

# University College Dublin NATIONAL UNIVERSITY OF IRELAND, DUBLIN

# ARTS, PHILOSOPHY, CELTIC STUDIES (Undergraduate Day Courses)

**SESSION 2001/2002** 

# INFORMATION FOR EXCHANGE STUDENTS RE. UNITS AND CREDITS

Throughout this booklet, undergraduate Arts courses, except in first year, are given or deemed to have a *unit* value. A one-unit course consists of one lecture/tutorial per week for a twelve-week period or represents an equivalent proportion of the year's work. Courses of two or three units are *pro rata*. Normally a student would take courses to the value of twenty-four units in a full year.

In addition, University College Dublin has adopted a system of *credits*, awarded for work successfully completed. In line with the European Course Credit Transfer System (ECTS), a full year's work successfully completed will be allotted 60 credits.

Exchange students and others involved in ECTS transfer of courses should note that to determine the number of credits which will be allotted to a successfully completed day Arts course, the Arts Faculty unit value should be multiplied by 2.5. Thus:

A one-unit course, successfully completed, will be awarded 2.5 credits; a two-unit course, successfully completed, will be awarded 5 credits; a three-unit course, successfully completed, will be awarded 7.5 credits; and twenty-four units, successfully completed, will be awarded 60 credits.

N.B. Enquiries on the award of credits should be addressed to the Registrar, University College Dublin, Belfield, Dublin 4.

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# **University College Dublin**

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# DEGREES IN THE FACULTIES OF ARTS, PHILOSOPHY & SOCIOLOGY AND CELTIC STUDIES

# **Extract from the Statute of the University**

The University may grant the following degrees to students who, under conditions laid down in the statutes and regulations, have completed approved courses of study, and have passed the prescribed examinations of the University, and fulfilled all other prescribed conditions:

In the Faculty of Arts:

Bachelor of Arts (Honours) (BA)\*

Bachelor of Arts (Honours) (Computer Science)

Bachelor of Music (BMus)\*\*

Bachelor of Social Science (Honours) (BSocSc)\*\*

Master of Arts (MA)

Master of Economic Science (MEconSc)

Master of Education (MEd)

Master of Library and Information Studies (MLIS)

Master of Literature (MLitt)

Master of Psychological Science (MPsychSc)

Master of Social Science (MSocSc)\*\*

Master of Philosophy (MPhil)

Doctor of Philosophy (PhD)

Doctor of Literature (DLitt)

Doctor of Music (DMus)\*\*

Doctor of Economic Science (DEconSc)

Doctor of Psychological Science (DPsychSc)

In the Faculty of Philosophy and Sociology:

Doctor of Philosophy (PhD)

Doctor of Literature (DLitt)

*In the Faculty of Celtic Studies:* 

Doctor of Philosophy (PhD)

Doctor of Celtic Studies (DLittCelt)

- \* For details of the BA Modular (Evening) Degree, see separate booklet.
- \*\* For details of the BMus Degree and the BSocSc (Honours) Degree, see separate booklets *Music*, *Social Science*.

# GUIDE TO TIMETABLE

# CLASSIFICATION OF ARTS SUBJECTS\*

ĹŦ	French **Maths Physics Psychology Geography Maths Physics Studies	Celtic Civilisation		Additional History	Sion
ш	Philosophy Irish Italian Sociology		Aramaic	Additional English	eginning of the ses
Д	English Archaeology Politics Computer Science (for DN050 Students only)			Additional Psychology	able issued at the h
C	Maths/Maths Studies German Spanish Early Irish‡ Hebrew Information Studies Latin				ovided in the times
В	Greek History Welsh Music Statistics			Additional Economics	Details will he no
A	Arabic Linguistics Greek and Roman Civilisation Economics History of Art		Irish Folklore Icelandic Classical Studies†		one and listed horse
Description	Subjects offered in all years	Subject offered in first year only	Subjects offered in 2nd and 3rd year only	Subjects offered in 2nd and 3rd year to complete full degree subjects in Mode 1*	* The session of the beginning of the session

<sup>\*</sup> The subjects for Philosophy (Mode 1) are not listed here. Details will be provided in the timetable issued at the beginning of the session: † Details of the additional lectures in Classical Studies will be available from the Classics Department. ‡ Students of Early Irish who wish to take Latin, will be facilitated by the Classics Department.

<sup>\*\*</sup> Not available to Students entering after 2000

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Saturday	•			•	•	•	•			Saturday	•	•	•	1		•	•					Saturday	1	1	•		1	•	1	1		
Friday	A	Щ	В	ĽΨ	*(C)	(A)‡		** Mathematics (H) only.		Friday	В	¥	ш	ш	1	В	∢	Ω	-			Friday	ш	ပ	Ω	Α	<b>т</b>	щ	Ö	ш	•	
Thursday	O	Ω	ſΤ	Э	,	Α÷	•			Thursday	D	ပ	щ	Ą	,	Ľ	ပ	ш	_			Thursday	ΙŦ	В	¥	ပ	<b>*</b>	Ω	æ	¥		
Wednesday	A	田	В	Ω	•	*	Ω	‡ Economics and Linguistics only;	SECOND ARTS	Wednesday	В	¥	ſĽ	ပ	1	Q	В	ш	1		THIRD ARTS	Wednesday	Э	ပ	Ω	щ	<b>ж</b>	Ĺ	ш	Έ,	•	
Tuesday	Ü	Ω	ĬΉ	В	•	Ŧ	•	† Except Economics and Liguistics;		Tuesday	D	ບ	田	Ľ,	<b>*</b>	A	ш	В	•			Tuesday	Ŧ	М	∢	Ω	<b>B</b>	ပ	Ω.	<b>V</b>	•	
Monday	A	щ	В	ပ	•		•			Monday	В	4	Œ	Q		ပ	ш	Ω		H).		Monday	Ξ	ပ	Ω	Ľ.,	<b>*</b>	æ	۷ı	ъ	•	
Time	9-10	10-11	11-12	12-1	1-2	2-3	3-4	* Except Mathematics (H);		Time	9-10	10-11	11-12	12-1	1-2	2-3	3-4	4-5	5-6	* Except Mathematics (H).		Time	9-10	10-11	11-12	12-1	1-2.	2-3	3-4	4-5	5-6	* Dhilocomby, only,

\* Philosophy only.

In all years tutorials will be by arrangement.

The above guide merely indicates the possible times for the main classes in specific subjects. For details, students should consult the timetables issued at the commencement of the session.

Mode 1 'additional subjects' or subjects with small numbers may be held, in special cases, at other times, if the timetable and accommodation requirements permit.

# DEGREE OF BACHELOR OF ARTS (HONOURS) DAY COURSES

The Faculties of Arts, Philosophy and Sociology, and Celtic Studies offer day courses, normally of three years' duration, leading to the Degree of Bachelor of Arts (Honours) of the National University of Ireland.

The dates of the academic terms for each year are published in the *Student Information Handbook*. In many departments in the Faculties of Arts, Philosophy and Sociology and Celtic Studies, the duration of courses is expressed as a *semester*, i.e. a twelve-week teaching period, usually from September to January or from January to May.

# **General Description**

Students reading for the BA Degree (Honours) by day take three subjects in the first year (as explained in the section on 'First Arts Day Courses') and one, two or three subjects in the second and final years (as explained in the sections on the different degree modes).

Students who have passed the First Arts Examination proceed to the Degree of Bachelor of Arts (Honours) by one of the degree modes which are entered at the beginning of second year. Eligibility to enter a particular degree mode is governed both by the course to which the student has been admitted, the level of attainment in the First Arts Examination and by the subject combination selected in First Arts. In selecting first year subjects, therefore, students should pay particular attention to the details concerning admission to the degree mode for which they are aiming.

# Course Requirements: Definition of the 'Unit'

Day courses, except in first year, are given or deemed to have a unit value: A one-unit course consists of one lecture/tutorial per week for a twelve week period, or represents an equivalent proportion of the year's work. Courses of two or three units are *pro rata*. In the case of some subjects where courses are not described in unitised form, the year's work is deemed equivalent to a pre-determined number of units. The number of course units which must be accumulated and examined in the subject(s) studied in the second and final years is laid out in the sections describing the degree modes.

# **Examination Requirements**

Students proceeding to the Degree of Bachelor of Arts (Honours) by day must pass the examinations listed below:

(a) The *First University Examination in Arts* (taken at the end of the first year) which must be passed in three permissible subjects before a student may proceed to second year.

The examination is held in the Summer of each year; a repeat examination in individual subjects is held in the Autumn. The examination must be passed within two years of entering the course.

For further details, see the section 'First Arts Day: Examination Requirements'.

(b) The Second University Examination in Arts (Honours)† (taken at the end of the second year) which must be passed in its entirety before a student may proceed to the final year.

The examination is held in the Summer of each year; a repeat examination is held in the Autumn. In the case of Mathematics and Mathematical Physics, there is no Autumn repeat examination at Honours level.

The examination must be passed within two years from the date of entering the second year course.

(c) The Final University Examination for the Degree of Bachelor of Arts (Honours)† (taken at the end of the final year).

The BA Degree (Honours) Examination is held in the Summer of each year. Honours will be awarded separately in each subject. Honours may only be awarded if the whole examination is passed at one sitting in the Summer examination. (Please note: Autumn 2002 will be the last occasion when a BA supplemental examination will be provided.)

