



# PATHWAYS IN FIRST YEAR MATHS

MILAN PAHOR

Never Stand Still

Science

School of Mathematics and Statistics



# MATH1131- MATHEMATICS 1A

- **Largest first year course. Approx. 1300 students**
- **Has two components: Algebra, Calculus.**
- **There is also a computing component which students need to do independently (MAPLE).**
- **Assumed knowledge: NSW HSC Mathematics Extension 1,  $\geq 100/150$ . Students with only HSC Mathematics with  $\geq 85$  can still pass but it is a struggle.**
- **This course is required for all Engineering courses.**
- **Also available in Semester 2 for students who commence mid year or students who fail in semester 1. (Students can then finish MATH1231 Mathematics 1B in Summer).**



# MATH1141 Higher Mathematics 1A

- Approx. 450 students
- Assumed knowledge: NSW HSC Mathematics Extension 2,  $\geq 176/200$ . Students with only HSC Mathematics Extension 1 with  $\geq 145$  should be fine.
- Common tests with MATH1131 and exam has one common question out of 4.
- More HD and DN grades are given in this course - BUT students who are weak do fail this course.
- Has two components: Algebra, Calculus.
- There is also a computing component which students need to do independently (MAPLE).
- Offered Semester 1
- Students will continue with MATH1241 in semester 2
- Required for students in the Advanced Maths Programs



# MATH1011 Fundamentals of Mathematics 1B

- **Approx. 60 students**
- **Assumed knowledge: NSW HSC Mathematics.**
- **Has two components: Algebra, Calculus.**
- **There is also a computing component which students need to do independently. MAPLE.**
- **An alternative route for students with HSC Mathematics but not Extension 1 level and who need to take MATH1131, is as follows. Take MATH1011 Fundamentals of Mathematics B first as this provides the necessary bridging material to take MATH1131 Mathematics 1A in the next semester.**
- **Offered in semester or semester 2**



# MATH1031 Mathematics for the Life Sciences

- **Approx. 350 students**
- **Assumed knowledge: NSW HSC Mathematics.**
- **This course is for Life Science students or for programs where first year maths is required such as Aviation. It covers a lot of important applications for Mathematics to Life Science areas. Very interesting course!**
- **There is a computing component which students need to do independently (MAPLE).**
- **Offered in semester 1**



# MATH1041 Statistics for the Life Sciences

- **Approximately 360 students**
- **Assumed knowledge: NSW HSC Mathematics.**
- **This course is for Life Science students. It is an introductory course in Statistics which will be very useful future life science related work.**
- **The course is designed for students who intend not to take Maths or Stats as a major and who do not need to take additional maths courses past 1<sup>st</sup> year.**
- **Offered semester 1 and semester 2**



# MATH1151 Mathematics for Actuarial Studies & Finance

- Approximately 360 students
- Assumed knowledge: NSW HSC Mathematics Extension 2  $\geq 175/200$ . Extension 1  $\geq 140/150$  should be fine.
- This course is **ONLY** for Actuarial students. It is regarded as very hard.
- Has two components: Algebra, Calculus.
- There is also a computing component which students need to do independently. MAT- LAB.
- Offered semester 1
- Students will continue with MATH1251 in semester 2



# MATH1081 Discrete Mathematics

- **MATH1081 covers other areas of mathematics that are particularly relevant for computer science but also help students to develop their ability to think mathematically and logically.**
- **MATH1081 is compulsory for students in Computer Science and Software Engineering, and is optional for all other Engineering students. In particular, it is recommended for students in Electrical, Telecom, Photovoltaic & Solar and Computer Engineering as it will help them with their Computing courses.**
- **Compulsory for students enrolled in a Mathematics for Education major in the BSc/BEd, any study plan (except Quantitative Risk) in Advanced Mathematics and is recommended for all other maths or stats majors.**
- **Where compulsory, MATH1081 should be included in the first year of study, but students in the basic Science program 3970 are advised to postpone MATH1081 until their second year, or to at least Semester 2 of their first year.**
- **Offered semester 1 and semester 2**





# Mathematics Bridging Course

- **Some university programs assume an existing knowledge equivalent to HSC Mathematics Extension 1 (or "3 unit").**
- **Bridges the gap between the HSC Mathematics course (not the General Mathematics course) by teaching relevant topics of the HSC Mathematics Extension 1 course.**
- **A satisfactory grade in the Mathematics Bridging Course examination allows for enrolment in MATH1131 (in the following semester) which is a compulsory course in all engineering programs, mathematics programs and many science-based programs.**
- **If you do not have the above assumed knowledge for entry to MATH1131 you are advised to first complete the one semester course, MATH1011 General Mathematics 1B.**
- **The Mathematics Bridging Course provides 40 hours of tuition and the fee is \$380.**
- **Note: Mathematics Bridging Course participants are assumed to have an existing knowledge equivalent to HSC Mathematics, that is, the calculus based 2 Unit course.**
- **The Bridging course for Maths started Monday 21<sup>st</sup> Jan. It is not too late to enrol.**



SYDNEY INSTITUTE

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Randwick  
College

MORE THAN YOU IMAGINE



## Mathematics Essentials for Higher Education

This semester 1 program will be delivered in partnership with the University of New South Wales and will cover the contents from the two unit Mathematics and Extension1 Mathematics courses. It will be suitable for students who wish to improve their knowledge in Mathematics or are having difficulty with Mathematics in their first year of their chosen University Course. The program will be tailored to meet students' needs with a flexible timetable.

