DEPARTMENT OF MATHEMATICS AND STATISTICS

Faculty of Science and Engineering



How to succeed in your Maths studies

There are things that will help you succeed with your Maths studies; here are some tips that might prove helpful

Attend all lectures

If you miss a lecture, you should use the ECHO recording to catch up as soon as possible. These recordings are not an equivalent experience to attending a lecture, and should only be used as a secondary source. If you miss a lecture for any reason, ECHO recordings are most helpful if you take notes as though you were in a lecture. They can also be used to revise particular points from a lecture if you feel you need clarification. Many students who rely solely on the ECHO recordings often get out of sync with SGTAs and end up falling behind.

Understanding and memory

The only resource available to you in exams is your own knowledge. This cannot be crammed in the last few weeks – it requires consistent study and problem solving throughout the semester.

Committing information to memory, and making it readily retrievable at test and exam time, is somewhat different to entering data into a computer. The best way to embed mathematical learning into a readily accessible memory, is to take an active consistent learning approach.

Active learning means:

- Reading up on the topic to be presented at your next lecture so you will have a better understanding of what your lecturer is explaining.
- Focussing intently on the lectures and taking notes.
- Reading over those notes as soon as possible after the lecture and filling in the gaps from your short-term memory.
- Attempting the SGTA exercises as soon as possible after the lecture, then discussing
 any questions you found problematic in your SGTA. You then need to go away and
 work on those problems yourself, having learnt how to solve them. This again helps
 with your understanding and strengthens your memory.

Studying Maths

Make a Study Timetable and place it above your study area; include your classes, study time, exercise time, sleeping, and social activities. It will help you to develop a study routine. Reward yourself after study time by doing things you enjoy, including regular exercise. Try to keep to the hours you have designated for each subject. Each Maths unit requires a commitment of around 12 hours per week, including time for lectures, SGTAs and study.

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Study Maths in small sessions – 1 to 2 hours at a time then go for a swim, walk, or do something else you enjoy. Study Maths when you are fresh and able to focus intently on the work. Of course, more hours may be necessary when you have an assessment task due, but spread these hours out over the days, well before the due date. Do not leave starting assignments to the last few days before they are due. Spread your assignment out so you have time to think about the problems and how to solve them.

SGTAs

You will be able to identify your strengths and weaknesses simply by working on the SGTA questions - you will soon find what you can and cannot do. Ask your tutor to help you with the problems with which you are having difficulty. Do not be shy about putting up your hand in class and requesting particular problems to be discussed. Other people in your class may be having the same problem. Having addressed these particular problems, it is good to go away and solve these questions again, by yourself, using what you remember of the class discussion.

Other resources available to you are the <u>Numeracy Centre</u> (The Atrium, Lower Ground Floor, 12 Wally's Walk), the weekly workshops and your lecturers during their consultation hours. However, do work on the problems yourself first before requesting assistance by going over your lecture notes and consulting the recommended textbook. This will focus your mind on this type of problem and will help to reinforce your understanding.

Assignments

Assignments are a very important component of Maths study as they give you the opportunity to use the mathematics you have learned in lectures and practiced in SGTAs. They are not intended to be worked on in one sitting, rather they should be thought about and understood over time, so download your assignment questions early. You will be advised in lectures, and possibly an iLearn announcement when an assignment is available to download. You should download it as soon as possible and start thinking about the problems. If you need assistance you can go to the Numeracy Centre. However, when it comes to writing up your assignment solutions, they must come from your understanding of the problems, not someone else's. We encourage you to discuss problems as you can learn a lot from your fellow students, and you can be helpful to them as well. Once this learning interaction has finished you should write your solutions alone as you understand them and not as dictated by, or copied from, someone else. The Department has a process for identifying plagiarism, and the penalties for this can be severe, from zero marks for both students to expulsion from the unit.

Check your student email & the announcements in iLearn

You will be notified in your student email when there are Announcements posted to iLearn. It is very important that you keep up with the information posted by your units, as we may wish to advise you that a due date has changed, or offer helpful advice, or advise you that assessment tasks are available for download.

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