† Introduction of Beneficial Aggregation (i.e. where aggregation operates to the benefit of the student)

Not to apply to the BA (International) Degree

From 2003 the grade of degree in a subject (when all subjects are passed at one sitting in the summer examinations of Second and Final Year) will be determined by: *either* aggregation of 30% of the Second Arts <u>summer</u> examination results with 70% of the Final Year <u>summer</u> examination results within each subject; *or* 100% of the Final Year summer examination results, whichever is to the benefit of the student.

# FIRST ARTS DAY COURSES

# **General Description**

First year students must follow courses in, and present for examination in, three subjects.

# **Subject Combinations**

The subjects available in First Arts (Day) are listed below. No two subjects may be taken from the same section of the list and not more than two subjects with asterisks may be chosen.

Subjects taught and examined at Honours and Pass levels separately are marked '(H & P)' below.

Section A:	Arabic, Economics*, Greek and Roman Civilization, History of Art, Linguistics						
Section B:	Greek, History*, Music <sup>1</sup> , Statistics <sup>2</sup> , Welsh						
Section C:	Early Irish <sup>3</sup> , German, Hebrew, Information Studies*, Latin, Logic <sup>4</sup> , Mathematical Studies, Mathematics (H), Spanish						
Section D:	Archaeology, English*, Politics*						
Section E:	Irish, Italian, Philosophy, Sociology*						
Section F:	Celtic Civilization <sup>5</sup> , French, Geography*, Mathematical Physics Studies <sup>2</sup> , Psychology <sup>6</sup>						

# (See page 38 for details regarding BA (Computer Science) for students entering under DN050).

### Notes

- Special conditions may apply to entry to Music; students should enquire from the department.
- Students wishing to proceed to second year in Mathematical Physics Studies and Statistics must also have passed First Arts Mathematical Studies or Mathematics. The combination Statistics and Psychology is only permitted in first year if Mathematical Studies or Mathematics is taken as the third subject.
- 3. Students of Early Irish who wish to take Latin will be facilitated by the Classics Department.
- 4. Logic will not be available as a First Arts subject in the 2001/2002 session.
- 5. Celtic Civilization is available as a First Arts subject *only*.
- 6. Students entering through DN012 should note that Psychology may only be taken beyond First Arts as a Single Honours subject (Mode I: 35 places).

# **Examination Requirements**

The First University Examination in Arts, taken at the end of first year, must be passed in three subjects within two years of entering the course. It is held in the Summer of each year; a repeat examination is held in the Autumn.

A subject passed need not be taken again; students may combine results in different subjects obtained at different examining sessions but no two subjects may be taken from the same section of the list and not more than two subjects with asterisks may be chosen.

### Awards

The awards on First Arts Examinations are: First Class Honours, Second Class Honours, Pass, Fail.

Honours may be awarded in individual subjects only at the Summer examinations and only to candidates who pass all three subjects at one sitting.

The awards on Pass examinations are: Pass, Fail.

# **Qualifying Mark**

A mark of 50% obtained in Honours Mathematics (Summer or Autumn) is deemed adequate for a student to proceed into second year at Honours level in the subject concerned, provided a suitable subject combination has been passed. In all other subjects, a mark of 40% entitles a student to proceed to second year in that subject, provided a suitable subject combination has been passed.

# Note:

For regulations concerning entry to Mode I (Single Subject) English, History, Philosophy or Psychology, see pages 12-15.

# MODE I: BA (HONOURS) SINGLE SUBJECT

**N.B.**: From the 2000/2001 session a specified number of places are available through the denominated entry CAO First Year application system as follows: Economics (20); History (12); Philosophy (5); Psychology (35). A number of places in these subjects, as indicated on the following pages, are also available on the results of the First Arts examination for students who have entered through DN012 (omnibus entry).

# **General Description**

In Mode I, students study for the Degree of BA (Honours) in a single subject.

# **Admission Requirements**

For admission to Mode I, the First Arts Examination must have been passed. The precise subject requirements, number of places and criteria for entry to the various subjects in Mode I are laid out on the following pages.

# **Course Requirements**

Students must attend, and be examined in, twenty-four course units (or equivalent) in second year, and the same number in the final year. Choice of courses is subject to the requirements of the department(s) concerned. Second year students interested in the BA (International) option should see pages ?? and ?? for details.

# **Examination Requirements**

The Second Arts Examination (Honours) (twenty-four units or equivalent) must be taken after completion of the appropriate courses. This examination must be passed in its entirety, within two years of entering the second year course, before the student may proceed to final year courses. The BA Degree (Honours) Examination (twenty-four units or equivalent) is taken at the end of the final year.

# Awards

The awards on the Second Arts (Honours) and BA (Honours) Examinations in Mode I are: First Class Honours; Second Class Honours, Grade I; Second Class Honours, Grade II; Third Class Honours; Pass; Fail. The result in each year is calculated on the basis of the marks obtained in the twenty-four units (or equivalent) examined. Honours may only be awarded if the whole examination is passed at one sitting in the Summer examination.

# **Beneficial Aggregation**: (not to apply to the BA (International) Degree)

From 2003 the grade of degree in a subject (when all subjects are passed at one sitting, in the summer examinations of Second and Final Year) will be determined by:

<u>either</u> aggregation of 30% of the Second Arts <u>summer</u> examination results with 70% of the Final Year <u>summer</u> examination results within each subject; <u>or</u> 100% of the Final Year summer examination results, whichever is to the benefit of the student.

TABLE OF SUBJECTS AVAILABLE IN MODE I (DAY) AND CONDITIONS FOR ENTRY

SECOND AND FINAL YEAR SUBJECTS	FIRST YEAR SUBJECTS REQUIRED FOR ENTRY  Note: No two first year subjects may be taken from the same section of the list of subjects available in first year. (See regulations page 10)
Classical Studies	<ul> <li>(a) Greek and Roman Civilization;</li> <li>(b) Any other subject (not including Greek);</li> <li>(c) Any other subject (not including Latin).</li> </ul>
Classics	(a) Greek; (b) Latin; (c) Any other subject.
† Limit of 20 places on First Arts examination 2001 for students entering through DN012	(a) Economics; (b) Any other subject; (c) Any other subject.
† Limit of 20 places on First Arts examination for students entering through DN012	<ul> <li>(a) English;</li> <li>(b) One of the following: Economics, French, German, Greek, Greek and Roman Civilization, History, Irish, Italian, Latin, Linguistics, Philosophy, Psychology, Spanish, Welsh;</li> <li>(c) Any other subject including any subject not already chosen from the list in (b).</li> </ul>
Geography	<ul><li>(a) Geography;</li><li>(b) Any other subject;</li><li>(c) Any other subject.</li></ul>

SECOND AND FINAL YEAR SUBJECTS	FIRST YEAR SUBJECTS REQUIRED FOR ENTRY
	Note: No two first year subjects may be taken from the same section of the list of subjects available in first year. (See regulations page 10)
History  † Limit of 6 places on First Arts examination 2001 for students entering through DN012	(a) History; (b) Any other subject; (c) Any other subject.
Irish	(a) Irish; (b) Early Irish; (c) Any other subject.
Mathematical Physics (Not available to students entering after 2000)	<ul> <li>(a) Honours Mathematical Physics (50% Hons. Qual.);</li> <li>(b) Honours Mathematics (50% Hons. Qual.);</li> <li>(c) Any other subject.</li> <li>(Note: Mathematical Physics may not be taken in first year with any subject from section B of the list except Statistics).</li> </ul>
Mathematical Physics Studies	<ul> <li>(a) Mathematical Physics Studies</li> <li>(b) Mathematical Studies or Mathematics</li> <li>(c) Any other subject</li> </ul>
Philosophy † Limit of 5 places on First Arts examination 2001 for students entering through DN012.	<ul><li>(a) Philosophy or Logic;</li><li>(b) Any other subject;</li><li>(c) Any other subject.</li></ul>

SECOND AND FINAL YEAR SUBJECTS	FIRST YEAR SUBJECTS REQUIRED FOR ENTRY  Note: No two first year subjects may be taken from the same section of the list of subjects available in first year. (see regulations page 10)					
Psychology  (Some courses will also be taken in Philosophy).	<ul><li>(a) Psychology;</li><li>(b) Any other subject;</li><li>(c) Any other subject.</li></ul>					
† Limit of 35 places on First Arts examination 2001 for students entering through DN012	(The combination Psychology and Statistics is only permitted if Mathematical Studies is taken as the third subject).  Repeat First Year Psychology students are required to reach at least 65% in Psychology to be eligible for one of the places in Mode I Psychology.					

† In Mode I Economics, English, History, Philosophy and Psychology, the places available to students who have entered through DN012 are allocated on the basis of First Arts marks in the subject concerned in the year of application, provided applicants have passed the First Arts Examination as a whole. (Autumn results may be considered if places are still available). No deferral is allowed.

Such students (DN012) wishing to be considered for a place in Mode I Economics, English, History, Philosophy or Psychology *must* contact the department concerned and fill in an application form before 15 February 2002.

# MODE II: BA (HONOURS) TWO SUBJECTS

# **General Description**

In Mode II, students study for the Degree of BA (Honours) in two of the subjects studied in First Arts. The two subjects must be taken from different sections of the list of subjects available in First Arts, with the exception of Psychology which is not offered in Mode II and Celtic Civilization which is only offered in first year.

