



NUI Galway
OÉ Gaillimh

***Coláiste na hEolaíochta
College of Science***

**Selection of 2nd Year
Undenominated Science
Subjects (2BS1)**

Advisory Session 2010/2011
Wednesday, 31st March 2010
Venue: Aula Maxima (Ground Floor)
Time: 2.00 - 6.00 pm

Attendance is compulsory

ADVISORY SESSION 2010/2011

Wednesday, 31st March 2010

Venue: Aula Maxima (Ground Floor)

Time: 2.00 - 6.00 pm

INSTRUCTIONS

- 1. Read all instructions carefully.**
- 2. Look at the compatibility of subjects when making choices.**
- 3. Attend the Advisory Session and obtain advice on subject choices.**
- 4. Carefully complete your Subject Choice Selection Form.**
- 5. Return Subject Choice Selection Form (by hand and sign that you have submitted it) to the College of Science Office by the deadline: Friday, 21st May 2010.**
- 7. You will be notified by the College of Science Office on which subjects you have been allocated following the release of examination results.**
- 8. Register for these subjects at Registration in September.**

The 2010-11 Information Booklet is valid for that Session. Whilst every effort is made to ensure the contents of the Information Booklet are accurate, the Information Booklet is issued for the guidance of students and staff only. The Information Booklet is not an offer to supply courses of study nor is it in any way to be construed as imposing any legal obligation on the College of Science or University to supply courses either at all or in part in respect of any subject. No guarantee is given that courses, syllabuses, fees or regulations may not be altered, cancelled or otherwise amended at any time. The Information Booklet confers no rights on any student registered for the Session 2010-11.

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Welcome
from the
Dean of Science

Advisory Session

Wednesday, 31st March 2010

Welcome

Firstly, I would like to take this opportunity to congratulate you on your achievements to date and to wish you a pleasant summer.

To assist you in a smooth return to your 2nd Year next academic year, the College of Science has compiled this Advisory Session booklet which will provide you with all the initial necessary information. As you may know, you are required to select your 2nd Year subjects in April/May this year. This is to allow the College Office sufficient time to make the necessary administrative arrangements to allocate slots to each student in the relevant discipline/schools for 2010/11 and, equally importantly, to allow individual disciplines to plan in advance for the coming academic year in the light of actual dispersal of students across all disciplines/schools of the College. As you were informed in your First Year Booklet, a quota system will apply to the allocation of places in 2nd Year subjects in 2010/11. For Health and Safety reasons, and to prevent overcrowding of small disciplines/schools, we have had to restrict the number of students who will be permitted to take certain subjects. Places have been increased for other subjects. Places available in each subject will be allocated in strict order of merit (i.e., based on overall first year result). You are required to complete the attached subject selection form carefully and return it to the College of Science Office by **Friday, 21st May 2010** deadline. You are also advised to attend the Advisory Session on 31st March 2010 in the *Aula Maxima (Ground Floor)* from 2.00 - 6.00 pm to obtain academic advice on the various options available to you in 2nd Year. A change of mind in terms of one or more subject(s) after registration in September may only be entertained if a place is still available in the subject(s) in question. However, such requests must be submitted on or before Wednesday, 15th September 2010.

In this booklet, you will find a list of all the available subjects on offer for the academic session 2010/2011. Also included is a list of

- (1) Incompatible Subject Combinations (including 20 ECTS and 10 ECTS Credit subjects) listing also the first year prerequisite subjects for each 2nd year subject, and
- (2) Compatible (20 ECTS Credit subjects only) subjects for ease of reference,
- (3) A general timetable,
- (4) Marks and Standards, etc.

Due to timetabling some subject combinations are **not** possible. The list of Incompatible Subject Combinations shows which combinations are **not** possible for each subject. This information has been incorporated on the computerised Student Record System and it will prevent you from registering for incompatible subjects. Therefore, when making a decision on your subject choices, **please refer carefully to this list and note in particular the guidelines appearing on page 25 (compatible subject combinations).**

On Registration Day, to ensure a smooth and timely operation of registration, it is imperative that each student has already obtained advice on their subject selections and knows exactly what to register for as informed by the College Office.

The College of Science Office staff will also be available to meet with students at the Advisory Session and to discuss any queries that may arise. We hope to make the Advisory Session and Registration process as smooth as possible for you.

I hope you find your 2nd Year of University life enjoyable and successful.

Dr. Gerry Morgan,
Dean, College of Science

Information

for

Students

Information for Students

Please read these instructions *carefully* before the Advisory Session on 31st March 2010.

Please note:

- **Students must attend the Advisory Session.**
- **Students must fill in and return, by hand, their choice selection form by 21st May 2010.**
- **All places will be allocated in order of merit. If you fail to respond to the College Office by the deadline of 21st May 2010, your choice of subjects will inevitably be restricted as the available slots in all disciplines/schools (including smaller disciplines/schools whose places are limited due to Health and Safety considerations) will be allocated, in the first instance, to those students who reply on time.**
- **Students who do not register on the Registration Day will be liable for a €200 Late Registration Fee.**

1. Subject Listing for 2nd Year.

A list of subjects together with their breakdown of modules, weightings, etc. is listed on pages 17 - 19. Students are required to register for 60 ECTS Credits, which can be made up in the following manner:

20 + 20 + 20 **or** 20 + 20 + 10 + 10

Each student must take at least two 20 ECTS courses from different subject areas.

Students must list all of their choices on their registration forms in September.

- In the case of a subject where all modules are obligatory, only the Level 1 code need be listed on the registration form, e.g., CH201: Chemistry (as students are obliged to take all Level 2 chemistry modules).
- In the case of a subject where choices are available both the Level 1 code and the Level 2 codes must be indicated, e.g., AS200: Applied Mathematical Science has a list of module choices of which students must select four. Therefore the choices must also be listed, e.g., AS200: MA211, MA212, MP205 and MP206.

2. Incompatible Subject Combinations

There is an Incompatible Options listing available also for each subject. This means that if a student wishes to take, for example, BI201: Biochemistry, he/she will be unable to select any of the subjects listed below BI201. This is due to timetabling clashes (lecture/examination) between subjects. The Student Record System will prevent students registering for incompatible subjects at registration. Therefore, when selecting subjects, this list of Incompatible Subject Combinations must be referred to carefully. An Incompatible Options listing for 3rd Year is included as well. **Some combinations that are available in 2nd Year are not available in 3rd Year.** The 3rd Year Incompatible Options list should therefore be checked carefully to ensure that the subject selection made can be continued in 3rd Year.

3. Compatible Subject Combinations

To further assist in making your selections/choices, a table highlighting the 20 ECTS Credit subjects which **can** be taken together is also included. This table should be referred to in order to double-check the compatibility of your subject selections.

4. Prerequisites

There is also a Prerequisite listing for each subject. In order to register for a subject, the student must have taken the required prerequisite(s) in the previous year, e.g., SI201: Physiology - the prerequisites are BO101: 1st Year Biology and PH101 or PH110: 1st year Physics (through English or Irish). If a student does not meet the prerequisite(s), he/she cannot register for the subject.

5. Advice on Subject Selection

At the Advisory Session, each discipline will have an advisory desk at which members of staff will be available for discussion of subject selection. Once you receive advice, you should carefully complete your subject choice selection form, referring to the incompatible or the compatible subject listings. This must be returned by **21st May 2010**. If you fail to meet this deadline, the available places in each discipline will be allocated in the first instance to the students who respond on time and, consequently, your subject choices will be severely limited.

Ollscoil na hÉireann, Gaillimh/National University of Ireland, Galway

Coláiste na hEolaíochta/College of Science

1. **The Academic Year**

The session will be organised as follows:

<i>Semester I:</i>	6 th September 2010 – 27 th November 2010
<i>Study Week:</i>	begins Monday, 29 th November 2010
<i>Examinations:</i>	6 th December 2010 – 17 th December 2010
<i>Semester II:</i>	10 th January 2011 – 2 nd April 2011
<i>Study Week:</i>	week of 4 th April 2011
<i>Examinations (Summer):</i>	15 th April 2011 – 20 th April 2011
<i>Easter Vacation:</i>	Thursday 21 st April 2011 – Wednesday, 27 th April 2011
<i>Examinations (Summer) cont'd:</i>	28 th April 2011 – 20 th May 2011
<i>Examinations (Autumn Repeat):</i>	3 rd – 17 th August 2011

2. **Advisory Session and Registration:**

You are required to attend the Advisory Session to obtain necessary and relevant up-to-date information on subject selection on the date stipulated (*Wednesday, 31st March 2010*). You are required to register on the date stipulated in your registration material. The Registration Office is not empowered to accept registrations after the specified registration date.

Course Registration

Subject listings for your programme are enclosed. You must complete the subject registration in accordance with this instruction. Modules to a total of 60 ECTS Credits must be taken.

3. **Lecture Timetables**

A general timetable is enclosed on page 38. Detailed timetables for each subject containing venue, etc., will be available from discipline offices. **They will not be available from the College Office.**

4. **Examination Timetable – Semester I**

The examination timetable will be posted on notice boards during the semester.

5. **Honours and Pass Level**

All subjects are lectured on and examined at honours level with the exception of Mathematics and Mathematical Physics where there are separate pass and honours courses. Applied Mathematical Science is available at pass level only.

6. **Subject and Course Changes**

Changes after submission of your subject selection form (*21st May 2010*) will only be permitted by the College of Science Office if there are places available

in the discipline/school in question after registration. However, such requests must be submitted on or before Wednesday, 15th September 2010.

7. Examination Entry

Subject registration also includes Examination Entry. You will not be required to complete another form. The importance of correct registration and course selection is therefore emphasised.

8. Examinations

8.1 Date

Examinations are held at the end of Semester I (December) and Semester II (May/June). However, examinations in some modules/subjects are held only at the end of Semester II (Summer).

8.2 Autumn Examinations

There are Autumn (repeat) examinations in Second Science usually held in August.

8.3 Time-limit

Students must complete the Second Science Examination within two academic years of having passed the First Science Examination.

8.4 Deferral

The College of Science considers applications for the deferral of examinations, where grounds of ill health, bereavement or other circumstances can be established to the satisfaction of the College. If in doubt, please consult with a member of the College of Science Office. Application can be made by contacting the College of Science Office to arrange an appointment with the Dean/College Office Staff initially and completing a Deferral Form, which is available from the College Office. Deferred examinations are held in the Autumn examination session (August) only.

9. Calculation of Second Science Results

The results of the Semester I examinations will be combined with Semester II results to give an overall result.

- (a) Students who **pass a 20 ECTS Credit subject on the average** between Semester I and Semester II whilst failing a 10 ECTS Credit component will not be required to repeat the failed component.
- (b) Students who **fail a 20 ECTS Credit subject on the average** between Semester I and Semester II will be permitted to retain grades of the component passed until the next sitting and will be required to repeat only the failed element. A repeat examination for courses failed in Semester I will be held in Autumn.

Results of Semester I examinations should be regarded as **Provisional** as no Examination Board meeting will be held following the Semester I examinations. Grades will be communicated verbally to students by 1st

February 2011 at the latest, by the Course Director listed in the Calendar if possible. Alternatively, grades may be posted on appropriate notice boards, listing all students taking the module together with their ID numbers (**not** students' names). Please note that these grades will **not** be issued to students by the Examinations Office or the College Office.

