

Get prepared!

Get into HSC Enrichment 2008

Biology
Chemistry
Physics

www.futurestudent.mq.edu.au/undergraduate



HSC Enrichment Program 2008

The HSC Enrichment Program is for Year 12 students doing their Higher School Certificate in NSW and the ACT in 2008. Courses are given by Macquarie University academics on core and elective subject areas of the HSC syllabus. Courses in the Program are science based and consist of one-day lectures. They are held at Macquarie University.

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Enquiries can be made to Caroline Taouk,
Science and Technology Liaison Officer,
Ph: (02) 9850 7383 or
email: caroline.taouk@vc.mq.edu.au

Important Information

- Macquarie University reserves the right to vary the program or to cancel if there are insufficient numbers by the closing dates of Friday 20 June 2008
- Courses cannot cover all aspects of the HSC syllabus in one day. Please refer to the programs contained in this brochure to ensure course suitability.
- Please note that numbers may be limited. Places will be allocated in order of receipt of payment and application form.
- Details of lecture venues will be forwarded with confirmation of your booking after Friday 20 June 2008.
- Do not lose your confirmation letter as you will need it for admission to lectures.
- Your confirmation letter will serve as a receipt.

Department of Chemistry and Biomolecular Sciences

Chemistry

MONDAY 14 JULY 2008

The Department of Chemistry and Biomolecular Sciences at Macquarie University will be providing an exciting one-day program on aspects of the HSC Chemistry syllabus to assist preparation for the HSC exam.

The day will consist of 6 lectures by expert academics on core topics of the HSC syllabus, along with an optional lecture on the elective Shipwrecks, Corrosion and Conservation (by popular demand). Each lecturer will discuss key concepts, past exam questions and give advice on model answers taking into consideration markers' comments from previous HSC papers. All of this information presented will be provided as a booklet to each participant upon registration on the day. This will be a valuable study resource.

Cost: \$60 (inc. GST, morning and afternoon tea and lunch).

Monday 14 July

8.30am – 9am	Registration
9am - 9.10am	Welcome by Head of Department
9.10am – 11am	The Production of Materials Electrochemistry Ethene, Polymers and Ethanol
11am – 11.20am	Morning Tea (will be provided)
11.20am – 1pm	The Production of Materials (cont.) Nuclear Chemistry The Acidic Environment
1pm – 1.40pm	Lunch (will be provided)
1.40pm – 3.30pm	Chemical Monitoring and Management Monitoring and Management in the Chemical Industry Chemistry and the Atmosphere Monitoring Water Quality
3.30pm – 3.45pm	Afternoon Tea (will be provided)
3.45pm – 4.45pm	Shipwrecks, Corrosion and Conservation (optional)

This lecture will be optional and will be run (at no extra cost) if there are sufficient numbers. Please note if you wish to attend this optional lecture you will need to specify this when booking your place for the HSC Chemistry Enrichment one-day program.

For more information about the Department of Chemistry and Biomolecular Sciences visit www.cbms.mq.edu.au

Physics

TUESDAY 15 JULY 2008

The department of Physics offers a one-day program on aspects of the HSC Physics syllabus. The day consists of three lectures each of 90 minutes duration which review and summarise the three core areas of the HSC Physics syllabus – Space, Motors and Generators, and From Ideas to Implementation. These lectures include demonstrations of various effects in physics. For the final one-hour session students attend a lecture on the option of their choice – Astrophysics, From Quanta to Quarks, and Medical Physics (lectures on the options of Geophysics and The Age of Silicon are not offered).

Cost: \$50 (inc. GST and morning tea). Students will need to either bring their lunch or buy their lunch on campus.

Tuesday 15 July

9am – 9.15am	Registration
9.15am - 9.30am	Introduction and Welcome
9.30am – 11am	Space
11am – 11.30am	Morning Tea (will be provided)
11.30am – 1pm	Motors and Generators
1pm – 2pm	Lunch (students will need to make their own arrangements)
2pm – 3.30pm	From Ideas to Implementation
3.35pm – 4.35pm	Options (Astrophysics, From Quanta to Quarks, Medical Physics)

These lectures will be optional and will be run (at no extra cost) if there are sufficient numbers. Please note if you wish to attend this optional lecture you will need to specify this when booking your place for the HSC Physics Enrichment one-day program.