# Admission Requirements (All subjects except Mathematics (Honours)†

For admission to Mode II, the First Arts Examination must have been passed in three subjects.

Students wishing to take Statistics in second year must include Mathematical Studies or Mathematics among the subjects passed in First Arts.

# **Course Requirements**

Students must attend and be examined in twenty-four course units, twelve units (or equivalent) in each of their two subjects in second year; the same requirement exists in the final year. Second year students interested in the BA (Honours) (International) option should see pages 23 and 24 for details.

# **Examination Requirements**

The Second Arts (Honours) Examination must be taken in twenty-four units or equivalent (twelve units per subject) after the completion of the appropriate courses. This examination must be passed in both subjects, within two years of entering the second year course, before the student may proceed to the final year. The BA Degree (Honours) Examination (twenty-four units - twelve units per subject) is taken at the end of the final year.

### Awards

Honours will be awarded separately in each subject. Honours may only be awarded if both subjects are passed at one sitting in the Summer Examination.

The awards on the Second Arts (Honours) and BA (Honours) Examinations in Mode II are: First Class Honours; Second Class Honours, Grade I; Second Class Honours, Grade II; Third Class Honours; Pass; Fail.

† For special regulations applicable to Mathematics (Honours), see page 17.

# **Beneficial Aggregation** (not to apply to the BA (International) Degree)

From 2003 the grade of degree in a subject (when all subjects are passed at one sitting, in the summer examinations of Second and Final Year) will be determined by:

<u>either</u> aggregation of 30% of the Second Arts <u>summer</u> examination results with 70% of the Final Year <u>summer</u> examination results within each subject; <u>or</u> 100% of the Final Year summer examination results, whichever is to the benefit of the student.

# **Special Regulations Applicable to Mathematics (Honours)**

For admission to Second Year Mathematics (Honours), the First Arts Examination must have been passed in three subjects with a mark of at least 50% in Mathematics (Honours). Students who obtain a mark of between 40% and 50% in Mathematics (Honours) may proceed to Second Year Mathematical Studies.

# Awards

Students taking Pass Mathematical Physics should note that they will not be eligible for an Honours award in this subject at second year or BA level.

# MODE IIA: BA (HONOURS) TWO ASSOCIATED SUBJECTS

# **General Description**

In Mode IIA, students study for the Degree of BA (Honours) in two subjects; at least one of these subjects studied is not available in First Arts (e.g. Irish Folklore) or is a specialisation not available as a *separate* subject in First Arts (e.g. Old and Middle English).

# **Admission Requirements**

For admission to Mode IIA, the First Arts Examination must have been passed. The precise entry requirements for the different subject pairs in Mode IIA are laid out in the table overleaf.

# **Course Requirements**

As for Mode II

# **Subject Combinations**

A table showing possible subject combinations in Mode IIA may be seen on the next page.

# **Examination Requirements**

As for Mode II.

# Awards

As for Mode II.

# TABLE OF SUBJECTS AVAILABLE IN MODE IIA (DAY) AND CONDITIONS FOR ENTRY

	UNDITIONS FOR ENTRY
SECOND AND FINAL YEAR SUBJECTS	FIRST YEAR SUBJECTS REQUIRED FOR ENTRY  Note: No two first year subjects may be taken from the same section of the list of subjects available in first year. (See regulations page 10)
Early Irish History and Another Subject Early Irish History; One of the following: Archaeology Early Irish Geography Irish Latin Medieval History Old and Middle English	<ul> <li>(a) History;</li> <li>(b) The second subject to be taken in Mode IIA;</li> <li>(For Old and Middle English, the requirement is First Arts English; for Medieval History any First Arts subject may be offered).</li> <li>(c) Any other subject.</li> </ul>
Irish Folklore and Another Subject Irish Folklore; One of the following: Archaeology Early Irish Early Irish History English Geography History Irish Medieval History Welsh	<ul> <li>(a) Any subject;</li> <li>(b) The second subject to be taken in Mode IIA;</li> <li>(For Early Irish History, Medieval History or Modern Irish History, the requirement is First Arts History).</li> <li>(c) Any other subject.</li> </ul>
Old and Middle English and Another Subject Old and Middle English; One of the following: Early Irish Linguistics Medieval History	<ul> <li>(a) English;</li> <li>(b) The second subject to be taken in Mode IIA; (For Medieval History, the requirement is First Arts History).</li> <li>(c) Any other subject.</li> </ul>

# MODE III: BA (HONOURS) RELATED SUBJECTS

# **General Description**

In Mode III, students study for the Degree of BA (Honours) in a group of closely related subjects.

# **Admission Requirements**

Students must have passed the First Arts Examination. The precise entry requirements for the various groups in Mode III are laid out in the table opposite.

# **Course Requirements**

Students must attend, and be examined in, twenty-four course units (or equivalent) in second year and the same number in the final year. Second year students interested in the BA (International) option should see pages 23 and 24 for details.

# **Examination Requirements**

The Second Arts (Honours) Examination (twenty-four units or equivalent) must be taken after completion of the appropriate courses. This examination must be passed in its entirety, within two years of entering the second year course, before the student may proceed to the final year. The BA Degree (Honours) Examination (twenty-four units or equivalent) is taken at the end of the final year.

### Awards

The awards on the Second Arts (Honours) and BA (Honours) Examinations in Mode III are: First Class Honours; Second Class Honours, Grade I; Second Class Honours, Grade II; Third Class Honours; Pass; Fail. Honours may only be awarded if the whole examination is passed at one sitting in the Summer examination.

# **Beneficial Aggregation** (not to apply to the BA (International) Degree)

From 2003 the grade of degree in a subject (when all subjects are passed at one sitting, in the summer examinations of Second and Final Year) will be determined by:

<u>either</u> aggregation of 30% of the Second Arts <u>summer</u> examination results with 70% of the Final Year <u>summer</u> examination results within each subject; <u>or</u> 100% of the Final Year summer examination results, whichever is to the benefit of the student.

# TABLE OF SUBJECT GROUPS IN MODE III (DAY) AND CONDITIONS FOR ENTRY

# SECOND AND FINAL YEAR SUBJECTS

# FIRST YEAR SUBJECTS REQUIRED FOR ENTRY

Note: No two first year subjects may be taken from the same section of the list of subjects available in first year. (See regulations page 10)

# Celtic Studies

# Α.

One of the following as major subject:

Early Irish

Modern Irish

Welsh\*

And the other two languages as minor subjects.

B.

Early Irish as major subject; two of the following as minor subjects:

Welsh

Early Irish History Archaeology.

C.

Welsh\* and Modern Irish or Scottish Gaelic (with Modern Irish).

D.

Irish Folklore as major subject; two of the following as minor subjects:

Modern Irish

Early Irish

Welsh

Archaeology and Early Irish History.

\* Major Welsh includes Breton

- (a) Modern Irish;
- (b) Early Irish or Welsh;
- (c) Early Irish *or* Welsh *or* Latin *or* Greek *or* French *or* Archaeology *or* Celtic Civilization.

If students plan to take either Early Irish or Welsh as a major subject, they must have passed that subject in the first year.

SECOND AND FINAL YEAR SUBJECTS  Celtic Studies (Contd.) E.	FIRST YEAR SUBJECTS REQUIRED FOR ENTRY  Note: No two first year subjects may be taken from the same section of the list of subjects available in first year. (See regulations page 10)  (a) Modern Irish or Early Irish Language and
One of the following as major subject:     Archaeology     Early Irish History     Early Irish Language and     Literature     Welsh      Two minor subjects:     Two subjects from above not chosen as the major subject or one of these and Medieval Welsh.  If Welsh is chosen as major subject Medieval Welsh may	Literature; (b) Archaeology; (c) History (including Early Irish History) or Latin or Welsh or Celtic Civilization.  If either Archaeology or Early Irish Language and Literature or Welsh is chosen as a major subject, it must be passed in the first year.
not be chosen as a minor subject  Near Eastern Languages Major subject: Arabic or Hebrew; Two of the following as minor subjects: Aramaic Hellenistic Greek Near Eastern Civilization Persian* Syriac Ugaritic  * The subject Persian may not always be offered.	(a) The major subject to be offered in the BA; (b) Any other subject; (c) Any other subject.

International Studies: The introduction of this course is postponed

# BA (HONOURS) (INTERNATIONAL) PROGRAMME

**N.B.**: From the 2001/2002 session a specified number of places are available through the denominated entry CAO First Year application system as follows: French (20); German (20); Spanish (6). A number of places in these subjects are also available on the results of the Second Arts examination 2002 for students who have entered through DN012 (omnibus entry) as follows: French (15); German (13); Spanish (4).

# **General Description**

The BA (Honours) (International) is a four-year programme which incorporates a year's university study abroad as an integral element in the degree programme. Second year students may apply to enter the programme and, if accepted, are required to attend approved foreign university courses during the following year.

All arrangements in connection with the BA (Honours) (International) programme are made through the department(s) in which the students are registered. Intending applicants should note that: (a) since only those who can be assigned full-time places in approved foreign universities are accepted, *the number of students who can take part is strictly limited*; and (b) that not all departments are involved in the programme.