The Grades applicable will be as follows:

Percentage Range	Grade
70 -100%	A
60 - 69%	B
55 - 59%	C+
50 - 54%	C-
40 - 49%	D
35 - 39%	E+
30 – 34%	E-
0 – 29%	F

10. Information and Support Services

As a student of the College of Science, if you are confused by any aspect of your programme, by the registration requirements or if you are experiencing personal difficulties or any difficulties in your academic programme, you are strongly recommended to seek advice and support from the academic staff, the Dean, the University Offices and the Student Support Services of the University. Timely support may be the key to your success in the programme and to a level of achievement which does you justice.

College of Science Offices

Dean of Science	Professor Tom Sherry	Room 210 Concourse	Ext. 3615
Administrative Officer	Mr. Kilian Dooley	Room 208 Concourse	Ext. 4166
Administrative Assistant	Ms. Claire Mitchell	Room 207 Concourse	Ext. 3700
Administrative Assistant	Ms. Cora Costello	Room 209 Concourse	Ext. 3630
Administrative Assistant	Ms. Olive Mills	Room 211 Concourse	Ext. 2182

Code of Practice
for dealing with
Plagiarism

Code of Practice for dealing with Plagiarism

Introduction

1. Plagiarism is the act of copying, including or directly quoting from, the work of another without adequate acknowledgement. The submission of plagiarised materials for assessment purposes, plagiarism in publication or in public presentation is fraudulent and all suspected cases will be investigated and dealt with appropriately by the University following the procedures outlined here and with reference to the Disciplinary Code.
2. All work submitted by students for assessment purposes, for publication or in public presentation, is accepted on the understanding that it is their own work and written in their own words except where explicitly referenced using the accepted norms and formats of the appropriate academic discipline.
3. Whilst some cases of plagiarism can arise through poor academic practice with no deliberate intent to cheat, this still constitutes a breach of acceptable practice and requires to be appropriately investigated and acted upon.
4. Regulations, guidelines and procedures regarding plagiarism should be made widely available and a statement included in course handbooks, websites, departmental noticeboards or appropriate handouts to students. Plagiarism can arise through ignorance and therefore it is important to ensure that students understand what is meant by the term and the seriousness of the offence.
5. Schools are recommended to consider requiring students to sign a short declaration that work submitted by them for assessment purposes, for publication or in public presentation, is their own and that such a statement may be attached to a submitted piece of coursework, essay or dissertation (or signed at the start of each course/ academic year, acknowledging that the student has read and understood the plagiarism regulations). The purpose of this statement is to reinforce the principle of statement (2) above and to remind students of the requirements for the submission of a formally marked assessment.
6. Cases in which students knowingly permit others to copy their work shall also be subject to the procedures outlined here and considered an offence.

Procedures

7. A small number of staff should be identified in each College who would have responsibility for dealing with suspected and reported cases of plagiarism¹.

¹ This is in keeping with best practice recommendations from the UK's JISC Plagiarism Advisory Service and also reflects practice in a number of institutions. Whilst it may seem like an additional burden in terms of administration, it offers a number of advantages of either leaving the responsibility to the lecturer involved or indeed, the Head of Department. In some universities each department identifies one such staff member, in others, a single staff member may span a number of subjects within a broad "cognate area." Further, having a small number of such staff clearly identified, across the university, who can readily be trained in such issues, ensures consistency of practice. It also enables "fast-tracking" of "minor" or admitted offences and responds to the outcome of *Flanagan vs University College Dublin* (1988, <http://www.ucc.ie/law/irlji/cases/159jr-88.htm>), as do the remainder of these guidelines.

These staff are Designated Authorities, as described in the NUI Galway Student Code of Conduct.

8. These staff should be trained on the basic issues, be made aware of current best practice guidelines; techniques for minimising, detecting and responding to plagiarism; and current national and international developments across the HE sector.
9. A member of teaching staff who suspects that a submitted piece of student work may be plagiarised should notify the appropriate plagiarism advisor in their College/cognate area. A short report including a copy of the suspected example and any evidence for plagiarism should be forwarded to the advisor.
10. The plagiarism advisor shall conduct an investigation of the alleged plagiarism, firstly determining whether it represents a “minor” or “major” offence.
11. Minor cases are those in which the suspected plagiarism is a first offence and represents poor academic practice. Such cases include:
 - apparently innocent misuse of materials;
 - inadequate citation such as poor referencing, inappropriate paraphrasing;
 - over-reliance on sources without sufficient of the candidate’s own work;
 - those in which the suspected plagiarism represents only a small proportion of the work and/or an element in a piece of work which makes a small contribution to the mark for the module
12. The advisor will, in such cases, normally interview the candidate to discuss the suspected plagiarism.
13. If the advisor is satisfied that there is sufficient evidence of such an offence, the student will be given a written warning and provided with advice on avoiding plagiarism and the necessity of properly acknowledging and referencing sources.
14. Major cases are those which may include, for example:
 - copying multiple paragraphs in full without acknowledgement of the source;
 - taking essays from the Internet without revealing the source;
 - copying all or much of the work of a fellow student with, or without, his/her knowledge or consent;
 - submitting the same piece of work for assessment under multiple modules;
 - those involving a final year undergraduate or postgraduate student (taught or research);
 - a second offence where the student has been in receipt of an earlier written warning.

15. In consideration of possible major cases, the student will be notified, in writing, of the suspected offence, provided with a copy of the marked-up piece of work and invited to attend an interview with the plagiarism advisor and an additional member of staff².
16. The student will have the right to be accompanied and assisted, at the interview, by a “friend.”³
17. At the interview, the student will be given a clear explanation of what has been alleged, shown a copy of his/her work, given the opportunity to justify the work and be invited to admit or deny responsibility.
18. In such major cases, where the advisor is satisfied that an offence has occurred, the advisor is required to determine between three possible courses of action, depending on the apparent severity of the offence:
 - (a) an opportunity to repeat and resubmit the work, but where the maximum mark that can be awarded is the pass mark appropriate to the module;
 - (b) the immediate imposition of an academic penalty, which would normally be the award of zero marks to the plagiarised work, with no option to resubmit the work;
 - (c) the submission of the case for consideration by the university’s Discipline Committee.
19. In all cases, the student will be notified in writing of the decision of the advisor and any penalty imposed.
20. In keeping with the University’s Code, the student shall be entitled to appeal a decision to the Appeals Board.
21. An appropriate record should be kept⁴ in respect of any upheld allegation, which can be consulted by the plagiarism advisor to determine whether a new case is potentially a second, or subsequent, offence.
22. Basic statistical information covering the number of cases referred to advisors, the number of written warnings and other penalties applied and their distribution across Departments and Faculties, should be collated by the University to inform subsequent modifications to these regulations and ascertain the requirement for wider training and information dissemination on this topic.

² For example, the Head of Department, a senior staff member in the department, or another plagiarism advisor.

³ As used in the University’s Code. This may, for example, be a parent or guardian; a fellow student or other friend; a representative from the Students’ Union; or a legal representative, if so desired.

⁴ By the appropriate University office.

Subject Codes

and

List of Course
Subjects

Subject Codes for 1st Year Undenominated Science

BO101:	Biology
CH101:	Chemistry
CH107:	Cemic
CS102:	Computer Science
PH101:	Physics
PH110:	Fisic
EOS104:	Introduction to Earth and Ocean Sciences
MA100:	Mathematics (Pass)
MA180:	Mathematics (Honours)
MA102:	Anailís & Algéabar (Onoracha)
MP103:	Introduction to Mathematical Physics

List of Second Year Undenominated Course Modules (2BS1)

Key:

AN: Anatomy	CS: Computing Studies	PH: Physics
AS: Applied Mathematical Science	EOS: Earth & Ocean Sciences	PM: Pharmacology
BI: Biochemistry	MA: Mathematics	SI: Physiology
BT: Botany	MP: Mathematical Physics	ZO: Zoology
CH: Chemistry	MI: Microbiology	

Level 1	Level 2	Module Name	ECTS Credits	Taught Sem I or Sem II	Exam Sem I or Sem II	Exam Duration	No. of Exam Papers	Course Director
AN202	AN220.I	Human Anatomy I	10	I	I	2 hours	1	Dr. Garcia
	AN220.II	Human Anatomy II	10	II	II	2 hours	1	Dr. Garcia
AS200	Please select any four modules from the options available within AS200 to a total of 20 ECTS Credits							
	MA211	Calculus I	5	I	I	2 hours	1	Head of School of Maths
	MA212	Calculus II	5	II	II	2 hours	1	Head of School of Maths
	MA203	Algebra	5	II	II	2 hours	1	Head of School of Maths
	MA204	Discrete Mathematics	5	I	I	2 hours	1	Head of School of Maths
	MA237	Statistics I	5	I	I	2 hours	1	Head of School of Maths
	MA238	Statistics II	5	II	II	2 hours	1	Head of School of Maths
	MM245	Numerical Analysis I	5	I	I	2 hours	1	Head of School of Maths
	MM246	Numerical Analysis II	5	II	II	2 hours	1	Head of School of Maths
	MP205	Methods of Mathematical Physics I	5	I	I	2 hours	1	Head of School of Maths
	MP206	Methods of Mathematical Physics II	5	II	II	2 hours	1	Head of School of Maths
	MP212	Mechanics I	5	I	I	2 hours	1	Head of School of Maths
	MP213	Mechanics II	5	II	II	2 hours	1	Head of School of Maths
	MA215	Mathematical Molecular Biology I	5	I	I	2 hours	1	Head of School of Maths
	MA216	Mathematical Molecular Biology II	5	II	II	2 hours	1	Head of School of Maths
BI201	BI204	Biomolecules in the Cell	10	I	I	3 hours	1	Dr. Byrnes
	BI205	The Cell Factory	10	II	II	3 hours	1	Dr. Byrnes
BT201	BT216	Aquatic Plant Science I: an introduction to the biology, ecology and physiology of aquatic plants	10	I	I	3 hours	1	Dr. Stengel
	BT217	Plants and the Environment: an introduction to terrestrial plant ecology	10	II	II	3 hours	1	Dr. Sheehy Skeffington
CH201	CH203	Physical Chemistry 2	5	I	I	2 hours	1	Dr. Leech
	CH204	Inorganic Chemistry 2	5	I	I	2 hours	1	Prof. Mc Ardle
	CH202	Organic Chemistry 2	5	II	II	2 hours	1	Dr. O'Leary
	CH205	Analytical & Environmental Chemistry	5	II	II	2 hours	1	Dr. Ryder
CS201	CS211	Programming and Operating Systems	5	I	I	2 hours	1	Head of School of Maths

