### **Statistics**

MATH2089



Term 2, 2019 - Presentation

#### Contact

Lecturer: Dr Gery Geenens

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Consultation: please use email to arrange an appointment

# Organisation

There will be 2 hours of lecture per week, with additional 1 hour in Weeks 2, 4, 6, 8 and 10

#### Lectures:

Tuesday	12:00-2:00РМ	CLB-7	W1-10
Wednesday	3:00-4:00РМ	CLB-7	W2,4,6,8,10

# Organisation

There is also one tutorial/computing laboratory class per week

**Tutorials/Laboratory classes** are held at a variety of times and locations as indicated on your timetable through myUNSW

Students are expected to attend tutorials/laboratory classes, and  $\underline{\text{rolls}}$  will be kept

Tutorials/Laboratory classes start in Week 1 and end in Week 10

You will be assigned a tutor for tutorials/laboratories

Your tutor should be your first point of contact for any question about this course

#### **Tutorial classes**

Tutorial classes take place in Weeks 1, 3, 5, 7, 9

Tutorials are devoted to problem-solving questions

You are encouraged to attempt the questions before class, and prepare questions for your tutor on topics you are not sure about

### Laboratory classes

**Laboratory classes** are held in the School of Mathematics and Statistics' computer laboratories in the Red Centre (level G)

**Before your first laboratory**, you should make sure you can logon to the computers using your zID (UNSW User ID) and zPass

Lab classes take place in Weeks 2, 4, 8, 10

There is no lab *per se* in Week 6. However, the **mid-session test** is scheduled in the labs in Week 6

(you must sit it in the lab class in which you are enrolled)

#### **MATLAB**

Many statistical problems require use of a computer software package

→ in this course you are asked to become familiar with MATLAB, and that is what the laboratory classes are designed for

You are advised to attempt, **as soon as possible**, the preliminary online Matlab quizzes

→ this is designed to get you started using Matlab, as those quizzes form part of your assessment (due end of Week 2)

#### **Assessment**

Assessment (for the stats component) will consist of 4 parts:

- introductory Matlab quizzes: weight 5%
- three online quizzes over the session: weight 5% each (15% altogether)
- a mid-session test: weight 25%
- a final examination: weight 60%

→ 100%

This mark is then averaged with the Numerical Methods mark to give your final MATH2089 mark

You cannot pass this course unless you have achieved a mark of at least 40 in both the Statistics and Numerical Methods components!!

# Introductory Matlab quizzes

By Friday 14th June, 2PM (Week 2), you are required to attempt 9 Matlab quizzes

Those 9 quizzes cover the material in the first 9 Lessons (Lesson 0 to Lesson 8) in the **Matlab** self-paced online tutorial

These self paced online lessons are available from a link on the Moodle course page

At the end of each lesson, there is a link to the corresponding Maple TA quiz

You have as many attempts as you want, the best mark will count (→ easy to get full marks!)

They are designed to get you started with Matlab and Maple TA

Weight: 5%

### Online quizzes

Online quizzes are also administered through MapleTA (not to be confused with the previous Matlab quizzes!)

They assess mastery of the material covered in the lectures and encourage consistent engagement with the course

You would use MATLAB as 'calculator' for those tests, but they are NOT MATLAB tests!

Quiz	date avail.	date due	weight
	Fr 21/6, 2РМ (Week 3)		
2	Fr 19/7, 2РМ (Week 7)	Fr 26/7, 2рм (Week 8)	5%
3	Fr 2/8, 2PM (Week 9)	Fr 9/8, 2PM (Week 10)	5%

You are allowed a maximum of 3 attempts (the best mark will count)

Once you begin a quiz, you have a **fixed time** to complete it (20 min)

It is expected that you work on each quiz alone

#### Mid-session test

The mid-session test will take place in Week 6 (8-12 July)

The test is administered through Maple TA

It takes place in your usual computing lab class

You must sit the test in the tutorial in which you are enrolled\*

The test consists of problem-solving questions and lasts 50 min

MATLAB will be available as 'calculator' but it is NOT a MATLAB test

Weight: 25%

Details of the material to be assessed will be made available closer to date

<sup>\*</sup>unless you have prior written approval from the lecturer

#### Final examination

The final examination will take place in the examination period (August) It will assess your mastery of the material covering in the whole course

Weight: 60%

Details of the material to be assessed will be made available closer to date

#### References



Applied Statistics for Engineers and Scientists (2nd or 3rd Edition), by J. Devore and N. Farnum (Duxburry Press)

Additional references

Probability and Statistics for Engineers and the Sciences (7th Edition), by J. Devore (Duxburry)

Applied Statistics and Probability for Engineers (5th Edition), by D. Montgomery and G. Runger (Wiley)

**Slides** 

A copy of the slides is available on Moodle ('Lecture notes')

Other

All tutorial and laboratory material is available from Moodle as well → please check regularly for new material