Permission to travel abroad on the BA (Honours) (International) programme is conditional upon (a) written approval of the Head of Department of at least one of the departments in which the student is registered (including details of courses to be followed and UCD equivalence allowed); and (b) the student's passing the Second University Examination (Honours) in Arts in the session in which permission is sought. No deferral is allowed.

Students must retain all documentation obtained abroad for departmental approval. Final decisions on all aspects of the programme rest with the Head of the UCD Department(s) concerned. Subject to approval, students may attend courses in more than one university during the year abroad.

Students in the BA (International) programme must normally take courses to the value of 30 ECTS credits in an approved partner institution under the direction of their Erasmus Coordinator in University College Dublin. They must obtain an overall pass in these courses in the academic year that they are abroad in order to continue into the final year of the BA (International) degree. In exceptional circumstances, and only with the prior permission of the relevant Head of Department, students may submit an extended essay on their return in fulfillment of some of their credit requirements. Students who fail to acquire the required credits at pass level will not be eligible for the BA (International) degree but will be permitted to take courses leading to the BA degree.

Regulation applying to students commencing their year abroad as of September 2002

Students in the BA (International) programme will be required to take appropriate courses during their year abroad deemed by the sending department to be the equivalent of 45 ECTS credits and to achieve an overall pass. At its sole discretion, up to 15 of these credits may be obtained by project work set by the home department.

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# **Admission Procedures**

In the 2001/2002 session students (who have been admitted under DN012) intending to apply for entry into the programme are advised to contact the departments in which they are registered early in their second year. Application forms are available from those departments which are involved in the programme. Completed application forms must be returned to departments by 1 March 2002.

# **BA (HONOURS) COMPUTER SCIENCE**

The BA (Honours) Computer Science degree is a four-year programme.

# **General Description**

The degree allows students to combine a variety of Arts subjects with Computer Science. The course has two aims: firstly to give students with a talent for Arts subjects the chance to exercise their abilities in a Computer Science context: secondly to allow students to become fully qualified Computer Scientists within the context of an Arts degree. From a computing perspective, students should acquire thinking and problem solving skills, fundamental programming skills, a knowledge of the potential of and current limits on information technology, and an appreciation of the notion of computation.

# Admissions procedure

Entry to the programme is by designated entry through the CAO application system.

# Course syllabus

*First Year*: Students choose Computer Science (which is a group D subject) and two Arts subjects from Groups A, B, C and F below. No two subjects may be taken from the same section of the list. *For subject restrictions see Notes for First Arts Day subjects (page ??)* 

Section A:	Arabic, Economics, Greek and Roman Civilization, History of Art, Linguistics
Section B:	Greek, History, Music <sup>1</sup> , Statistics <sup>2</sup> , Welsh
Section C:	Early Irish <sup>3</sup> , German, Hebrew, Information Studies, Latin, Logic <sup>4</sup> , Mathematical Studies, Mathematics (H), Spanish
Section F:	Celtic Civilization <sup>5</sup> , French, Geography, Mathematical Physics Studies <sup>2</sup> Psychology <sup>7</sup>

(Subjects taught and examined at Honours and Pass levels separately are marked '(H & P)' above.)

# Second Year

Students continue with Computer Science (12 units) and one Arts subject (12 units) studied in First Year provided the First Arts examination has been passed in three permissible subjects.

### Third Year

Students continue with Computer Science (12 units) and the Arts subject (12 units) studied in Second Year provided the Second Arts examination has been passed in the two subjects. The Arts subject is completed in this year and a grade awarded for it.

# **University College Dublin**

**N.B.** Provided students have passed the Third Arts examination and attained at least 45% in Computer Science, they will then proceed to Fourth Year; where they pass both subjects in Third Year with a mark of under 45% in Computer Science, students will be awarded a BA degree with a pass in Computer Science.

# Fourth Year

This course comprises Computer Science (16 units) and a major BA thesis (8 units).

# **Examination and Course Requirements**

First Year: As for First Arts (see page 10)
Second and subsequent Years: As for BA Mode II (see page 16)

**N.B.** Beneficial aggregation does <u>not</u> apply to the subject Computer Science.

Arts - Undergraduate

# **SYLLABUS OF COURSES**

**University College Dublin** 

# ARABIC

# FIRST YEAR (ARAB 1000)

ARAB 1001 Principles of Arabic grammar. Course book: David Cowan, An Introduction to Modern Literary Arabic (Cambridge University Press).

ARAB 1002 Elementary Arabic reading and comprehension.

ARAB 1003 Beginners' level translation from Arabic into English and from English

into Arabic.

ARAB 1004 Introduction to Islam.

No prior knowledge of the language is required. The course is intended to prepare the student to tackle a variety of Classical Arabic texts, as well as material in Modern Standard Arabic, which is the written language of the contemporary Arabic-speaking world. The student is also introduced to the principles and early history of Islam.

# **SECOND YEAR (ARAB 2000)** (deemed equivalent to twelve units)

ARAB 2001 Arabic-English Translation
Translation of unseen passages from Arabic into English.

ARAB 2002 English-Arabic Translation

Translation of unseen passages from English into Arabic.

ARAB 2003 Arabic Religious and Secular Texts

Prepared translation and study of selected *surahs* of the Koran, and sections of the *hadith* of the Prophet Muhammad. Prepared translation and study of excerpts from medieval and later Arabic topographical

works.

ARAB 2004 Modern Arabic Literature

Prepared translation and discussion of a variety of modern Arabic writers

and their work.

Note for Second Year Students:

• There will be an Arabic conversation class.

# FINAL YEAR (ARAB 3000) (deemed equivalent to twelve units)

ARAB 3001 Arabic-English Translation

Translation of unseen passages from Arabic into English.

ARAB 3002 English-Arabic Translation

Translation of unseen passages from English into Arabic.

# ARABIC (Contd.)

ARAB 3003 Islamic History and Aspects of Arabic Historiography

Study of the history of principally the Arabic-speaking Near and Middle East, from the rise of Islam until the eve of the Crusades, and how it was recorded by a variety of historians writing in Arabic. Prepared translation

and study of primary sources.

ARAB 3004 Modern Arabic Literature

Prepared translation and discussion of a variety of modern Arabic writers

and their work

Note for Final Year Students:

• There will be an Arabic conversation class.

# ARAMAIC

(Minor Subject in Mode III Near Eastern Languages)

# FIRST YEAR

Courses not offered.

# **SECOND YEAR (ARAM 2000)**

Mode III

ARAM 2001 Syriac Grammar. Text: J.F. Healey, First Steps in Syriac.

ARAM 2002 Grammar of Biblical Aramaic. Text: F. Rosenthal, A Grammar of

Biblical Aramaic.

ARAM 2003 Prescribed texts: Selections from Brockelmann's *Chrestomathie*, and

F. Rosenthal (ed.), An Aramaic Handbook.

ARAM 2004 History of the Aramaeans.

# FINAL YEAR (ARAM 3000)

Mode III

ARAM 3001 Prescribed texts: Selections from Brockelmann's *Chrestomathie*,

F. Rosenthal (ed.), An Aramaic Handbook, and J. Gibson, Syrian Semitic

Inscriptions, Vol. 2.

ARAM 3002 Translation of Unseen Passages.

ARAM 3003 History of the Targums and Syriac literature.

*Note:* For unit values of courses in Aramaic, please consult the Department of Near Eastern Languages.

# ARCHAEOLOGY

# FIRST YEAR (ARCH 1000)

While the topics studied serve as a foundation for students proceeding to second and final years, they also form a complete programme for those taking Archaeology for one year. The course comprises eight 12-lecture modules.

ARCH 1006 What is Archaeology?

What is Archaeology? How do we know what happened in the past? How do we date past events? These questions are addressed in this course of 12 lectures

ARCH 1007 The Palaeolithic and Mesolithic periods

This course will examine the evidence for the earliest humans in Africa, looking at the evolution of humanity through more than four million years and the dispersal of early hominids across the globe. The cave art of Ice Age hunters will be discussed as will the societies of the early postglacial period, a time when people developed complex hunting, gathering and fishing techniques in adaptation to their new environment.

ARCH 1008 The Neolithic in Ireland and Europe

The Neolithic period is when farming societies became established in Europe. These lectures will look at the origins and spread of the farming lifestyle. They will explore the character of Neolithic settlement and the role played by the dead and the ancestors, using this information as a means of understanding the complexity of Neolithic societies.

ARCH 1009 Life and Death in Bronze Age Europe

During the Bronze Age, we see the first use of metals, the emergence of social stratification and the development of complex trade networks linking societies in distant parts of the European continent. These 12 lectures will discuss some of the evidence archaeologists have used to reconstruct social, political, economic and religious life during this period.

ARCH 1010 Iron Age Europe and Ireland

Conventional dating for the beginning of the Iron Age in Europe is about 750 BC. By about 600 BC, iron-working, on a limited scale, had reached Ireland. The period is associated with those people historically referred to as Celts, a people with distinctive burial rites, with advanced metal technology and, above all, with an art style which has been described as "the first great non-classical art of Europe". In the course of the last century BC, the expansion of Roman power brought an end to Celtic independence. Only in Ireland did Celtic culture survive.

# ARCHAEOLOGY (Contd.)

### ARCH 1011 *Ireland and Europe in the Early Middle Ages*

This course is an examination of the archaeology of Ireland and Europe between the fifth and tenth centuries AD. The topics discussed will include the 'barbarian invasions', the Viking diaspora, and the art of the Church in Ireland.