<i>Level 1</i>	<i>Level 2</i>	<i>Module Name</i>	<i>ECTS Credits</i>	<i>Taught Sem I or Sem II</i>	<i>Exam Sem I or Sem II</i>	<i>Exam Duration</i>	<i>No. of Exam Papers</i>	<i>Course Director</i>
CS201	CS209	Algorithms and Scientific Computing	5	I & II	II	2 hours	1	Head of School of Maths
	CT232	Methodology	5	I	I	2 hours	1	Ms. Griffith
	CT233	Information Systems	5	II	II	2 hours	1	Ms. Griffith
EOS218	EOS221	Fundamental Skills in EOS I	10	I	Con. Ass.		1	Dr. Henry
	EOS220	Fundamental Skills in EOS II	10	II	Con. Ass.		1	Dr. Feely
PH201	PH211	Electricity Magnetism & Electrical Circuits	5	I	I	2 hours	1	Head of School of Physics
	PH212	Mechanics, Oscillations and Waves	5	I	I	2 hours	1	Head of School of Physics
	PH213	Modern Physics	5	II	II	2 hours	1	Head of School of Physics
	PH214	Thermodynamics	5	II	II	2 hours	1	Head of School of Physics
MA200	MA203	Linear Algebra	5	II	II	2 hours	1	Head of School of Maths
	MA204	Discrete Maths	5	I	I	2 hours	1	Head of School of Maths
	MA211	Calculus I	5	I	I	2 hours	1	Head of School of Maths
	MA212	Calculus II	5	II	II	2 hours	1	Head of School of Maths
MA280	MA283	Algebra Mathematics	5	II	II	2 hours	1	Head of School of Maths
	MA284	Discrete Maths	5	I	I	2 hours	1	Head of School of Maths
	MA286	Analysis I	5	I	I	2 hours	1	Head of School of Maths
	MA287	Analysis II	5	II	II	2 hours	1	Head of School of Maths
MI201	MI211	The Microbial Cell	10	I	I	3 hours	1	Dr. O'Byrne
	MI212	Microbes and the Environment	10	II	II	3 hours	1	Dr. O'Byrne
MP200	MP205	Methods of Mathematical Physics I	5	I	I	2 hours	1	Head of School of Maths
	MP206	Methods of Mathematical Physics II	5	II	II	2 hours	1	Head of School of Maths
	MP212	Mechanics I (Pass)	5	I	I	2 hours	1	Head of School of Maths
	MP213	Mechanics II (Pass)	5	II	II	2 hours	1	Head of School of Maths
MP280	MP207	Methods of Mathematical Physics I (Hons)	5	I	I	2 hours	1	Head of School of Maths
	MP208	Methods of Mathematical Physics II (Hons)	5	II	II	2 hours	1	Head of School of Maths
	MP204	Mechanics (Hons)	10	I & II	II	3 hours	1	Head of School of Maths
PM202	PM203	Fundamentals of Pharmacology I	10	I	I	2 hours	1	Dr. Welsby
	PM204	Fundamentals of Pharmacology II	10	II	II	2 hours	1	Dr. Welsby
SI201	SI216	Physiology I	10	I	I	2 hours	1	
	SI218	Physiology II	10	II	II	2 hours	1	
ZO201	ZO205	Invertebrate Zoology	10	I	I	3 hours	1	Dr. Schlosser
	ZO206	Vertebrate Zoology	10	II	II	3 hours	1	Dr. Schlosser
10 ECTS Credit Subjects								
BT216	BT216	Aquatic Plant Science 1: an introduction to the biology, ecology and physiology of aquatic plants	10	I	I	3 hours	1	Dr. Stengel

<i>Level 1</i>	<i>Level 2</i>	<i>Module Name</i>	<i>ECTS Credits</i>	<i>Taught Sem I or Sem II</i>	<i>Exam Sem I or Sem II</i>	<i>Exam Duration</i>	<i>No. of Exam Papers</i>	<i>Course Director</i>
BT217	BT217	Plants and the Environment: an introduction to terrestrial plant ecology	10	II	II	3 hours	1	Dr. Sheehy Skeffington
CH207	CH207	Computers in Chemistry	10	I	Con. Ass			Dr. Geraghty
EOS212	EOS212	Sediments and the Biosphere I	10	II	II	2 hours	1	Dr. Murray
EOS213	EOS213	Introduction to Ocean Sciences	10	I	I	2 hours	1	Dr. Cave
FR252	FR252	French	10	I & II	II	3 hours	1	Prof. Ó Gormaille
GR224	GR224	Beginner's German for Science	10	I & II	II	3 hours	1	Dr. Ryan
GR252	GR252	Improvers I Science - German	10	I & II	II	3 hours	1	Prof Bourke
MA201	MA211	Calculus I	5	I	I	2 hours	1	Head of School of Maths
	MA212	Calculus II	5	II	II	2 hours	1	Head of School of Maths
MA293	MA203	Algebra	5	II	II	2 hours	1	Head of School of Maths
	MA204	Discrete Mathematics	5	I	I	2 hours	1	Head of School of Maths
MA209	MA215	Mathematical Molecular Biology I	5	I	I	2 hours	1	Head of School of Maths
	MA216	Mathematical Molecular Biology II	5	II	II	2 hours	1	Head of School of Maths
ST299	MA237	Statistics I	5	I	I	2 hours	1	Head of School of Maths
	MA238	Statistics II	5	II	II	2 hours	1	Head of School of Maths
MM255	MM245	Numerical Analysis I	5	I	I	2 hours	1	Head of School of Maths
	MM246	Numerical Analysis II	5	II	II	2 hours	1	Head of School of Maths
MP201	MP205	Methods of Mathematical Physics I	5	I	I	2 hours	1	Head of School of Maths
	MP206	Methods of Mathematical Physics II	5	II	II	2 hours	1	Head of School of Maths
MP202	MP212	Mechanics I	5	I	I	2 hours	1	Head of School of Maths
	MP213	Mechanics II	5	II	II	2 hours	1	Head of School of Maths

Please note: Under AS200: students must take the following module combinations:

MA211 + MA212 MM245 + MM246 MA215 + MA216

MA203 + MA204 MP212 + MP213

MA237 + MA238 MP205 + MP206

Under AS200: students cannot take the following combinations:

MA211 + MA212 cannot be taken with MA203 + MA204

MP205 + MP206 cannot be taken with MP212 + MP213

Incompatible
Subject Combinations
for 2nd Year
Undenominated Science

Incompatible Subject Combinations for 2nd Year Undenominated Science 2010/11 (20 ECTS Credit Subjects)

Key:

AN: Anatomy	CH: Chemistry	MA: Mathematics	PM: Pharmacology
AS: Applied Mathematical Science	CS: Computing Studies	MI: Microbiology	SI: Physiology
BI: Biochemistry	EOS: Earth & Ocean Science	MM: Numerical Analysis	ZO: Zoology
BT: Botany	FR: French	MP: Mathematical Physics	
	GR: German	PH: Physics	

Subject Choice	AN202	BI201	BT201	CH201	CS201	EOS218	MA200	MA280	MP200	MP280	MI201	PH201	PM202	SI201	ZO201
Incompatible options	CS201	EOS218	BT216	MM255	AN202	AN202	MA201	AN202	AN202	BT201	PH201	BT201	CS201	BT201	PH201
	EOS218	MM255	BT217		EOS218	BI201	MA280	MA200	BT201	BT216	MA200	BT216	EOS218	BT216	MA200
	MA209		PH201		EOS212	CS201	MA293	MA201	BT216	BT217	MA201	BT217	EOS212	BT217	MA201
	MA280		MP200		EOS213	MA209	MI201	MA293	BT217	MP200	MA280	EOS212	MA200	PH201	MA280
	MP200		MP201		MA209	MM255	PM202	MI201	MP201	MP201		MI201	MA280	MP200	MP200
	MP202		MP280		PM202	PM202	ZO201	PM202	MP202	MP202		SI201	MA293	MP201	MP201
			SI201					ST299	MP280	SI201		ZO201	MA209	MP202	MP280
								ZO201	SI201	ZO201			ST299	MP280	
								ZO201							
Prerequisites	BO101 & (PH101 or PH110)	BO101 & (PH101 or PH110) & (CH101 or CH107)	BO101	CH101 or CH107	CS102	None	MA100 or MA180 or MA102	MA180 or MA102 (result = 50% +)	MP103	MP103 (result = 50% +)	BO101 & (CH101 or CH107)	PH101 or PH110	BO101 & (PH101 or PH110)	BO101 & (PH101 or PH110)	BO101

Please also check 3rd Year Incompatible subjects to ensure that you can continue your subject selections.

**Incompatible Subject Combinations for 2nd Year Undenominated Science
2010/2011 (10 ECTS Credit Subjects)**

Subject Choice	BT216	BT217	CH207	EOS212	EOS213	FR252	GR224	GR252	MA201	MA293	MA209	ST299	MM255	MP201	MP202
Incompatible options	BT201	BT201		AN202	AN202	GR252	GR252	FR252	MA200	MA200	AN202	EOS212	BI201	BT201	AN202
	PH201	PH201		CS201	CS201	GR224	FR252	GR224	MA280	MA201	CS201	MA280	CH201	BT216	MP200
	MP200	MP200		PH201	MA209				MA293	MA280	EOS213	PM202	EOS218	BT217	MP280
	MP201	MP201		PM202					MI201	PM202	EOS218			MP200	SI201
	MP280	MP280		ST299					ZO201		PM202			MP280	
	SI201	SI201												SI201	
														ZO201	
Prerequisites	BO101	BO101	CH101 or CH107	None	None	None	None	None	MA100 or MA180 or MA102	MA100 or MA180 or MA102	MA100 or MA180 or MA102	MA100 or MA180 or MA102	MA100 or MA180 or MA102 or MP103	MP103 or MA100 or MA180 or MA102	MP103

Please also check 3rd Year Incompatible subjects to ensure that you can continue your subject selections.

Compatible
Subject Combinations
for 2nd Year
Undenominated Science

Compatible Subjects Combinations for 2nd Year Undenominated Science 2010/2011 (20 ECTS Credit Subjects only)

	Anatomy	Biochem	Botany	Chemistry	Comp Stud	EOS218	Maths P	Maths H	Micro	Maths Physics P	Maths Physics H	Physics	Pharmacology	Physiology	Zoology
Anatomy		YES	YES	YES			YES		YES		YES	YES	YES	YES	YES
Biochemistry	YES		YES	YES	YES		YES	YES	YES	YES	YES	YES	YES	YES	YES
Botany	YES	YES		YES	YES	YES	YES	YES	YES				YES		YES
Chemistry	YES	YES	YES		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Comp Studies		YES	YES	YES			YES	YES	YES	YES	YES	YES		YES	YES
EOS218			YES	YES		YES	YES	YES		YES	YES	YES		YES	YES
Mathematics P	YES	YES	YES	YES	YES	YES				YES	YES	YES	YES	YES	
Mathematics H		YES	YES	YES	YES	YES				YES	YES	YES	YES	YES	
Microbiology	YES	YES	YES	YES	YES					YES	YES			YES	YES
Maths Physics P		YES		YES	YES	YES	YES	YES	YES			YES	YES		
Maths Physics H	YES	YES		YES	YES	YES	YES	YES	YES			YES	YES		
Physics	YES	YES		YES	YES	YES	YES	YES		YES	YES		YES		
Pharmacology	YES	YES	YES	YES					YES	YES	YES	YES		YES	
Physiology	YES	YES		YES	YES	YES	YES	YES	YES				YES		YES
Zoology	YES	YES	YES	YES	YES	YES			YES					YES	

Guidelines for Choosing Compatible Subject Combinations

If you are taking three 20 ECTS Credit subjects in 2nd Year, you should, before reaching a decision on preferred subject combinations, refer carefully to the above table to ensure that all your preferred options are compatible.