**Duration:** 6 weeks, 4 hours/week  
**Start Date:** 8 March 2013 and 29 April 2013  
**Location:** Randwick TAFE  
**Cost:** \$360

### Enrol Online:

Please email Customer Service [si.randwickenquiries@tafensw.edu.au](mailto:si.randwickenquiries@tafensw.edu.au),  
or [paul.reilly2@tafensw.edu.au](mailto:paul.reilly2@tafensw.edu.au) to obtain the web link.

### For further enquiries contact:

**Customer Service Centre**, Randwick College  
Phone: 9469 8539, Email: [si.randwickenquiries@tafensw.edu.au](mailto:si.randwickenquiries@tafensw.edu.au)  
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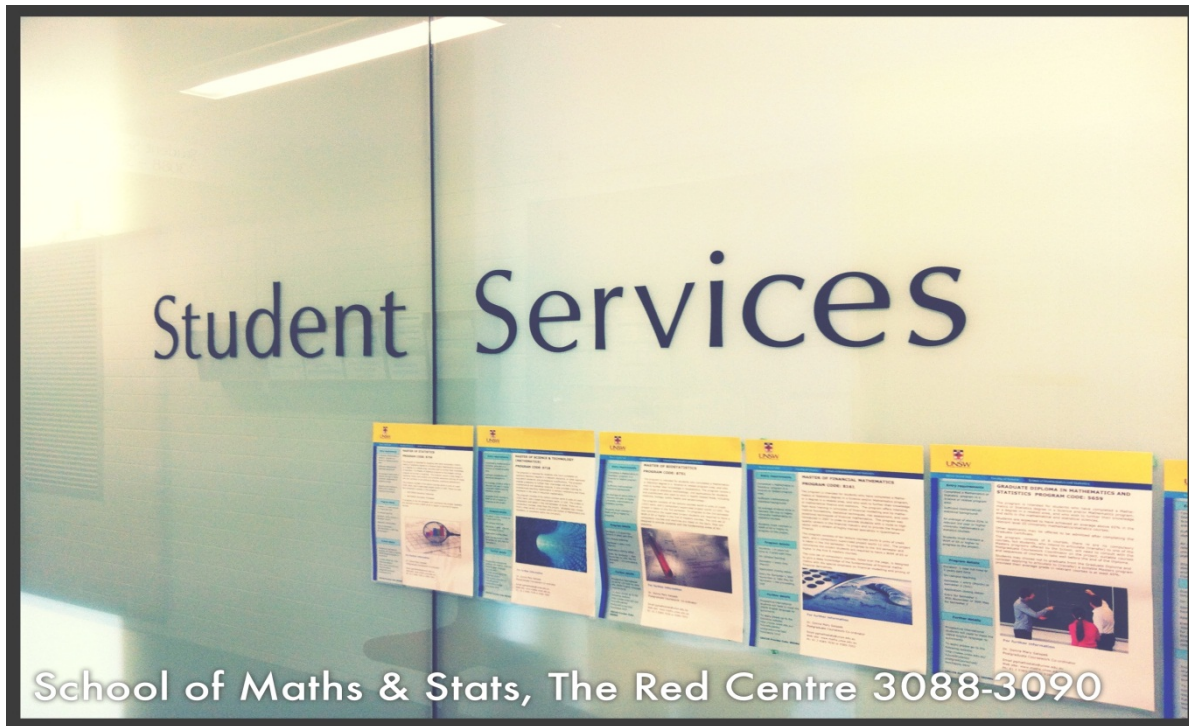
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# ASSISTANCE AVAILABLE

The Student Services Office for Mathematics and Statistics is located on Level 3 of the Red Centre (East Wing). Francy Fan Room 3090 primarily assists First Year Students but you are also able to consult Julie Hebblewhite Room 3088.



# Student Support Scheme

It is a drop-in centre service for first and second year students currently studying at UNSW.

## **FREE TUITION!**

SSS provides free one-on-one tutoring for students.

## **Semester 1 2013**

The SSS is open to all students currently enrolled in MATH1011, MATH1131, MATH1031 and MATH2019.

## **Venue**

The SSS is located in Room 3064 of the Red Centre. It is located to the left of the main office on the third floor of the centre wing.