### ARCH 1012 Later Medieval Ireland and Europe

The archaeology of Ireland and Europe in the first half of the second millenium AD is discussed here. We will examine specifically the rise of high medieval European culture and the effects of the Anglo-Norman

invasion of Ireland

### ARCH 1013 The Archaeology of World Societies

In this course of 12 lectures students are introduced to both ancient civilizations, such as the Scythians, and modern societies such as the Australian Aborigines, Amazonian Indians and the Inuit of the Artic Circle

# **SECOND YEAR (ARCH 2000)** (deemed equivalent to twelve units)

This comprises ten 12 lecture courses and one 24 lecture course. The Irish and British material is treated in greater depth, corresponding developments elsewhere in Europe are addressed more specifically and students are introduced to relevant debates about the evidence and its interpretation. Other features include a major course on the theory and philosophy of Archaeology, a course on scientific techniques in Archaeology and a course on ancient craftsmanship in various materials. Reading lists for the courses will be provided.

ARCH 2006	From hunter-gatherers to first farmers.
ARCH 2007	Contemporary problems in the interpretation of the Neolithic.
ARCH 2008	The emergence of hierarchy: the Bronze Age of north-western and central Europe.
ARCH 2009	The Irish Iron Age: problems of Celticity.
ARCH 2010	Early medieval landscape, settlement and society in Ireland.
ARCH 2011	Early medieval art.
ARCH 2012	Viking-age Ireland, later Anglo-Saxon England, and Carolingian Europe.
ARCH 2013	The archaeology of feudal society: Ireland and Europe AD 1100 - 1500.
ARCH 2014	Methods and techniques in landscape archaeology.
ARCH 2015	A practical introduction to materials in archaeology.
ARCH 2016	Theory and philosophy of archaeology (24 Lectures).

# FINAL YEAR (ARCH 3000) (deemed equivalent to twelve units)

The course will consist of ten core courses (each course counting as one unit) and two optional courses (each counting as one unit) chosen from a range of at least five options. The courses will be thematic and will develop concepts and issues introduced in the First and Second Year programmes.

The selection of courses available in any academic year will depend on staffing and logistical resources. Minimum and maximum limits will be placed on numbers attending optional courses. Courses additional to the list below may also be offered. The list of courses on offer in any academic year will be available immediately before the beginning of the academic year in September.

A one-week field course will be offered as an option in early September *prior* to the commencement of the lecture programme. Students interested in this option should enquire in the Department for details.

A significant proportion of the overall programme will be examined by continuous assessment. This will include three extended essays.

# Courses to be offered will be selected from the following:

ARCH 3001	The Mesolithic/Neolithic transition
ARCH 3002	Stone tools in a social context
ARCH 3003	Regionality in the Neolithic of Ireland and Britain
ARCH 3004	Settlement and landscape
ARCH 3005	Ritual and ideology
ARCH 3006	Funerary archaeology
ARCH 3007	Material culture
ARCH 3008	Art in prehistory
ARCH 3009	Practice and theory in Irish archaeology
ARCH 3010	Wetland archaeology
ARCH 3011	Religion and ritual in Celtic Europe
ARCH 3012	The Celts at war: history, archaeology and myth
ARCH 3013	Ireland's Golden Age
ARCH 3014	People of the Isles: Ireland and Britain, AD 400-1000
ARCH 3015	The archaeology of architecture
ARCH 3016	$Sculptors\ and\ stone masons\ in\ the\ first\ Christian\ Millennium$
ARCH 3017	The Viking world
ARCH 3018	Field courses

# ARCHAEOLOGY (Contd.)

The Celtic Studies course in Archaeology and Early Irish History (Mode III) will consist of approximately forty lectures in each subject spread over a two year period. These will cover the Celtic Iron Age (Ireland, Britain and the Continent) and early Christian Ireland. For the course in Early Irish History, consult the department.

The Celtic Studies course in Archaeology as a full minor subject (Mode III) will cover the Archaeology of Ireland and Britain and the continental background from the early Iron Age to the Vikings: monuments and settlement; art and its context.

# CELTIC CIVILIZATION

# FIRST YEAR (CCIV 1000)

This course of lectures, a comprehensive survey of the Celtic peoples in the ancient and medieval worlds, will enable the student to understand and appreciate Celtic literary, intellectual and artistic achievements

The history and culture of the Celts will be traced from their prehistoric continental origins to their ultimate homelands in Ireland, Britain and Brittany. Included will be a study of institutions, religion and mythology, law and art. The evidence of archaeology will be examined and discussed in conjunction with the written sources.

The varied and important medieval literature of Ireland and Wales, read in translation, complements the broader study of Celtic culture. Texts will include the Táin and early Irish sagas, lyric poetry, the Mabinogion, Arthurian romance and medieval Welsh poetry. A general overview of the Celtic languages will also be presented.

CCIV 1001	Insular Celtic Archaeology and Art
CCIV 1002	Ancient Celtic Peoples
CCIV 1003	Celtic Mythology
CCIV 1004	Romano-Celtic Britain
CCIV 1005	Early/Medieval Welsh Literature
CCIV 1006	Celtic Ireland
CCIV 1007	Early Irish Literature
CCIV 1008	Celtic History and Ethnography

A reading list will be available at the beginning of term.

Please note that Celtic Civilization is currently offered as a first year subject only.
 Students taking this subject in combination with certain other first year subjects may proceed to the BA (Honours) in Mode IIA or to the BA (Honours) in Celtic Studies in Mode III.

# CLASSICAL STUDIES

# FIRST YEAR

To qualify to enter Classical Studies, which is a Mode I degree subject, students must take Greek and Roman Civilization as one of their first year subjects.

# **SECOND YEAR (CS 2100)** (deemed equivalent to 24 units)

CS 2001 *Greek History*: The Rise of Macedon.

CS 2002 Greek Art and Archaeology: The Archaeology of Greek Society.

This course builds on the First Year Greek Archaeology course. It covers the same periods and material, but they are approached as a method for understanding Greek society. Themes covered include: mythology and art as propaganda, sport and welfare, burial customs, the symposium and prostitution, gender relations. Students are thus introduced to archaeology as a method for social interpretation and understanding.

CS 2003 Greek Philosophy: Plato, Phaedo.

The prescribed text for this course is Plato's *Phaedo*. In this dialogue Plato portrays Socrates at his death arguing for the immortality of the soul. Lectures deal with the personal and philosophical presentation of Socrates, the arguments for the soul's immortality, with special reference

to Plato's Forms, and the myth near the end.

CS 2004 Greek Literature: Greek Tragedy: Aeschylus, Prometheus Bound and Other Plays; Sophocles, Electra and Other Plays; Euripides, Medea and

Other Plays (all in Penguin Classics).

The prescribed texts for this course are Aeschylus', *The Persians* and *Prometheus Bound*, Sophocles', *Ajax* and *Women of Trachis*; Euripides', *Medea, Hecabe* and *Heracles*. The lectures will deal with the social and theatrical context of Greek Tragedy, and with the structure and themes of the seven plays. The course focuses in particular on the justice of the gods, on the nature of heroism (both male and female), and on the

problem of revenge.

CS 2005 Roman History: The Early Roman Empire.

The Roman Empire from the assassination of Caesar to the natural death of Hadrian with particular emphasis on the role of Augustus in the establishment of the imperial system. The course explores the empire through a series of themes, such as the Senate, the Army, the People, Italy, Rome's subjects, and the Imperial Cult. Among the evidence used will be Tacitus' *Annals*, Suetonius' *Lives of the Caesars*, and selected inscriptions.

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# **CLASSICAL STUDIES (Contd.)**

CS 2006 Roman Art and Archaeology: Imperial Art and Architecture.

Official art in the Roman empire was more than just decoration for the towns of the Roman empire. It fulfilled a vital political role. During the course we will look at the "language" of Roman art and learn how to read the political messages in some of the big monuments in Rome and elsewhere, and how the "language" survived into European culture. The

period covered is the first to fifth century.

CS 2007 Roman Literature: The Satires of Horace Persius; Juvenal, The Satires

(World's Classics, trans. N. Rudd).

Satire was the only literary form which the Romans invented. The three authors covered - Horace with his urbane moralising, Persius with his doctrinaire preaching and Juvenal with his bitter tirades - give us an

insight into the realities of life in Rome.

CS 2008 Ancient Society: Stoics and Epicureans.

The Stoics and Epicureans were the two philosophical movements which had the greatest direct influence on the everyday lives of ancient Greeks and Romans. They held that a moral code could be based on reasoned argument in the context of an understanding of our physical environment. This course examines how they justified their moral code and the kind of physical universe which they claimed we inhabit. As far as possible this will be done through the words of the philosophers themselves, in the case of the Epicureans through Lucretius' poem *On the Nature of the Universe*.

Either

CS 2009 Greek (course text: *Reading Greek*, Cambridge University Press)

or

CS 2010 Latin (course text: *Reading Latin*, P.V. Jones and K.C. Sidwell,

Cambridge University Press).

Students will be expected to attend tutorials and to maintain a satisfactory standard in essay work connected with them.

#### FINAL YEAR (CS 3100) (deemed equivalent to 24 units)

I Subject to certain restrictions in choice, students will be required to choose four courses from a list of courses which will be offered each year. Subject to approval by the Head of Department, a student may substitute an extended essay of approximately 12,000 words for one of these courses.