If they are **not** compatible, you will **not** be able to take the combination.

For instance, if you wish to take Biochemistry, Microbiology and Physiology, you must check:

- (1) that Biochemistry is compatible with Microbiology,
- (2) that Biochemistry is compatible with Physiology, and
- (3) that Microbiology is compatible with Physiology.

Explanation
of Third Year
Undenominated Science
Module Codes

Explanation of Third Year Undenominated Science Module Codes

Please note that some combinations which are available in 2nd Year are not available in 3rd Year. The 3rd Year Incompatible Options list should therefore be checked carefully to ensure that the subject selection made in 2nd Year can be continued in 3rd Year.

In Third Year, students are required to take 60 ECTS Credits, which can be made up in the following manner:
36 + 24 **or** 36 + 12 + 12 **or** 24 + 24 + 12 **or** 24 + 12 + 12 + 12

However, please note, Undenominated Science students who wish to take a biological subject (i.e., Anatomy, Biochemistry, Botany, Microbiology, Pharmacology, Physiology and Zoology) in third year **must** select another 24 or 36 ECTS subject. Choices therefore are 36 + 24 **or** 24 + 24 + 12.

Students who wish to specialise in the following subjects will be exempt from this requirement: Chemistry, Computer Science, Earth and Ocean Sciences, Mathematics (Honours), Mathematical Physics (Honours), Physics.

Subjects worth 36 or 24 ECTS Credits:

AN310:	Anatomy
AM380:	Applied Mathematics (36 ECTS Credits)
AS300:	Applied Mathematical Science
BI320:	Biochemistry
BT301:	Botany
CH301:	Chemistry
CS322:	Computer Science
EOS306:	Earth Sciences I
EOS307:	Earth Sciences II
EOS308:	Ocean Sciences
EOS309:	Environmental Geosciences
PH350:	Physics (36 ECTS Credits)
MA300:	Mathematics (Pass)
MA380:	Mathematics (Hons) (36 ECTS Credits)
MP300:	Mathematical Physics (Pass)
MI330:	Microbiology
PM302:	Pharmacology
SI330:	Physiology
ZO301:	Zoology

Subjects worth 12 ECTS Credits:

BI306:	Human Nutrition	PH358:	Physics
BT316:	Plant Ecology and Palaeoecology	PH358:	Electronic Systems and Signals/Thermal Physics and Materials
BT317:	Aquatic Plant Science II: ecology and utilisation	PH359:	Computational Physics/Quantum Physics
CH328:	Molecular Modelling and Drug Design	PH361:	Astrophysics
CH327:	Validation and Industrial Chemistry	FR352:	French
EH303:	Applied Hydrology	GR224:	Beginner's German for Science
EH305:	Hydrology and Hydrogeology	GR252:	Improvers German I - Science
EOS311:	Environmental Geoscience	GR353:	German
EOS312:	Sediments and Biosphere 2	GT301:	Genetics
EOS313:	Marine Geoscience	MA209:	Mathematical Molecular Biology
EOS314:	Igneous and Metamorphic Petrology	MA357:	Statistics
EOS315:	Plate Tectonics and Structural Geology	MA304:	Advanced Calculus/Complex Variable
EOS327:	Field Techniques in Earth and Ocean Sciences (EOS)	MA303:	Linear Algebra
PH317:	Occupational Hygiene	MM255:	Numerical Analysis
PH327:	Physics of the Environment	MM355:	Numerical Analysis
PH357:	Wave Optics/Nuclear and Plasma	MP201:	Methods of Mathematical Physics

MP303: Quantum Mechanics (Pass)
MP306: Modelling
MP311: Methods of Mathematical Physics and
Computing
MP324: Quantum Mechanics (Honours)
MP362: Methods of Mathematical Physics
MR323: Introduction to Marine Ecology I
MR324: Introduction to Marine Ecology II
PM304: Basic Pharmacology
PM305: Principles of Toxicology
SI317: Human Body Function
SI321: Physiology I
SI323: Endocrinology and Reproduction
ST299: Statistics
NS311: Neuropharmacology/Neurophysiology
NS305: Neuroanatomy/Neuropharmacology
NS310: Neuroanatomy/Neurophysiology

Incompatible

Subject Combinations

for 3rd Year

Undenominated Science

Incompatible Subject Combinations for 3rd Year Undenominated Science (24 ECTS Credit Subjects)

Key:

AN: Anatomy	CH: Chemistry	FR: French	MI: Microbiology	NS: Neurosciences
AS: Applied Mathematical Sci.	CS: Computing Studies	GR: German	MM: Mathematics/Mathematical Physics	PH: Physics
BI: Biochemistry	EH: Hydrology	GT: Genetics	MP: Mathematical Physics	PM: Pharmacology
BT: Botany	EOS: Earth & Ocean Sciences	MA: Mathematics	MR: Marine Ecology	SI: Physiology
				ZO: Zoology

Subject Choice	AN310	BI320	BT301	BT301 Cont'd	CH301	CS322	CS322 Cont'd	EOS306	EOS306 Cont'd	EOS307	EOS307 Cont/d	EOS308	EOS308 Cont'd	EOS309	EOS309 Cont'd	EP350	EP350 Cont'd
Incompatible options	CS321	CS321	BI306	MR324	BI306	AN310	PM304	AN310	MP362	BI320	PH327	AN310	PM302	AN310	PM302	BT301	SI321
	CS322	CS322	BT316	NS305	BT301	BI306	SI317	BI306	MR324	BT301	PH350	BI320	SI317	BI320	SI321	BT316	SI323
	EOS213	EOS306	BT317	NS310	BT316	BI320		BI320	NS305	BT316	PH358	BT301	SI321	CS322	SI323	BT317	SI330
	EOS306	EOS307	CH301	NS311	BT317	BT301		BT301	NS311	CH301	PM302	BT316	SI323	EOS306	SI330	CH301	ZO301
	EOS308	EOS308	CH327	PM302	EOS213	BT317		BT316	PH317	CS321	PM305	CH301	SI330	EOS308	ST299	CH327	
	EOS309	EOS309	CH328	SI317	EOS307	CS321		CS322	PH327	CS322	SI317	EOS309	ST299	EOS311		CH328	
	EOS311	EOS311	CS322	SI321	EOS308	EOS306		EOS309	PH361	EOS213	SI321	EOS312		EOS313		CS322	
	EOS313	EOS312	EOS306	SI323	EOS312	EOS307		EOS311	PM302	EOS308	SI323	EOS313		GT301		EOS307	
	MA209	EOS314	EOS307	SI330	MA380	EOS309		EOS312	ST299	EOS312	SI330	GT301		MA209		EOS308	
	MA300	EOS327	EOS308		MM354	EOS311		EOS314		EOS314	ST299	MA209		MA300		EOS312	
	MA303	MP300	EOS312		MR324	EOS314		EOS315		GT301		MA357		MA303		MA380	
	MA380	MP311	EOS315		NS310	EOS327		GT301		MA300		MA380		MA357		MI330	
	NS305	MR323	MA300		NS311	FR352		MA209		MA304		MI330		MA380		MR324	
	NS310	MR324	MA303		PH350	MM354		MA300		MA357		MR323		MI330		NS310	
	PH361	PM305	MA380		PH357	MR323		MA303		MA380		NS310		MM354		NS311	
	PM304	SI317	MM255		PH358	MR324		MA357		MI330		NS311		MP303		PH317	
			MP201		PH359	PH350		MI330		MP303		PH317		MP362		PH357	
			PH350		SI321	PH357		MM354		MR323		PH327		NS310		PH358	
			PH357		SI323	PH358		MP303		NS310		PH350		PH317		PH359	
			PH358		SI330	PH359		MP311		NS311		PH358		PH327		PM305	
		PH359		ZO301	PM302		MP324		PH317		PH361		PH361		SI317		
Co-requisites							MP201 unless MA200 or MP200 or MP280 taken in 2 nd Year		EOS327		EOS327		EOS327		EOS327		
Pre-requisites	AN202	BI201	BT201		CH201	CS201		EOS218		EOS218		EOS218		EOS218		PH201	

Incompatible Subject Combinations for 3rd Year Undenominated Science (24 ECTS Credit Subjects)

Subject Choice	MA300	MA380	MA380 Cont'd	MP300	MI330	PM302	SI330	ZO301
Incompatible options	AN310	AN310	SI323	BI320	CH327	BI306	BT301	CH301
	BT301	BT301	SI330	EOS306	CH328	BT301	BT316	EOS213
	BT316	BT316	ST299	EOS307	EOS306	BT316	BT317	MM354
	BT317	BT317		EOS309	EOS307	BT317	CH301	MP300
	EOS213	CH301		EOS313	EOS308	CH327	CS322	MP311
	EOS306	CH327		EOS314	EOS309	CH328	EOS307	MP324
	EOS307	EOS213		EOS315	EOS311	CS322	EOS308	NS311
	EOS309	EOS307		GT301	EOS312	EOS306	EOS309	PH350
	EOS311	EOS308		MI330	EOS313	EOS307	EOS312	PH357
	EOS314	EOS309		MM354	EOS314	EOS308	EOS313	PH358
	MA209	EOS313		MP303	EOS315	EOS309	MA300	PM302
	MA303	EOS314		MP311	MA300	EOS311	MA303	
	MA304	GT301		MP324	MA304	EOS312	MA380	
	MA357	MA300		MP362	MA357	EOS315	MM255	
	MA380	MA303		PH327	MA380	GT301	MR324	
	MI330	MA304		PM302	MM255	MA380	NS310	
	MM255	MA357		ZO301	MP300	MM354	NS311	
	MR324	MI330			MP303	MP201	PH317	
	NS305	MM255			MP311	MP300	PH350	
	NS310	MR324			MP324	MP311	PH357	
	NS311	NS310			MP362	MP324	PH358	
	PH361	NS311			PH317	MP362	PH359	
	PM305	PH350			PH327	MR323	PH361	
	SI321	PH357			PH350	MR324	SI317	
	SI323	PH358			PH357	NS305	SI321	
	SI330	PH359			PH358	NS311	SI323	
		PH361			PH359	PM304		
	PM302			PM305	SI317			
	PM305			SI317	ZO301			
	SI321			ST299				
Pre-requisites	MA200 <i>or</i> MA280	MA280 (50%)		MP201 <i>or</i> MP200 <i>or</i> MP280	MI201	PM202	SI201	ZO201

Incompatible Subject Combinations for 3rd Year Undenominated Science (12 ECTS Credit Subjects)

