

***This course aims to:***

- provide students with a sound understanding of advanced functions and elementary calculus;
- show the relevance of these quantitative techniques to a wide range of real life problems;
- develop in the student, feelings of confidence towards further quantitative studies.

***What you will do on the Course***

Teaching methods will include:

- diagnostic testing to structure and monitor individual student programs
- structured sessions of lectures
- workshops where students work closely with a tutor – 1 tutor to 7 students
- individual time using the computer based teaching package
- group activities where real problems are tackled
- text book and numerous written materials including graded exercises

At all times, each student's individual needs will be recognised and addressed. To a large extent, each student will work at a pace which suits him/her and his/her background, adopting appropriate learning strategies from a range of options which have been developed and refined over a period of more than twenty years. Topics which students traditionally find difficult (for example, exponentials, logs, limits and calculus) will be presented not as 'magical' manipulations, but as tools needed to solve real problems.

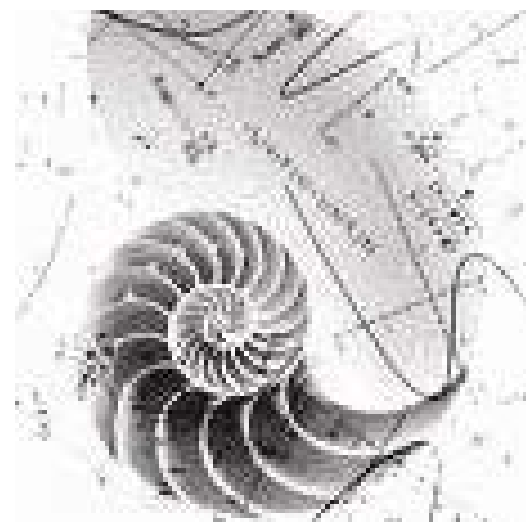
As students work through the course content they are tested on each major topic before moving on to the next topic. Testing consists of written examinations requiring mastery at 90%. The Statistics, Financial Mathematics and Operations Research components are assessed through written assignments.

***Specific Content of the Course***

The following topics will be covered during the course:

- basic algebra revision
- exponential and logarithmic functions
- the number  $e$
- cartesian and polar co-ordinates
- degrees and radians
- trigonometric ratios and functions
- inverse trigonometric functions
- periodic functions
- limits
- bounds
- sequences
- continuity
- differentiation
- derivatives of functions (logarithmic, exponential, trigonometric)

- applications of differentiation
- curve sketching
- simple differential equations
- integration
- definite and indefinite integrals
- integration by substitution and parts
- exploratory data analysis and elementary statistical inference
- financial mathematics
- operations research.



**FOR FURTHER DETAILS PLEASE CONTACT  
FLORENCE AMERY on (07) 3735 7512**



## **MATHEMATICS B BRIDGING COURSE**

### **Enrolment Form**

**NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

\_\_\_\_\_

**POSTCODE:** \_\_\_\_\_ **PHONE:** \_\_\_\_\_

**STARTING DATE:** 6<sup>th</sup> December 2010 / 22 November 2010 (*Pls circle*)

**TERTIARY COURSE PLANNED:** \_\_\_\_\_

**INSTITUTION YOU HOPE TO ATTEND:** \_\_\_\_\_

**FACULTY OR COURSE OF STUDY:** \_\_\_\_\_

**If you have any medical conditions that we should be aware of, please give details:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**PAYMENT OF COURSE FEE - \$580** (*No GST is levied on this fee*)

I enclose a cheque for \_\_\_\_\_ made payable to: *Griffith University*

**SIGNATURE:** \_\_\_\_\_

Credit Card facilities available. (Master, Visa, American Express)  
Phone the Cashier on 3735 7315 and quote the following information.

**ACCOUNT: 1404**

**SPEEDTYPE: 2134940**

**CLASS: 00000**

**Please post to:** Mathematics B Bridging Course  
Mrs. Florence Amery  
Griffith School of Environment  
Griffith University  
NATHAN, QLD 4111  
P: 3735 7512  
F: 3735 6717  
f.amery@griffith.edu.au