Courses offered in the session 2001/2002 may include:

CS 3001 The Archaeology of Minoan Crete

CS 3003 The Oedipus Myth

CS 3004 Roman History 60-50 BC

CS 3008 Introduction to Neoplatonism: Plotinus

CS 3009 Rome and the Greek World

CS 3012 The Roman Novel

CS 3013 The Archaeology of the Roman Imperial Army

#### II Either

#### CS 3010 Greek:

- Greek Tragedy: Euripides, Medea\*
- 2. Plato, Apology\*, Crito\*
- 3. Homer, *Iliad IX*\*
- 4. Demosthenes. Olynthiacs
- 5. Unprescribed translation

#### Or

## CS 3011 Latin:

- 1. Reading Latin ch.6
- 2. 2 Latin reading texts
- 3. Unprescribed translation
- Indicates texts for detailed study.

#### General Notes:

Details of courses may have to be altered at short notice because books are not available or for other urgent reasons.

Students will be expected to maintain a satisfactory standard in essay and language work connected with their courses.

#### CLASSICS

#### FIRST YEAR

To qualify to enter Classics, which is a Mode I degree subject, students must take Greek and Latin (either Mode A or B) as first year subjects.

#### SECOND (CLAS 2100) AND FINAL (CLAS 3100) YEARS

For their second and final years students follow the courses prescribed for the subjects Latin and Greek.

## **COMPUTER SCIENCE**

## AVAILABLE ONLY TO STUDENTS WHO ENTERED THROUGH DN.050

## FIRST YEAR (COMP 1600)

There are three lectures a week plus programming practicals and tutorials.

#### 1 Introduction to Computing Programming

Nature of computation; algorithms; correctness and efficiency of algorithms; basic complexity measures; sequence, selection and iteration constructs; program construction using these constructs; reasoning about programs; various methods of problem decomposition; reuse of existing software components.

#### 2. Introduction to Information Technology

Basic computer hardware; practical usage of current software applications and operating systems; the Internet and World-Wide Web.

## SECOND YEAR (COMP 2600)

COMP 2601 Datastructures & Algorithms 1

Software design principles; data abstraction; dynamic data types; lists,

queues, stacks, trees, graphs and operations on them; hashing.

COMP 2603 Functional Programming

> Expression Evaluation; Notation; Types; Conditionals; Lists & primitive functions; DEFUN; Applicative functions; Iteration; Declarations; Macros; EVAL; Compilation; Association lists; Assignment; Structures;

I/O; CLOS; Garbage Collection; Other functional languages.

**COMP 2607** Formal Foundations

> The role of mathematics and logic in Computer Science; Logic fundamentals; propositional and predicate logic and proof techniques.

## COMP 2606 Databases & Information Systems

Types of information system; database organisation; introduction to relational, hierarchical and network data models; data definition and manipulation languages; information retrieval systems; retrieval strategies: intelligent knowledge based systems.

## COMP 2608 Operating Systems I

Introduction to Oss. Processes: Memory Management; File Management; Introduction to Security and Protection; Case Studies; Unix, Win NT.

## COMP 2609 Datastructures & Algorithms II

Trees; graphs; pattern matching; sorting; specification techniques; complexity analysis; applications.

## THIRD YEAR (COMP 3600)

Students will be required to take five of the following units based on the set of units offered in a given year.

## COMP 3617 Foundations of Computing

Mathematical notation and terminology; finite automata and regular languages; definitions and properties, regular expressions; universal models and computability theory; Turing machines, primitive recursive functions; complexity of algorithms: efficiency of algorithms, complexity classes, complexity analysis in practice.

## COMP 3604 Software Design and Development I

Information systems; Users, the technology, the value of information, systems development life cycle (overview); analysis and design methodologies; structured methods; selected system analysis and design techniques; designing structured programs; data environments; programming; software development tools, project management (overview); systems justification.

## COMP 3606 Introduction to Artificial Intelligence

Problem solving & search; Introduction to knowledge representation: search techniques; expert systems. Introduction to Machine Learning; Inductive learning; learning from mistakes; case-based reasoning. Connectionist Computing; Basic neurobiology; history of connectionism; Connectionist models. Applications of Artifical Intelligence; studies; recommender systems & the World Wide Web.

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#### **COMPUTER SCIENCE (Contd.)**

## COMP 3607 Program Design & Verification I

Review of predicate logic; use of predicates to specify programs. WP-Calculus, backward derivation, refinement calculus, Calculation of programs. Efficiency considerations; strengthening invariants, choosing variants.

## COMP 3611 Object-Oriented Programming

Fundamental object-oriented concepts: classes, objects, messages, encapsulation, inheritance, polymorphism, dynamic binding. Elementary object-oriented design. Quality issues in object-oriented programs. Practical programming in an object oriented language, for example in C++

## COMP 3616 Networks & Internet Systems

Network types, functions, topologies, transmission, switching, routing, management, reference models, architectures, protocols and standards; network user applications; flow and congestion control strategies; design and implementation considerations; use in internet systems.

#### FOURTH YEAR (COMP 4600)

Students are required to take a total of eight units. The choice of units will be drawn from core units (COMP 4601, COMP 4607, COMP 4608 and COMP 4610) and additional units offered by the Department in a given year. Students also undertake a substantial project assignment, under supervision, which is reported both orally and in written form.

#### COMP 4601 Theory of Computation

Efficiency of algorithms and complexity issues. Decision problems and languages. Classes of P and NP. NP completeness. Cook's theorem. Examples of NP-complete problem and proofs. Use of NP-completeness to analyse problems. Turing reducibility. Approximation algorithms.

## COMP 4602 Information Systems II

Databases; recovery; concurrency; security; integrity; distributed databases; extended relational data model; object oriented data model.

Prerequisite: COMP 3605

## COMP 4603 Systems Design & Development

Systems development life cycle (issues/problems); Tools and techniques for analysis and design; implementation approaches, soft methodologies; CASE tools; analysis, design, code generation; distributed system issues; evaluation; usability; quality assurance; security; project management tools and techniques.

Prerequisite: COMP 3604

## COMP 4604 Interactive Computer Graphics

The rendering pipeline; visible surface determination; local illumination and shading models; curve and curved surface generation; solid modeling, texture mapping; global illumination; ray tracing radiosity and monte carlo methods; computer animation; scientific visualization.

## COMP 4605 Image Processing

Geometric operations; linear system theory; convolution and correlation; continuous Fourier transform; Fast Fourier Transform; frequency filtering; segmentation; image encoding; applications.

#### COMP 4606 Computability

Recursive function theory; Post and Thue systems; particularly computability; equivalences; recursive functions, Turing machines etc.; mechanical theorem proving; Godel's incompleteness theorems.

#### COMP 4607 Formal Semantics

Formal semantics; needs and uses; semantics; recursive programs; fixed point theory; structural induction; computational induction; denotational semantics; algebraic semantics; axiomatic semantics.

## COMP 4608 Object-Oriented Design

Object-oriented methods in the software development cycle; practical design techniques using e.g. Unified Modelling Language technique; alternative approaches to object-oriented design; frameworks and design patterns.

#### COMP 4609 Design Patterns

Introduction to Patterns. Use of patterns in the design process. Documentation of new patterns. Creational patterns. Structural patterns. Behavioural patterns. Introduction to Frameworks. Data-driven and architecture-driven approaches. Synergy between patterns and frameworks. Case Studies.

# Prerequisite: COMP 3611

## COMP 4610 Concurrent Programming

Nature of concurrent programming shared memory; message passage; interference; synchronisation; mutual exclusion; semaphores; deadlock; fairness; high level constructs for concurrency; communication sequential processes; applications to operating systems; formal verification.

## **COMPUTER SCIENCE (Contd.)**

## COMP 4611 Formal Specifications

Need for formal specifications; specification methods e.g. VDM, algebraic specifications; techniques for specifying complex systems; developings systems for specifications; case studies.

## COMP 4612 Operating Systems II

Introduction, Process synchronisation, Language mechanisms for concurrency, Deadlock, Computer security – formal models (access matrix, BLP, lattice, take grant models). Scheduling Algorithms. Distributed Operating Systems – design and implementation, Synchronisation in Distributed OS, Distributed Process Scheduling, Distributed Concurrency control (deadlock and recovery), Distributed File Systems, Distributed Shared Memory, Distributed Computer Security. Case Studies:

CHORUS, MACH, AMOEBA. *Prerequisite: COMP 3602* 

## COMP 4613 Language Engineering

Fundamentals of natural language processing; formal models and corpusbased methods in speech and language; resources, standards and evaluation methodology; applications of human language technology.

## COMP 4614 Distributed Systems

Distributed systems processing and interconnection architectural/reference models and concepts; open and closed systems; distributed operating system kernels, decomposition and consequences of distribution; security and management of distributed systems; transparency, remote operations, coordination replication, shared transactions, concurrency control, recovery and fault tolerance.

## COMP 4615 Exploring Computer Science

Special topics related to current research and state of art applications not covered in other units.

#### COMP 4616 The Intelligent Internet

Applications of Artificial Intelligence techniques to the Internet: information integration, information extraction, information retrieval, clustering, recommender systems, and semistructured information.

## COMP 4617

Foundations of Artificial Intelligence

The importance of representation, First Order Logic, Predicate Calculus, Normalised FOPL forms, Skolemisation, Conversion to Clausal Form, Resolution, Logic Programming, Prolog, Extra Logical Features of Prolog.

#### **COMP 4618**

Connectionist Computing

Basic neurobiology: cortical and sub-cortical structure and function. History of connectionism; the McCulloch and Pitts neuron, Hebbian learning, the Perceptron. Modern connectionist learning: simple associators, the Boltzmann machine, Hopfield networks, Kohonen networks, error backpropagation. Connnectionist natural language processing. Connectionist visual processing.

Prerequisite: COMP 3609

#### COMP 4619

Multi-Agent Systems (MAS)

Definition of Distributed Artificial Intelligence (DAI). Motivations for MAS. Strong versus weak notions of agency. Intentional agent systems. Agent communication. Speech act theory. Collaboration, planning, belief desire intention (BDI) architectures. Agent oriented design, agentoriented programming and languages (Agent0, Agentalk), Multi-agent systems prototyping environment, industrial and commercial applications.

Prerequisite: COMP 3609

## **COMP 4620**

Speech Processing

Speech production: the vocal tract, basic articulatory phonetics; Acoustic phonetics; Waveform segmentation; Sampling and digital encoding; FFT and spectral representations; Spectrogram reading; Source-filter model of the vocal tract; Speech coding - LPC, Cepstra; Voicing and pitch extraction; Principles of synthesis.

#### COMP 4622

Randomised Algorithms & Stochastic Simulation

Basic concepts in the design and analysis of randomised algorithms; Randomness and non-uniformity, Game-Theoretic Techniques, Markov Chains and Random Walks, Algebraic Techniques; Linear and Non-linear Programming; NP-complete applications; Graph Algorithms; Metaheuristic techniques: simulated annealing, genetic algorithms, tabu search.

#### **ECONOMICS**

#### FIRST YEAR (ECON 1000)

A general introduction to economics and its methodology:

ECON 1001 Microeconomics: The price system, theory of the firm, factors of

production and their markets; microeconomic policy.

ECON 1002 *Macroeconomics*: National income accounting, introduction to models of

income determination, money, banking and credit, international economic

relations, monetary and fiscal policy.

#### SECOND YEAR (ECON 2000 - MODE II) (ECON 2100 - MODE I)

ECON 2001 Macroeconomics (2)
Intermediate level course in macroeconomics.

ECON 2002 Microeconomics (2)

Intermediate level course in microeconomics.

ECON 2005 History of Economic Thought (2)

The development of economic theory over the years.

ECON 2006 Statistics/Econometrics (2)

Introduction to statistics as applied to the estimation of economic models.

ECON 2010 Economic History (2)

Introduction to the main topics in Irish and Western economic history.

ECON 2011 The Irish Economy (2)

Study of the Irish economy, its development and recent economic history.

ECON 2012 *Quantitative Techniques (2)* 

Introduction to the use of mathematical techniques in economics.

ECON 2017 Labour Economics (2)

The economics of investment in human capital. Labour supply,

employment, unemployment and wage rigidity.

ECON 2025 Environmental Economics (2)

Externalities and the environment; optimal policies to combat pollution;

cost-benefit analysis of resource-based projects.

ECON 2028	Managerial Accounting (2) Introduction to principles of managerial accounting and financial control.
ECON 2030	Tutorials (2) Weekly tutorial on general aspects of theoretical and applied economics.
ECON 2031	Applied Economics (2) Study of the determinants of market structure and their implications for resource allocation.

The list of optional subjects may vary from year to year.

Schedule of Courses for Second Arts Mode I and Other Modes

· ·	V	Mode I	Other Modes
ECON 2001	Macroeconomics	R	R
ECON 2002	Microeconomics	R	R
ECON 2005	History of Economic Thought	O	O
ECON 2006	Statistics/Econometrics	R	R
ECON 2010	Economic History	O	O
ECON 2011	The Irish Economy	R	R
ECON 2012	Quantitative Techniques	R	R
ECON 2017	Labour Economics	O	O
ECON 2025	<b>Environmental Economics</b>	O	O
ECON 2028	Managerial Accounting	O	*
ECON 2030	Tutorials	R	R
ECON 2031	Applied Economics	O	O
ECON 2030	Tutorials	Ü	R O

R = Required Course; O = Option Course; \* Not an option for 'Other Modes'

## Notes for Second Year Students:

- Mode I students must do eleven courses (six required and five options) and attend tutorials.
- Other students must do the *five* required courses and attend tutorials.

FINAL YEAR (ECON 3000 - Mode II)

# ECONOMICS (Contd.)

(ECON 3100 - Mode I)

ECON 3001	Macroeconomics (2) Macroeconomic theory; growth inflation and unemployment, fiscal, monetary and exchange-rate policy.
ECON 3002	Microeconomics (2) Applications of price theory to contemporary problems; introduction to welfare economics and general equilibrium.
ECON 3003	Economic Theory I: Macroeconomics (4) (Mode I students only) Macroeconomic theory; growth inflation and unemployment, fiscal, monetary and exchange-rate policy.
ECON 3004	Economic Theory II: Microeconomics (4) (Mode I students only) Applications of price theory to contemporary problems; introduction to welfare economics and general equilibrium.
ECON 3006	Econometrics $I(2)$ Estimation and inference in the general linear model; departures from Classical assumptions; simultaneous equation systems.
ECON 3009	Transport Economics (2) Applied economic analysis of (i) the provision of transport infrastructure; (ii) transport providers; and (iii) transport users, the role and influence of government on the transport sector.
ECON 3010	Economic History (2) Issues in Irish and European economic history.
ECON 3012	Quantitative Techniques (2) Classical optimisation with and without constraints; linear and non-linear programming; economic applications.
ECON 3014	Finance (2) Supply and demand for money; the optimal quantity of money; monetary policy.
ECON 3018	Health Economics (2) Demand for health; payment systems for doctors; casemix analysis; health insurance; health and labour market outcomes.

ECON 3019 Econometrics II (2) Theoretical aspects of the linear model and its associated problems: interrelation to simultaneous equations models. ECON 3020 *Industrial Organisation* (2) The analysis of modern industry, particularly the competitive and growth strategies of firms under uncertainty; the functioning of markets. ECON 3021 *Introduction to Game Theory* (2) Introduction to the Theory of games with applications to finance, auctions and industrial organisation. ECON 3023 International Economics (2) International trade theory: balance of payments adjustment. ECON 3024 Economic Development (2) Application of economic theory to the study of the problems facing the less developed countries. ECON 3028 Managerial Accounting (2) Introduction to principles of managerial accounting and financial control. ECON 3029 Public Sector Economics (2) Demand and supply for public goods; criteria for public intervention; inequality and poverty. ECON 3030 Tutorials (2) Weekly tutorial on general aspects of theoretical and applied economics. ECON 3033 Labour Economics (2) Microeconomic models of unemployment and evidence for OECD countries, human capital, labour supply. ECON 3034 *The European Economy* (2) The economic rationale for European integration, focussing on the single market and the Euro.

## **ECONOMICS (Contd.)**

## Provisional Schedule of Courses for BA Degree

Notes for Final Year Students:

ECON 3100 Mode I

Mode I students must:

(a) Take the following five required courses:

ECON 3003 Economic Theory I

ECON 3004 Economic Theory II

ECON 3006 Econometrics I

ECON 3019 Econometrics II

ECON 3034 The European Economy

- (b) Attend tutorials (ECON 3030)
- (c) Take four options from the list of final year courses excluding ECON 3001 Macroeconomics and ECON 3002 Microeconomics.

#### ECON 3000 Mode II

Mode II students must:

(a) Take the following three required courses:

ECON 3001 Macroeconomics

ECON 3002 Microeconomics

ECON 3034 The European Economy

- (b) Attend tutorials (ECON 3030)
- (c) Take two options from the list of final year courses excluding ECON 3003 *Economic Theory I* and ECON 3004 *Economic Theory II*.

#### **ENGLISH**

#### FIRST YEAR (ENG 1000)

The principal aim of First Year English is to equip you with the literary, theoretical and linguistic expertise needed to understand how texts are constructed and operate. The texts studied range widely in time (from medieval to modern), in place (Ireland, America, England) and in genre (from conventional, 'literary' categories like 'short story' or 'novel' to 'non-literary' ones like the language of the tabloid press or the phonetics of rap poetry). This wide scope affords rich opportunity to investigate how particular historical moments and cultural formations shape texts.

Courses in the English Department are organised under two broad headings: Old and Middle English and Modern. First semester Old and Middle English courses heighten linguistic awareness of how English works, especially today but also in the past. This awareness will enrich your encounter with any text studied in the Department. Old and Middle English courses of the second semester introduce some of the earliest English texts written. Together, the two Old and Middle English semesters are designed to extend your acquaintance with English in all its diversity and at both extremes of its chronological range. First semester Modern courses concentrate on the formal aspects of three literary genres: the short story, the novel and poetry. During these courses you will become aware that there are many different ways of reading the same text, and you will also develop some of the technical and conceptual skills needed for textual discussion. Modern courses of the second semester build on knowledge acquired in the first by considering texts in a more inter-related fashion and in broader cultural contexts. The focus here will be on texts produced in specific periods of literary and cultural Renaissance.