Subject Choice	BI306	BT316	BT317	CH328	CH327	CS321	EOS213	EOS311	EOS312	EOS313	EOS314	EOS315	EOS327	
Incompatible options	BT301	BI306	BI306	BT301	BT301	AN310	AN310	AN310	BI320	AN310	BI320	BI306	BI320	
	BT316	BT301	BT301	BT316	BT317	BI320	BI306	BI320	BT301	EOS308	CS321	BT301	CS322	
	BT317	CH301	CH301	GT301	GT301	CS322	CH301	CS322	BT316	EOS309	CS322	BT316	MR324	
	CH301	CH328	CH327	MI330	MA380	EOS307	EOS307	EOS306	CH301	MA209	EOS213	EOS213	CS321	
	CS322	EOS306	CS322	MR323	MI330	EOS314	EOS314	EOS309	CS322	MA380	EOS306	EOS306		
	EOS213	EOS307	MA300	NS305	MR324	EOS327	EOS315	GT301	EOS307	MI330	EOS307	GT301		
	EOS306	EOS308	MA303	NS311	PH317	MR323	MA209	MA209	EOS308	MP303	MA300	MI330		
	EOS315	EOS312	MA380	PH317	PH350	MR324	MA300	MA300	GT301	NS310	MA304	MM354		
	MA380	EOS315	MM255	PH350	PH359	PM304	MA303	MA303	MA357	PH327	MA380	MP303		
	MR324	PH350	MP201	PH359	PM302	SI317	MA380	MA357	MI330	PH361	MI330	MP311		
	NS305	PH357	MR324	PM302			MM354	MI330	MR323	SI321	MP303	MP324		
	NS311	PH358	PH350	SI317			NS305	MP362	NS310	SI323	MR323	MP362		
	PM302	PH359	PH357				NS310	MR324	NS311	SI330	NS311	NS305		
	ZO301	MA300	PH358				PH350	NS310	PH317		PH317	NS311		
		MA303	PH359				PH359	PH317	PH350		PH327	PH317		
		MA380	PM302				PH361	PH361	PH358		PM305	PH327		
		MM255	SI321				ZO301	PM302	PM302		SI317	PM302		
		MP201	SI323						SI317					
		MR324	SI330						SI321					
		NS305							SI323					
		NS310							SI330					
		NS311												
		PM302												
	SI317												EOS306 or	Co-requisites
	SI330												EOS307 or	
	SI321												EOS308 or	
	SI323												EOS309	
Pre-requisites	BI201 <i>or</i>	BT201 <i>or</i>	BT201 <i>or</i>	CH201	CH201	CS201 <i>or</i>	None	EOS218	EOS212 <i>or</i>	EOS218	EOS214 <i>or</i>	EOS104	EOS104	
	MI201 <i>or</i>	BT217	BT216			MA100 <i>or</i>			EOS218		EOS218			
	SI201					MA180 <i>or</i>								
						MA102 <i>or</i>								
						MP103 <i>or</i>								
					MP180									

Incompatible Subject Combinations for 3rd Year Undenominated Science (12 ECTS Credit Subjects)

Subject Choice	FR352	GR224	GR252	GR353	GT301	MA209	MA357	MA304	MA303	MM255	MM354	MP201	MP303	MP311
Incompatible options	GR224	FR352	GR224	GR224	CH327	AN310	EOS306	EOS307	AN310	BT301	BI306	BT301	CS322	BI320
	GR252	GR252	GR353	GR252	CH328	EOS213	EOS307	EOS314	BT301	BT316	CH301	BT316	EOS306	EOS306
	GR353	GR353	FR352	FR352	CS322	EOS306	EOS308	MA300	BT316	BT317	EOS213	BT317	EOS307	EOS315
					EOS306	EOS308	EOS309	MA303	BT317	MA300	EOS306	MR324	EOS309	GT301
					EOS307	EOS309	EOS311	MA357	EOS213	MA303	EOS309	NS305	EOS313	MI330
					EOS308	EOS311	EOS312	MA380	EOS306	MA304	EOS315	NS311	EOS314	MM354
					EOS309	EOS313	MA300	MI330	EOS309	MA357	MA380	PM302	EOS315	MP300
					EOS311	MA300	MA304	MM255	EOS311	MA380	MP300		GT301	MP324
					EOS312	MA303	MA380	PM305	MA209	MI330	MP311		MI330	MP362
					EOS315	NS305	MI330		MA300	MM354	MP324		MP300	PH317
					MA380	NS310	MM255		MA304	MR324	NS311		PH327	PM302
					MP300	PH361	PH317		MA380	NS310	PH350			ZO301
					MP303	PM304			MM255	NS311	PH359			
					MP311				MR324	SI321	PM302			
					MP362				NS305	SI323	ZO301			
					MR323				NS310	SI330				
					MR324				NS311					
					PM302				PH361					
									SI321					
									SI323					
									SI330					
Pre-requisites	FR252	None	None	GR252	BO101	MA100 or MA180 or MA102	ST299	MA201	MA293	MA100 <i>or</i> MA180 <i>or</i> MA102 <i>or</i> MP103 <i>or</i> MP180	MM255	MA100 <i>or</i> MA180 <i>or</i> MA102 <i>or</i> MP103 <i>or</i> MP180	MP201 <i>or</i> MP200 <i>or</i> MP280	MP201 <i>or</i> MP200 <i>or</i> MP280

Incompatible Subject Combinations for 3rd Year Undenominated Science (12 ECTS Credit Subjects)

Subject Choice	MP324	MP362	MR323	MR324	NS305	NS310	NS311	NS311 Cont'd	PH317	PH327	PH357	PH358	PH359
Incompatible options	EOS306	EOS306	BI320	BI306	AN310	AN310	BI306	SI323	CH327	EOS306	BT301	BT301	BT301
	EOS315	EOS309	CH328	BI320	BI306	BT301	BT301	SI330	CH328	EOS307	BT316	BT316	BT316
	MA380	EOS311	CS321	BT301	BT301	BT316	BT316	ZO301	EOS306	EOS308	BT317	BT317	BT317
	MI330	EOS315	CS322	BT317	BT316	CH301	CH301		EOS307	EOS309	CH301	CH301	CH301
	MM354	GT301	EOS307	CH301	CH328	EOS213	CH328		EOS308	EOS313	CS322	CS322	CH327
	MP300	MI330	EOS308	CH327	EOS213	EOS307	EOS306		EOS309	EOS314	MA380	EOS307	CH328
	MP311	MP300	EOS312	CS321	EOS306	EOS308	EOS307		EOS311	EOS315	MI330	EOS308	CS322
	MP362	MP311	EOS314	CS322	EOS315	EOS309	EOS308		EOS312	MI330	PH350	EOS312	EOS213
	PM302	MP324	GT301	EOS306	MA209	EOS311	EOS312		EOS314	MP300	PM305	MI330	MI330
	ZO301	PM302	PM302	EOS309	MA300	EOS312	EOS314		EOS315	MP303	SI321	MR324	MM354
			PM305	EOS311	MA303	EOS313	EOS315		MA357	PH317	SI323	NS310	PH317
			SI317	EOS327	MP201	MA209	MA300		MI330		SI330	NS311	PH350
				GT301	NS310	MA300	MA303		MP311		ZO301	PH350	SI317
				MA300	NS311	MA303	MA380		NS311			SI321	SI321
				MA303	PH361	MA380	MM255		PH327			SI323	SI323
				MA380	PM302	MM255	MM354		PH350			SI330	SI330
				MM255	PM304	NS305	MP201		PH359				ZO301
				MP201	SI317	NS311	NS305		SI317				
				PH350		PH350	NS310		SI321				
				PH358		PH358	PH317		SI323				
				PM302		PH361	PH350		SI330				
				SI321		PM304	PH358						
				SI323		SI321	PM302						
				SI330		SI323	SI317						
						SI330	SI321						
Pre-requisites	MP280 <i>or</i>	MP201 <i>or</i>	BO101	BO101	Any 2 of	Any 2 of	AN201 <i>or</i>		(PH101 <i>or</i> PH110)	(PH101 <i>or</i> PH110)	PH201	PH201	PH201
	MA280	MP200 <i>or</i>			AN201 <i>or</i>	AN201 <i>or</i>	BI201 <i>or</i>		and	and			
		MP280 <i>or</i>			BI201 <i>or</i>	BI201 <i>or</i>	PM202		(CH101 <i>or</i> CH107)	(CH101 <i>or</i> CH107)			
					PM202	PM202	Or SI201						
					Or SI201	Or SI201							

Incompatible Subject Combinations for 3rd Year Undenominated Science (12 ECTS Credit Subjects)

Subject Choice	PH361	PM305	PM304	SI317	SI321	SI323	ST299
Incompatible options	AN310	EOS307	AN310	BI320	BT301	BT301	EOS306
	EOS213	EOS314	CS321	BT301	BT316	BT316	EOS307
	EOS306	MA300	CS322	BT316	BT317	BT317	EOS308
	EOS308	MA304	MA209	CH328	CH301	CH301	EOS309
	EOS309	MA357	NS305	CS321	CS322	CS322	MA357
	EOS311	MA380	NS310	CS322	EOS307	EOS307	MA380
	EOS313	MI330	PM302	EOS307	EOS308	EOS308	MI330
	MA209	MM255		EOS308	EOS309	EOS309	
	MA300	PH350		EOS312	EOS312	EOS312	
	MA303	PH357		EOS314	EOS313	EOS313	
	MA380	PM302		MI330	MA300	MA300	
	NS305			MR323	MA303	MA303	
	NS310			NS305	MA380	MA380	
	SI321			NS311	MM255	MM255	
	SI323			PH317	MR324	MR324	
	SI330			PH350	NS310	NS310	
				PH359	NS311	NS311	
				PM302	PH317	PH317	
				SI330	PH350	PH350	
					PH357	PH357	
					PH358	PH358	
					PH359	PH359	
					PH361	PH361	
					SI323	SI321	
					SI330	SI330	
Pre-requisites	PH201	Any two of the following	Any two of the following	None	SI201	SI201	MA100 <i>or</i> MA180 <i>or</i> MA102
		BI201,	CH201,				
		CH201,	BI201,				
		SI201	SI201				
		PM202					

2nd Year

Timetable

2010/11

2nd Year TIMETABLE 2010/2011

AN: Anatomy	EOS: Earth & Ocean Sciences	MP: Mathematical Physics
AS: Applied Mathematical Science	FR: French	PH: Physics
BI: Biochemistry	GR: German	PM: Pharmacology
BT: Botany	MA: Mathematics	SI: Physiology
CH: Chemistry	MI: Microbiology	ZO: Zoology
CS: Computing Studies	MM: Numerical Analysis	

L = Lecture; PR = Practical; S1 = Semester 1; S2 = Semester 2

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9.00 – 10.00	L MI201	L PH201 L ZO201	L MP200 L MP201 L MP280 L ZO201	L BT201 L BT216 (S1) L BT217 (S2) L PH201 L SI201	L MP200 L MP202 L MP280 (S2) L SI201
10.00 – 11.00	PR AN202 L BT201 L BT216 (S1) L BT217 (S2) L MP200 L MP201 L MP280 L SI201	L BT201 L BT216 (S1) L BT217 (S2) L PH201 PR MI201	PR AN202 L CH201 PR CS201	L PH201 L MI201	PR AN202 PR BI201 L CH201
11.00 – 12.00	PR AN202 L MA200 L MA201 L MA280 L ZO201	L AN202 L MP200 L MP202 PR MI201	PR AN202 PR CS201 L MA200 L MA201 L MA280 L MI201	PR AN202 L BI201 L EOS221 (S1) L EOS220 (S2) L EOS218 L EOS219 (S1) PR ZO201	PR AN202 PR BI201 L MA200 L MA280 L MA293
12.00 – 1.00	L BI201 L EOS221 (S1) L EOS220 (S2) L EOS218 L EOS219 (S1) L MM255	PR FR252 PR MI201	L CH201 L ST299	PR AN202 L BI201 L EOS220 (S2) L EOS218 (S2) PR EOS221 (S1) PR EOS218 (S1) PR EOS219 (S1) PR ZO201	PR BI201 L CH201 L MM255
1.00 – 2.00	L AN202 L EOS213 (S1) L EOS212 (S2) L EOS219 (S2)	L AN202 L CS201 L EOS213 (S1) L MA209	L MA200 L MA280 L MA293 PR MI201 L PM202	PR EOS221 (S1) PR EOS218 (S1) PR EOS219 (S1) L MA209 L PM202	L CS201 L EOS212 (S2) L EOS221 (S1) L EOS218 (S1) L EOS219 L PM202