For more information about the Department of Physics visit www.physics.mq.edu.au

Biology

WEDNESDAY 16 JULY 2008

The Department of Biological Sciences at Macquarie University is offering an intensive and stimulating day of Biology HSC Enrichment. Some of the material covered is very similar to lectures given in first year biology subjects at Macquarie University, allowing students to experience what learning at university is like. The day consists of three lectures by expert academics in the core topics of the HSC syllabus. For the final session students attend a lecture on the option of their choice – Communication, The Blueprint of Life or Genetics: The Code Broken? The lecturers will cover core content and add supplementary material that can be used as additional material in HSC exam answers.

Cost: \$50 (inc. GST and morning tea). Students will need to either bring their lunch or buy their lunch on campus.

Wednesday 16 July

9am – 9.15am	Registration
9.15am – 9.30am	Introduction and Welcome
9.30am – 10.40am	9.2 Core: Maintaining a Balance Cells /Homeostasis Nervous and endocrine systems Hormones Enzymes and enzyme activity
10.40am – 11.10	Morning tea (will be provided)
11.10am – 11.55am	9.4 Core: The Search for Better Health What is disease? / Koch's postulates Types of infectious agents Barriers to infection/ Immune defenses
11.55am – 12.55am	9.3 Core: Blueprint of Life DNA replication, translation, mutation Chromosomes, mitosis, meiosis, sex linkage Mendel Evidence for evolution
12.55pm - 1.45pm	Lunch (students will need to make their own arrangements)
1.45pm - 2.30pm	9.5 Option: Communication Non-human communication to companions/partners Avoiding predators from 'eavesdropping'
1.45pm - 2.30pm	9.7 Option Genetics: The Code Broken? Recombinant DNA technology Human genome project/Gene therapy/ Cloning
1.45pm - 2.30pm	9.8 Option: The Human Story Primate phylogeny/Fossil and anatomical evidence Molecular evidence Evolution in modern humans

Note: Option lectures are optional and will be run (at no extra cost) if there are sufficient numbers. Please note if you wish to attend an optional lecture you will need to specify this when booking your place for the HSC Biology Enrichment one-day program.

To find out more about the Department of Biological Sciences visit www.bio.mq.edu.au

Payment Details

Biology, Physics, Chemistry

Bookings and payments are required for the above listed courses.

Payments can be made by cheque, money order or credit card.

Unless accompanied by a medical certificate, refund requests for all July courses will not be accepted after Friday 20 June 2008.

This is a TAX INVOICE when payment is made to Macquarie University (ABN 90 952 801 237). Please retain for your records.

PROGRAM(S)

DATE

MR/MS FIRST NAME

SURNAME

TOTAL \$ (includes GST)

ADDRESS

SUBURB

POSTCODE

TELEPHONE

SCHOOL

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Macquarie University HSC ENRICHMENT PROGRAM 2008 APPLICATION FORM

Please complete all sections below, detach application form and return with your payment to:

Caroline Taouk, Science and Technology Liaison Officer,
Public Relations and Marketing Unit,
Macquarie University, North Ryde NSW 2109.

Please note closing dates for applications is Friday 20 June 2008.

Unless accompanied by a medical certificate, refund requests for all courses will not be accepted after Friday 20 June 2008.

Personal details

MR/MS

FIRST NAME

SURNAME

ADDRESS

SUBURB

POSTCODE

TELEPHONE

EMAIL

SCHOOL

Course/s to enrol in (please tick all courses you wish to enrol in)

- Chemistry 14 July 2008
- Chemistry 14 July 2008 Option (No extra charge):
 - Shipwrecks, Corrosion and Conservation
- Physics 15 July 2008
- Physics 15 July 2008 Option (No extra charge):
 - Astrophysics

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From Quanta to Quarks

Medical Physics

Biology 16 July 2008

Biology 16 July 2008 Option (No extra charge):

Communication

Genetics: The Code Broken

The Human Story

Payment details

I would like to pay by (please tick option)

Cheque (payable to Macquarie University)

Money order OR

Credit card

Visa MasterCard Bankcard

Card number:

Expiry date:

Amount:

I hereby authorise

Macquarie University to deduct the total fees from my credit card.

Signature: