions.

Assessments

	Statistics	Numerical Methods
MATLABonline quizzes	5%	5%
other online quizzes	5% + 5% + 5%	5% + 5% + 5%
mid-session test	20 %	20%
total in session	40%	40%
final exam	60%	60%

- MATLAB online quizzes due in Week 2 – equal share
- 3 Statistics online quizzes due in Weeks 4, 8, 10.
- 2 Numerical Methods online quizzes due in Weeks 5, 9, 10.
- 1 Statistics mid-session test in computer lab in Week 6
- 1 Numerical Methods mid-session test in your tutorial in Week 8

What is MATLAB ?

- Watch
  `http://au.mathworks.com/videos/matlab-overview-61923.html`
- Run `demo` command

Learning MATLAB

- Introduction to MATLAB (see course web page)
  Read this before your first Statistics lab in Week 1
- Statistics using MATLAB (see course web page)
- Statistics lab in Week 1
- Online MATLAB self-paced lessons 0–10 (link via the course web page)
- 9 online MATLAB quizzes through Maple TA (link via the self-paced lessons or directly from the Maple TA tab on the course web page)
  - Due by 2pm on the Friday of Week 2
  - Enrol in the Maple TA course "MATH2089 Numerical Methods and Statistics, T2 2019"
  - Complete the quizzes in sequential order, starting from Declaration, 0, 1, 2, . . . , 8.
  - Each MATLAB quiz has a time limit, but there is no limit on the number of attempts per quiz. Your best mark will count.
  - The marks are distributed equally between the Numerical Methods and Statistics components.

Obtaining MATLAB

- Information on obtaining MATLAB is a available at `https://www.it.unsw.edu.au/students/software/matlab.html`. Also see the course web-page on Moodle.
- You can remotely access to the MATLABvia `https://www.myaccess.unsw.edu.au/` (more instructions are on Moodle)

References for Numerical methods

- Lecture notes will be posted on the course web page prior to the lectures.
- *Recommended text*: S. S. Rao, Applied Numerical Methods for Engineers and Scientists, Prentice Hall, Upper Saddle River, N.J., 2002.
  This book is available for purchase in the UNSW bookshop and is also in the High Use Collection in the UNSW library.
- A list of the programs from the textbook is available from http://cwx.prenhall.com/bookbind/pubbooks/rao/
- C. Moler, Numerical Computing with Matlab, SIAM, 2004 http://www.mathworks.com/moler/
- A. Gilat, MATLAB: an introduction with applications, New York; Chichester: Wiley, 2005.

You must read and understand the School of Mathematics and Statistics Assessment Policies, see
http://www.maths.unsw.edu.au/currentstudents/student-services