2.00 – 3.00	PR BT201 PR BT216 (S1) PR BT217 (S2) PR CH201 L CH207 (S1) PR CS201 PR MI201	PR BI201 PR CH201 L EOS212 (S2) L EOS219 (S2) PR PH201 PR PM202 L ST299	PR CH201 PR PH201 PR MI201 L MP280 PR SI201	PR BI201 PR CH201 L CS201 PR EOS220 (S2) PR EOS218 (S2) PR PH201	L MP280 PR SI201 L ZO201
3.00 - 4.00	PR BT201 PR BT216 (S1) PR BT217 (S2) PR CH201 L CH207 (S1) PR CS201 PR MI201	PR BI201 PR CH201 PR EOS213 (S1) PR EOS212 (S2) PR EOS219 (S2) PR PH201 PR PM202	PR CH201 L CS201 PR PH201 PR MI201 PR SI201	PR BI201 PR CH201 L CS201 PR EOS220 (S2) PR EOS218 (S2) PR PH201	PR EOS213 (S1) PR SI201
4.00 – 5.00	PR BT201 PR BT216 (S1) PR BT217 (S2) PR CH201 L CH07 (S1) PR MI201 L ST299	PR BI201 PR CH201 PR EOS213 (S1) PR EOS212 (S2) PR EOS219 (S2) PR PH201 PR PM202 L ST299	PR CH201 PR PH201 PR SI201	PR BI201 PR CH201 PR EOS220 (S2) PR EOS218 (S2) PR PH201 PR ZO201	PR EOS213 (S1) PR SI201
5.00 – 6.00	PR BT201 PR BT216 (S1) PR BT217 (S2) L CH207 (S1) L CT250 (S1) PR FR252	PR EOS213 (S1) PR EOS212 (S2) PR EOS219 (S2) PR PH201	L EOS213 (S1) PR PH201	PR EOS220 (S2) PR EOS218 (S2) PR PH201 PR ZO201	PR EOS213 (S1)

Practicals:

- AN202 Students must attend one practical session per week, chosen by the discipline of Anatomy on the basis of their other subject combinations.
- BI201 Tuesday or Thursday
- BT201 2-4 or 4-6 on Mondays.
- CH201 Students must attend one practical session per week – whichever fits in best with their timetable
- CS201 Students must attend Monday or Wednesday sessions.
- EOS219: Taken only by Marine Science students
- FR252 Student must attend one practical/lab hour session.
- GR252 Students must attend all lectures and language labs as provided by the German discipline.
- GR224 Students must attend all lectures and language labs as provided by the German discipline.
- MI201 One of the three Lab Practicals
- MM255 Computing Practical Tuesday 5 – 7 pm or 7 - 9 pm.
- MP280 Students attend four lectures per week in Semester I and five lectures per week in Semester II.
- PH201 Tuesday or Wednesday* or Thursday - *Wednesday practical is held only if class numbers exceed 80
- PM202 Students must attend Tuesday session.
- SI201 Students must attend Wednesday or Friday sessions.
- ST299 Students attend two lectures per week Monday or Tuesday and Tuesday or Wednesday.
- ZO201 Students must attend one Thursday session.

MARKS

AND

STANDARDS

2010/2011

MARKS AND STANDARDS 2010/2011

SECOND UNIVERSITY EXAMINATION IN SCIENCE (Including Denominated Degree Programmes)

Course Instance	• 2BO1, 2BPA1, 2BPC1, 2BPM1, 2BPP1, 2BS1, 2BY1, 2CS1, 2EH1, 2EV1, 2FM1, 2HF1, 2MR1	Duration of Course	12 months
Course Type	Bachelor	NQAI Level	Level 8
Title (in full)		Full/Part Time	Full Time
ECTS (per yr)	60 ECTS	Mode of Study	Taught
Marks	Marks returned out of 100%		
Board Meetings	1 st Sitting - <input type="checkbox"/> Spring <input checked="" type="checkbox"/> Summer <input type="checkbox"/> Autumn <input type="checkbox"/> Winter 2 nd Sitting - <input type="checkbox"/> Spring <input type="checkbox"/> Summer <input checked="" type="checkbox"/> Autumn <input type="checkbox"/> Winter		
Marks Entry	<input checked="" type="checkbox"/> Results will be returned at level 2 and an aggregated result will be calculated up to Level 1.		

Honours	Honours awarded at the subject level (level 1)	
Honours and Pass Standards <i>Please choose the appropriate % for each Grade relevant to this course instances</i>	H1	70%
	H2	N/A
	H21	60%
	H22	50%
	Pass	40%
	<i>Honours will be removed at every level where a student fails overall.</i>	
All Years: 1/2/3/4th	A student can reach a 40% pass on the aggregate mark within a group or subject (from level 2 to level 1 only) where a student has excess credits in other modules within that same group / subject which are equal to single deficiency, minimum mark 30%.	
Years 1 and 2 only Pass by Compensation	Candidates who do not fall below 35% (at level 1 only) in 15 ECTS (Year 1) / 20 ECTS (Year 2) may be deemed to have passed if they obtain excess marks above the pass standard in the other groups / subjects equivalent to double the deficiency	
Year 3 only Pass on 40% Average Rule	A student who has failed a Level 1 stand-alone subject of 12 ECTS value or less will be deemed to have passed the Third Year Examination provided: <ul style="list-style-type: none"> • An average mark of 40% or more is obtained across all 60 ECTS Credits and • Provided that a minimum mark of 30% has been obtained in the failed Level 1 stand-alone subject. 	
Honours Rules	Honours can be awarded in 1 st <input checked="" type="checkbox"/> and / or 2 nd <input type="checkbox"/> Sitting NOTE: Candidates who pass by compensation are not eligible for honours.	
Award <i>(where applicable)</i>	Based on final year -or- Final year and penultimate year to the benefit of the student <input type="checkbox"/> Final Year alone (100%) of the penultimate year and of the final year <input type="checkbox"/> Either of the above to the benefit of the student	
Carrying Forward	Yes <input checked="" type="checkbox"/>	A candidate fails the examination as a whole, but has obtained a passing mark or more in one or more subjects, they can be carried forward.
	No <input type="checkbox"/>	
Progression Rules	<input checked="" type="checkbox"/>	Candidates must clearly pass one year in order to progress to the next year
	<input type="checkbox"/>	Not Applicable
Special Requirements <i>(where applicable)</i> <u>No longer than 3 lines</u>	3HF2: Health & Safety Systems <u>Note:</u> (i) Third Year Health & Safety Systems (3HF) students must complete the Professional Experience Programme (PEP) element of the course, or equivalent exercise as specified by the	

	<p>programme director, in the period between Semester II (Spring) examinations and commencement of the following academic year. Except in exceptional circumstances, approved by the College of Science, students who fail to meet this requirement will not be permitted to proceed to Fourth Year.</p> <p>(ii) Third Year Health & Safety Systems (3HF) Examinations take place in Semester I and in Spring, with supplemental/repeat examinations in Autumn. Students failing more than two Level 2 subjects (24 ECTS) at the Summer examination board, will not normally be allowed to re-sit at that Autumn's examinations.</p> <p><i>Note: Where there are specific Course Requirements to be passed outright or 0 ECTS (Pass/Fail) modules on the course structure please give details including the module code</i></p>
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Created by Sheila Coyle and Grainne Morahan on behalf of the Academic Records Office

ADDITIONAL INFORMATION

SECOND UNIVERSITY EXAMINATION IN SCIENCE (Including Denominated Degree Programmes)

Results of Semester I examinations will be communicated to students by means of the following grades:

Percentage	Grade
70-100	A
60-69	B
55-59	C+
50-54	C-
40-49	D
35-39	E+
30-34	E-
0-29	F

Examinations for Second Science will be held at the end of Semester I or the end of Semester II. The results of Semester I examinations will be incorporated with Semester II results to give an overall result. A candidate who passes a Level 1 subject on the average between Semester I and Semester II whilst failing a Level 2 module component at not less than 30%, will not be required to repeat the failed component. A candidate who fails a Level 1 subject on the average between Semester I and Semester II will be permitted to retain any passed Level 2 module component, but will be required to repeat the failed component. Repeat examinations for subjects failed either in Semester I or Semester II will be held in the Autumn.

Capping of Repeat Examination Results:

Repeat Examination Results (for 2nd and subsequent sittings) will be capped at 40% in each module repeated.

Progression to Third Year:

NOTE: Undenominated Science students who wish to take a biological subject (*i.e.*, Anatomy, Biochemistry, Botany, Microbiology, Pharmacology, Physiology and Zoology) in third year must select another 24 or 36 ECTS major subject. ECTS Credits choices therefore are 36 + 24 or 24 + 24 + 12.

Students who wish to specialise in the following subjects will be exempt from this requirement: Chemistry, Computer Science, Earth and Ocean Sciences (*EOS327 with EOS306 or EOS307 or EOS308 or EOS309*), Mathematics (Honours), Mathematical Physics (Honours), Physics.

Calculation of 4th Year (Honours) Degree Results

For information: to be implemented in the calculation of 4th Year results from the Academic Year 2011/12: The overall degree result will be based on 80% of overall 4th Year results + 15 % of overall 3rd Year results + 5% overall of 2nd Year results.

Distribution of Marks for Written and Practical Examination:

	<i>Written</i>	<i>Practical and/or Oral</i>
Mathematical Physics/Applied Mathematics	80%	20%
CS202 Computer Methods	50%	50%
CS201 Computer Science	A proportion of marks up to a maximum of 30% may be awarded for any combination of course work, orals, practicals and projects.	
PH200 Astronomy PH201 Physics	A proportion of marks, up to a maximum of 60% may be awarded for any combination of course work, orals, practicals and projects.	
All other subjects (except those governed by note on Mathematics Course).	70%	30%

Recognised Subjects
for the
Postgraduate Diploma
in Education

Recognised Subjects for the Postgraduate Diploma in Education

Extract from PAC Information Booklet

For further information on application procedures, candidates should refer to the Postgraduate Applications Centre website for up-to-date official information: <http://www.pac.ie/hdip.php>. The extract below is for general information only.

Necessity for approval of degrees and subjects by the Teaching Council for the purposes of Registration as a Post Primary Teacher

In order to be eligible for appointment to an incremental salaried teaching position in a State funded Post Primary school, a teacher must be registered with the Teaching Council. Once Section 30 of the Teaching Council Act is commenced, Registration will be a mandatory requirement for all teachers.

Each applicant for registration as a post primary teacher must possess, among other things, a third-level degree (*or equivalent*) which the Teaching Council considers to be adequate to enable the holder to teach at least one of the approved second level curricular subjects.

Recognised Degrees:

List A (*extract of Science Degrees, NUI Galway listed below*) overleaf outlines the degree qualifications which may be recognised by the Teaching Council as being appropriate to teaching in a recognised post primary school. This List must however be read in conjunction with the *General and Special Requirements for Teachers of Recognised Subjects in Mainstream Post Primary Education* (see Blue pages) to ensure your degree, including subject and module options taken, meets all the requirements for Post Primary teaching.

All degrees listed are also recognised for the purposes of admission to the Postgraduate Diploma in Education course as offered by any constituent College of NUI or University of Dublin, Trinity College.

NATIONAL UNIVERSITY OF IRELAND, GALWAY
Science Degrees only

Qualification code	Qualification Title	Subjects
GY03P	Bachelor of Science ¹	See below
GY04P	Bachelor of Science Degree in Marine Science ²	Biology
GY05P	Bachelor of Science Degree in Environmental Science ³	Biology
GY06P	Bachelor of Science Degree in Computer Studies	Mathematics and Computer Studies
GY10P	Bachelor of Science Degree in Biotechnology	Biology
GY11P	Bachelor of Science Degree in Physiology	Biology
GY12P	Bachelor of Science Degree in Anatomy	Biology
GY13P	Bachelor of Science Degree in Microbiology	Biology
GY18P	Bachelor of Science – Applied Physics and Electronics	Physics
GY22P	Bachelor of Science Degree – Applied Mathematics	Mathematics & Applied Mathematics
GY23P	Bachelor of Science Degree in Chemistry & Applied Chemistry	Chemistry
GY24P	Bachelor of Science in Biomedical Science ⁴	Biology
GY25P	Bachelor of Science – Financial Mathematics and Economics	Economics and Mathematics
GY30P	Bachelor of Science in Physics and Astronomy	Physics

1 Provided one or more of the following subjects are taken in the third or fourth year of an honours degree or the third year of a general degree:

Microbiology, Biotechnology, Physiology, Anatomy, Biochemistry, Biology, Botany, Chemistry, Experimental Physics, Food Chemistry, Geography, Mathematics, Mathematical Physics, Applied Mathematical Science, Plant Science, Science of Materials, Statistics, Theoretical Physics, Zoology.

- 2 Recognised in the subject area Biology provided that the 3rd year of the honours degree (Final year of B.Science General degree) contains in addition to the Fundamentals of Marine Science, one of the core subject 24 ECTS courses (Botany or Zoology).
- 3 Recognised in the subject area Biology provided that the 3rd Year of the honours degree (Final year of B.Science General degree) contains in addition to stated obligatory subjects, both of the 9 ECTS courses Botany (BT303) **AND** Zoology (ZO303).
- 4 Subject to an applicant taking the following modules in 3rd and 4th year. Anatomy, Biochemistry or Physiology.

Queries regarding teacher registration and information on recognised courses should be directed to:

The Teaching Council
Block A
Maynooth Business Campus
Maynooth
Co. Kildare

Telephone: LoCall 1890 224 224 or +353 1 6517900

Fax: +353 1 6517901

E-mail info@teachingcouncil.ie

Web Address: <http://www.teachingcouncil.ie>

Scholarships & Prizes

available to

College of Science

Students

Scholarships and Prizes available to College of Science students

University Scholar Scheme

1. Number

Údarás na hOllscoile will confer the title University Scholar on students who obtain the minimum requirement at the relevant examination as specified at 5.2 below.

The title University Scholar may be held with other Scholarships or Grants awarded by the University or by an external body.

2. Value

An award of €250 will be made to each University Scholar.

3. Tenure

The title is tenable only at National University of Ireland, Galway.

4. Condition of Award

To register as a student of the University in the College in which the title is awarded by the due registration date. Failure to complete the registration requirement will render the student ineligible without further notice.

5. Basis of Award

5.1 The award will be made on the results of fulltime undergraduate degree examinations other than the degree examination itself.

5.2 In September, 2011 the title will be awarded to students who obtained the following minimum standards in the session 2010/11.

College	Examination	Minimum Requirement
Science	First, Second and Third	An overall average of at least 70% including First Class Honours (at Level 1) in at least 48 of the total 60 ECTS

SCOLÁIREACHTAÍ BHORD NA GAELIGE

- Scoláireachtaí iad seo atá á dtairiscint ag Údarás na hOllscoile, ar mholadh Bhord na Gaeilge san Ollscoil mar thacaíocht don chlár teagaisc trí Ghaeilge san Ollscoil, agus ar mhaithe le céimithe ar ardchaighdeán acadúil agus Gaeilge a chur ar fáil in ábhair éagsúla.
- Bronnfar na Scoláireachtaí ar mhic léinn a bheas cláraithe sa chéad, sa dara nó sa tríú bliain de chúrsa fochéime san Ollscoil faoi na coinníollacha seo a leanas:-
 - go bhfuil siad ag freastal ar chúrsaí a gcéime trí mheán na Gaeilge.
nó
 - go leanfaidh siad an chéad, an dara agus an tríú bliain dá gcúrsa céime trí Ghaeilge, nó an méid den chúrsa a bheas ar fáil trí Ghaeilge san Ollscoil ó thráth go chéile, agus air sin go seasfaidh siad scrúduithe an chúrsa trí Ghaeilge nó an méid díobh a bheas á réachtáil trí Ghaeilge ó thráth go chéile.
 - gur éirigh go maith leo i scrúdú na hArdteistiméireachta (i gcás na mac léinn chéad bhliana agus sa scrúdú deiridh ollscoile i gcás na mac léinn dara agus tríú bliana).
- Is fiú €1600 an Scoláireacht agus íocfar mar a leanas í, faoi réir tuairisc shásúil a fháil ón a Ranna cuí maidir le dul chun cinn an tsealbhóra.

Samhain – €800 Márta – €800

An Coiste Scoláireachta, ar chomhairle ó na ranna cuí, a chinnfeas íocaíocht do gach sealbhóir scoláireachta ar leith, nuair a bhíonn an Coiste sásta go bhfuil cúrsaí trí Ghaeilge á ndéanamh ag an sealbhóir i rith na bliana acadúla i gceist.

- 4 Féadfar an Scoláireacht a athnuachan faoi na coinníollacha céanna i leith an dara bliain den chúrsa Céime ach tuairisc shásúil a fháil ó na Ranna cuí maidir le dul chun cinn an tsealbhóra. Is ar thorthaí scrúduithe an chéad bhliain ollscoile a bhronnfar scoláireachtaí sa dara bliain agus is ar thorthaí scrúduithe na dara bliana a bhronnfar scoláireachtaí sa tríú bliain orthu siúd a dhéanann freastal ar na cúrsaí trí Ghaeilge.
 - 5 Coiste Scoláireachta, arna cheapadh ag an Uachtarán, a bhronnfaidh na Scoláireachtaí ar fad. Cuirfidh an Coiste san áireamh:
 - (i) torthaí na hArdteistiméireachta agus torthaí agallaimh i gcás mhic léinn don chéad bhliain agus torthaí an scrúdaithe deiridh ollscoile i gcás na mac léinn don dara agus tríú bliain.
 - (ii) tuairisc ó chomhaltaí den fhoireann teagaisc;
 - (iii) oiriúnacht an chláir oibre ó thaobh aidhmeanna na scoláireachta.
- Féadfar agallamh a chur ar iarrthóirí freisin.
- 6 Le haghaidh 2004-05, féadfar fiche a cúig (25) Scoláireacht a bhronnadh ar mhic léinn sa chéad, dara agus tríú bliain.
 - 7 Féadfaidh an Coiste an Scoláireacht a tharraingt siar tráth ar bith má tharlaíonn nach bhfuil coinníollacha na scéime á gcomhlíonadh ag an sealbhóir.
 - 8 Ní bheidh dul thar bhreith an Choiste i bhfeidhmiú na scéime.

IRISH LANGUAGE PRIZES

1. Údarás na hOllscoile offers for competition among registered students of the University the following Prizes:

(a) three Irish Language Prizes (one of €32, one of €26, and one of €13) open for competition to all students of the First Year (holders of Government Gaeltacht Scholarships and holders of University Gaeltacht Scholarships excepted);

(b) three Irish Language Prizes (one of €32, one of €26, one of €13) open for competition to all students of the Second Year (holders of Government Gaeltacht Scholarships and holders of University Gaeltacht Scholarships excepted).

2. The Examinations for these Prizes will be oral and written. The Examinations will be held in October; due notice of the Examinations will be given.
- 3.

THE BLAYNEY EXHIBITION (Founded by the late Lord Blayney)

An Examination for one Exhibition, originally established under the Blayney Bequest and now valued at €1,000, is held in the month of June in each year, on the following conditions:

1. The Exhibition is awarded in alternate years for proficiency (1) in Greek, Latin, and one other language set forth in 4; and (2) in any two subjects for the B.Sc. Degree set forth in 4; the standard required is that of the Pass Degree.

2. Should no candidate present himself or should insufficient merit be shown, the Exhibition may be held over for one year and offered again in the following year in the same course of study.

3. The Examination will be held in June. Candidates must enter their names with the Dept. on or before 31st March.

4. The Courses for the Academic Year 2006-2007, 2007-08, etc., will be the B.A. Courses in the following subjects for the Session:—

(1) Greek; (2) Latin; (3) French; (4) German; (5) Irish; (6) Italian; (7) English; (8) Spanish.

The Courses for the Academic Year 2004-05, 2006-07, etc., will be the B.Sc. Pass Courses in any two of the following subjects for the Session:—

(1) Mathematics; (2) Mathematical Physics; (3) Experimental Physics; (4) Chemistry; (5) Zoology; (6) Botany and Plant Physiology; (7) Geology and Mineralogy; (8) Anatomy and Anthropology; (9) Physiology; (10) Pathology and Bacteriology; (11) Biochemistry.

(The maximum number of marks obtainable is the same in each subject.)

5. No student of Medicine may take Anatomy and Physiology for the Examination if more than three years have elapsed from the date of his registration as a student of Medicine. No other student may enter for the Examination if more than three years have elapsed from the date of his Matriculation.

6. No candidate will be admitted to the examination for the Exhibition who has not attended Honours Classes of the First and Second Years in the subjects in which he intends to compete.

7. Údarás na hOllscoile retains the power of withholding, or of awarding only a portion of, the Exhibition.

8. The Blayney Exhibition may be held along with any Scholarship.

9. The Exhibition will be paid in July.

DR. RICHARD JOHN ANDERSON BOOK PRIZE IN BIOLOGY

The Prize was founded under the Trusts of the Will of the late Dr. Hannah Perry Anderson in memory of her husband, Professor R. J. Anderson, Professor of Natural History in this University (1883-1914). The value of the Prize, originally the interest on €127, being the amount of legacy bequeathed, is now €125. In accordance with the Terms of the Will, the interest is to form a Book Prize in Biology to be called the Richard John Anderson Book Prize.

The Prize shall be awarded to the second year student who, in the opinion of the Professor, has the highest qualifications in Biology.

Ó CARRA MEDAL

The discipline of Biochemistry awards the Ó Carra medal annually to the student who demonstrates overall best performance in the second year Biochemistry course.

BOOK PRIZE IN CHEMISTRY

The value of the Prize, originally the interest on €64, donated to the Chemistry Department by Dr. Thomas Dillon, former Professor of Chemistry, is now €125.

The interest will form a Book Prize to be awarded to the student who obtains the highest marks at the Second Year Science Examination in Chemistry.

MICROSOFT SCHOLARSHIP

The Microsoft European Product Development Centre funds two scholarships at NUI Galway worth €1270 each year for 5 years, which commenced in 2000/01. Scholarships will be awarded for one year in the first instance but students may reapply for the following year. Applicants should have already completed one year of undergraduate studies.

Eligibility is restricted to those students currently enrolled on the following programmes at NUI Galway:

B.Sc. in Computing Studies / Mathematical Science

B.Sc. in Applied Physics and Electronics or Experimental Physics

B.Sc. (Undenominated) - if taking at least 20 or 24 ECTS Credits of Computer Science

B.Sc. in Information Technology

B.E. in Electronic Engineering

B.E. in Electronic and Computer Engineering

B.A. Degree (taking Information Technology as one of two subjects possibly with French, German, Italian or Spanish)

B.Comm. Year 3 - if majoring in MIS

In offering these scholarships, Microsoft is aiming to provide assistance to students who are in *genuine financial need* and whose studies are being jeopardised as a result. The company is looking not specifically at just the top students, but very good students who are suffering genuine financial hardship.

SCHOOL OF PHYSICS SECOND YEAR LABORATORY GOLD MEDAL.

This medal is awarded to the student who achieves the highest mark in the second year physics laboratory, provided that a high overall mark is obtained in the subject.

SPORTS SCHOLARSHIPS

The University offers a number of sports scholarships to student-athletes of outstanding calibre who register as students of the University. These scholarships are aimed at persons who have the potential to achieve a high level of performance in sport while pursuing a full-time undergraduate degree course, postgraduate degree course, or postgraduate diploma course.

Scholarship Application Forms are available from the Sports Officer, National University of Ireland, Galway. Tel: (091) 524411, Extn. 2165; Fax (091) 750545.

UNIVERSITY PRIZES

Students of this University may compete for the Prizes, Medals, Scholarships and Studentships offered for competition by the National University of Ireland.

For information regarding these Prizes, etc., students are referred to the Registrar, The National University of Ireland, 49 Merrion Square, Dublin 2; Tel. No. 01 - 4392424.

MONSIGNOR P. DE BRÚN ANNUAL MEMORIAL LECTURE

1. The Monsignor de Brún Memorial Fund is derived from a Testimonial to Right Reverend Monsignor Pádraig de Brún, M.A., D.Sc., subscribed by his many friends to mark the occasion of his retirement from the Presidency of National University of Ireland, Galway. An eminent and remarkably versatile Scholar, especially gifted in the study of Languages and of Mathematical Science, Monsignor de Brún was President of the University from 1945 to 1959. The Memorial Fund, which amounted to €508 on 15th December 1960, comprised the balance of the Testimonial Fund left after defraying the costs of a bronze portrait bust (which was presented to Monsignor de Brún, in Galway, in May, 1960).

2. The income from the Fund shall be used to endow an annual public lecture in the University, to be known as Léacht Chuimhneacháin an Mhonsignor P. de Brún.

3. The Lectures shall be given on subjects in the Sciences and in the Humanities (including Fine Arts), alternately.

4. The Lecturers shall be Visiting Lecturers selected by the President.

5. Proposals for the Lecture may be submitted to the President before 1st December each year.

SCOLÁIREACHTAÍ NA GAELTACHTA CURTHA AR BUN AG ÚDARÁS NA hOLLSCOILE

Fuagraí Faoi Leith

Ní bheidh costas taistil ná costas aíochta le fáil ag aon duine dá dtiúrfaidh Coiste Scoláireachtaí na Gaeltachta cuireadh dhó teacht ag an scrúdú Gaeilge le haghaidh na Scoláireachtaí.

Caithfear iarratais le haghaidh na Scoláireachtaí a chur isteach ar 1 Meán Fómhair nó roimhe, chuig an Oifig Iontrála, Ollscoil na hÉireann, Gaillimh

I.

Is ionann an “Ghaeltacht”, maidir leis an gCóras seo, agus an chuid d’Éirinn atá fá dhath dearg agus buí ar léarscáil Choimisiúin na Gaeltachta.

II.

1. Tá Údarás na hOllscoile ag tairscint roinnt áirithe Scoláireachtaí san Ollscoil do chainteoirí dúchais Gaeilge a rugadh nó a tóigeadh sa nGaeltacht, a bhfuil Scrúdú na hArdteistiméireachta bainte amach acu.

Má bhíonn iarrthóirí istigh as an mbreac-Ghaeltacht nach bhfuil ina gcainteoirí dúchais amach agus amach agus má bhíonn an scrúdaitheoir Gaeilge sásta gur Gaeilgeoirí maithe iad, tig leis an gCoiste, má bhíonn airgead sparála sa gciste, scoláireachtaí a thabhairt do dhaoine den tsórt seo.

2. Is fiú €254 sa bhliain ar feadh cheithre mbliain gach Scoláireacht acu seo, ach beidh cead ag Coiste Scoláireachtaí na Gaeltachta scoláire a bhfuil an chéim bainte amach aige nó aici, d’ainmniú, ar chuntair áirithe, le haghaidh Scoláireachtaí den 5ú bhliain.

3. Duine ar bith atá ag cur isteach ar cheann de na Scoláireachtaí seo ní mór dhó Foirm Iarratais a fhail ón Oifig Iontrála, agus é a bheith istigh aige, líonta go dlisteanach, ar 1 Meán Fómhair, nó roimhe.

4. Ní mór don Iarrthóir na scrúduithe seo a sheasamh:—

(a) Scrúdú na hArdteistiméireachta.

(b) Scrúdú béil agus scríofa i nGaeilge.

Bronnfar na Scoláireachtaí do réir iarmhartha na scrúduithe tuasríofa. Ligfear 300 marcanna le haghaidh na Gaeilge ag an Scrúdú béil agus scríofa i nGaeilge ((b) thuas). Cuirfear na gráid a bainfear amach (taobh amuigh den Ghaeilge) ag Scrúdú na hArdteistiméireachta san áireamh le haghaidh na Scoláireachtaí.

Má bhíonn pas faighte ag iarrthóir i níos mó ná cúig ábhair (taobh amuigh den Ghaeilge) is iad gráid na gcúig n-ábhar is fearr a éirigh leis an iarrthóir iontu, a cuirfear san áireamh.

5. Ní mór d’iarrthóirí an Ardteistiméireacht a bhaint amach in aon iarracht amháin, na hábhair a bheith do réir

mar tá luaite i riail 4 thuas.

6. Gheobhaidh gach iarrthóir dlísteanaigh cuireadh go dtí an scrúdú Gaeilge le haghaidh na Scoláireachtaí.

7. Beidh an scrúdú seo i nGaeilge ar bun san Ollscoil chomh luath agus faightear toradh Scrúdú na hArdeistiméireachta. Is é Ollamh na Nua-Ghaeilge san Ollscoil a chuirfeas na hiarrthóirí faoi scrúdú. Gheobhaidh gach iarrthóir fuagra roimh ré fá dháta an scrúduithe.

8. Ní bronnfar scoláireacht ar aon duine nach sroicheann an caighdeán atá ceaptha, le haghaidh na Scoláireachtaí, ag an gCoiste.

Ní bheidh feidhm le scoláireacht ach amháin sa mbliain ina mbronntar í — muna mbí cúis an-speisialta leis.

9. An té a n-éireoidh leis Scoláireacht a bhaint amach, cuirfidh sé/sí in iúl don Oifig Iontrála, i dtosach an tSeisiúin cé na hábhair léinn ar mian leis/léi freastal orthu.

Pér bith cúrsa a shocraíós Scoláire a dhéanamh, is ar na léachtaí i nGaeilge le haghaidh an chúrsa sin a dhéanfas sé/sí freastal. Mura bhfuil cúrsa iomlán le fáil i nGaeilge, déanfaidh sé/sí freastal ar phér bith léachtaí atá le fáil i nGaeilge le haghaidh an chúrsa.

Ní bheidh cead ag aon scoláire a chúrsa léinn d'athrú gan cead faoi leith ó'n gComhairle Acadúil.

10. Ina fo-choda a híocfar an Scoláireacht. Is féidir fochuid nó an t-iomlán dá Scoláireacht a bhaint de mhac léinn, (a) mura mbí iompar ceart, oiriúnach air/uirthi, (b) má mbíonn sé/sí faillíoch ag freastal na léachtaí, (c) mura n-éirí leis/léi i bhfo-scrúduithe na dtéarmaí.

11. Is ar scrúdú na hOllscoile nó san Ollscoil a sheasamh don mhacléinn i ndeireadh na bliana atá coinneáil ar aghaidh na Scoláireachta dhó an bhliain dár gcionn, is é sin, mura dtuga an Chomhairle Acadúil toil ar a mhalairt.

12. Ní ghlacfaidh an Coiste le haon fhoirm iarratais nach bhfuil líonta go cúramach agus go hiomlán.

III.

Beidh cead ag Údarás na hOllscoile scoláireachtaí na Gaeltachta a bhronnadh ar Ghaeilgeoirí ó dhúchas ar éirigh leo an Chéad Scrúdú Ollscoile a bhaint amach, má mholann Coiste Scoláireachtaí na Gaeltachta a leitheid seo de dhaoine chuige.

Tá tuilleadh eolas faoi Scoláireachtaí Gaeltachta ar fáil ó Peadar Uas. Mac an Iomaire, Stiúirthóir na Gaeilge Labhartha.

AN ROINN OIDEACHAIS AGUS EOLAÍOCHTA

Scoláireachtaí Ollscoile

Bronnann an Roinn Oideachais agus Eolaíochta Scoláireachtaí Ollscoile atá intsealbhaithe i Ollscoil na hÉireann, Gaillimh faoi réir an dá scéim seo a leanas:

Scoláireachtaí Ollscoile do Mhicleinn ón nGaeltacht *agus*

Scoláireachtaí chun cur ar chumas Macléinn Cúrsaí Ollscoile a dhéanamh trí Ghaeilge.

Is féidir tuilleadh eolais a fháil faoi na Scoláireachtaí seo ó: An Rúnaí, An Roinn Oideachais agus Eolaíochta, Brainse an Iarbhuoideachais, Teach Apollo, Baile Átha Cliath 2.

ALIVE VOLUNTEERING PROGRAMME

The ALIVE Programme at NUI Galway seeks to support and recognise student volunteering through an integrated programme including:

- **volunteer opportunity** matching service,
- series of **volunteer training** workshops,
- **peer support** reflection sessions and social gatherings,
- **recognition** through the ALIVE Certificate

Contact name: Lorraine Tansey, Student Volunteer Coordinator, Community Knowledge Initiative.

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Email: studentvolunteering@nuigalway.ie

Web: www.nuigalway.ie/cki