You will write six course-related essays in First Year, two for the Old and Middle English side of the Department and four for the Modern.

Overall, the aims of First Year are:

- To master the writing of a well-structured, properly documented essay.
- To improve analytical reading skills.
- To acquire some critical vocabulary and theoretical perspectives.
- To situate texts in literary and cultural contexts.

#### Courses:

ENG 1001	Poetic Form (1)
ENG 1002	Narrative (1)
ENG 1003	Dramaturgy and Performance (1)
ENG 1004	Introduction to English Language Studies (1)
ENG 1005	The American Literary Renaissance (1)
ENG 1006	The Irish Literary Renaissance (1)
ENG 1007	The English Literary Renaissance (1)
ENG 1008	Introduction to Medieval English Literature (1)

#### **ENGLISH (Contd.)**

## SECOND YEAR (ENG 2000 - Mode II) (ENG 2100 - Mode I)

Students take a total of six core courses: three in each semester

Core Courses

ENG 2001 The Canterbury Tales (1.5 units)

Taught by weekly lectures and tutorials. Lectures will run for one

semester.

ENG 2002 An Introduction to Old English (1.5 units)

Taught by weekly lectures and tutorials. Lectures will run for one

semester.

ENG 2003 Early Modern English (1.5 units)

A literature course taught by weekly lectures and tutorials. Lectures

will run for one semester.

ENG 2004 *Modern English* (1.5 units)

A literature course taught by weekly lectures and tutorials. Lectures

will run for one semester.

ENG 2005 *American Literature* (1.5 units)

A literature course taught by weekly lectures and tutorials. Lectures

will run for one semester.

ENG 2006 Anglo-Irish Literature (1.5 units)

A literature course taught by weekly lectures and tutorials. Lectures

will run for one semester.

#### Mode II Options

Students also take three seminar classes: choices available vary from year to year.

ENG 2007 Old & Middle English Literature Options

The following were available in 2000/2001:

Medieval Mystery Plays (1 unit) Gothic and Gothick (1 unit) Medieval Fabliaux (1 unit) Old Norse Mythology (1 unit) The Arthurian Tradition (1 unit) Humour: Medieval to Modern (1 unit)

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ENG 2008/2009 Modern English Literature Options

The following were available in 2000/2001:

Renaissance Revenge Tragedy (1 unit)

A Study of Christopher Marlowe (1 unit)

The Rise of English: Language and Identity in the Age

of Shakespeare (1 unit)

Poetry in English – 17<sup>th</sup> Century til the Present (1 unit)

Early American Writing (1 unit)

Shakespearean Comedy: Idea and Form (1 unit)

The History of Sexuality: A Theoretical Introduction (1 unit)

Satire (1 unit)

Nineteenth and Twentieth Century Irish Women Poets:

Politics and Aesthetic (1 unit)

The Literature of Terror: From Gothic to Sensation Fiction (1 unit)

Monstrous Speculations: Film and the Gothic (1 unit)

A Re-Reading of *Gulliver's Travels* (1 unit)

Shakespeare and Film (1 unit)

Mode II students must accumulate twelve units over two semesters. All core courses are compulsory.

#### Mode I Core Courses

ENG 2020	An Old English Language Laboratory Course (1 unit)
ENG 2023	Language in Ireland (2 units)

**ENG 2022** Medieval Texts: from Manuscript to Print (2 units)

ENG 2024 A Modern English course (2 units) ENG 2025 A Modern English course (2 units)

Mode I Options

ENG 2026 An Old and Middle English option taught in weekly seminars. The

department will offer a range of seminars: students must choose one. (1

unit)

ENG 2027 A literature option taught in weekly seminars. The department will offer

a range of seminars; students must choose one. (1 unit)

**ENG 2028** A literature option taught in weekly seminars. The department will offer

a range of seminars; students must choose one. (1 unit)

Mode I students must accumulate twenty-four units over two semesters. All core courses are compulsory. In addition to fulfilling the course requirements for Mode II, Mode I students must take Mode I core courses and two extra Modern English options and one extra Old and Middle English option (i.e. six options in all). No student may take the same option twice. Please see sample lists under ENG 2007 and ENG 2008/2009 for a guide to seminar topics.

#### **ENGLISH (Contd.)**

## FINAL YEAR (ENG 3000 - Mode II) (ENG 3100 - Mode I)

Students take a total of six core courses: three in each semester.

$\alpha$	
Ore	Courses

ENG 3011 Epic and Romance (1.5 units)

An Old and Middle English literature course taught by weekly lectures

and tutorials. Lectures will run for one semester.

ENG 3012 *Medieval Dream Visions* (1.5 units)

An Old and Middle English literature course taught by weekly lectures

and tutorials. Lectures will run for one semester.

ENG 3013 Tradition and Experiment (1.5 units)

A literature course taught by weekly lectures and tutorials. Lectures will

run for one semester.

ENG 3014 *Literature of Nations* (1.5 units)

A literature course taught by weekly lectures and tutorials. Lectures will

run for one semester.

ENG 3015 Gender and Writing (1.5 units)

A literature course taught by weekly lectures and tutorials. Lectures will

will run for one semester.

ENG 3016 The Formation of Canons (1.5 units)

A literature course taught by weekly lectures and tutorials. Lectures will

run for one semester.

#### Mode II Options

Students also take three seminar courses; choices available vary from year to year

ENG 3017 An Old and Middle English option taught in weekly seminars. The

department will offer a range of seminars; students must choose one.

(1 unit)

ENG 3018 A literature option taught in weekly seminars. The department will offer

a range of seminars; students must choose one. (1 unit)

ENG 3019 A literature option taught in weekly seminars. The department will offer

a range of seminars: students must choose one. (1 unit)

Options will vary from year to year. The following is a sample list of Modern English options available in 2000/2001:

Canadian Fiction in English
Reading Shakespeare in Context
The Poetry and Prose of Eavan Boland
Film and the Emergence of an Audio-Visual Aesthetic
Gothic Fiction
J. M. Synge
Beckett and the Modern Theatre
Coleridge's Biographia
African-American Writing
Pinter

Mode II students must accumulate twelve units over two semesters. All core courses are compulsory.

Mode I Courses

ENG 3024	Reading Old English (2 units)
ENG 3026	The English Language (2 units)
ENG 3027	A Modern English course (2 units)
ENG 3028	A Modern English course (2 units)
Mode I Options ENG 3029	An Old and Middle English option taught in weekly seminars. The department will offer a range of seminars; students must choose one. (1 unit)
ENG 3030	An Old and Middle English option taught in weekly seminars. The department will offer a range of seminars; students must choose one (1 unit)
ENG 3031	An Old and Middle English option taught in weekly seminars. The department will offer a range of seminars; students must choose one. (1 unit)
ENG 3032	A Modern English literature option taught in weekly seminars. The department will offer a range of seminars; students must choose one. (1 unit).
ENG 3033	A Modern English literature option taught in weekly seminars. The department will offer a range of seminars; students must choose one. (1 unit)

#### **ENGLISH (Contd.)**

ENG 3034 A Modern English literature option taught in weekly seminars.

The department will offer a range of seminars; students must

choose one. (1 unit)

ENG 3035 (a) E (subject to availability) (b) M

(a) English Syntax (2 units)

(b) Medieval Welsh (2 units)

(c) Alfred the Great (2 unit)

Mode I students must accumulate twenty-four units over two semesters. All core courses are compulsory. In addition to fulfilling the course requirements for Mode II, Mode I students must take Mode I core courses and accumulate four further units from options, including at least one Old and Middle English option and one Modern option. No student may take the same option twice.

#### OLD AND MIDDLE ENGLISH

#### FIRST YEAR

All students of English take courses as described under **ENGLISH**. These will include (1) Introduction to English Language Studies and (2) Introduction to Medieval English Literature.

#### SECOND YEAR

Mode I English courses are described under **ENGLISH**. For details of courses for Mode IIA Old and Middle English, contact the Department.

#### FINAL YEAR

Mode I English courses are described under **ENGLISH**. For details of courses for Mode IIA Old and Middle English, contact the Department.

## EXPERIMENTAL PHYSICS

See separate booklet, Science.

#### **FRENCH**

*Note:* Day students of French are normally required to spend a total period of at least three months in a French-speaking country in the course of their undergraduate studies. Exceptions may be made in special circumstances. The department provides guidance concerning travel, vacation courses and other opportunities for visits.

#### FIRST YEAR (FR 1000)

A student who has not the equivalent of at least Grade C3 at Honours Leaving Certificate should think carefully before deciding to take French as a subject.

Admission to degree programmes is decided on the results of the First University Examination in Arts. There is a 'language barrier' at this examination; in order to qualify for the second year courses in French, students are required to obtain certain specified standards in the language components of the examination, in addition to adequate marks in other papers. Details of the required standards will be provided by the department.

The first year programme consists of four courses, all taught over *both* semesters, largely through French, each covering a key aspect of French studies.

#### FR 1001 Oral and Written French

This course begins with a revision of basic French grammar and then introduces students to practice in essay-writing and comprehension. The course is taught by weekly lectures in the first semester and by two weekly tutorials throughout both semesters.

#### FR 1002 France Actuelle

This course offers an introduction to contemporary French life and civilisation under the guidance of native French speakers. The course is taught by weekly lectures in the second semester and weekly tutorials throughout both semesters. Students will be expected to produce written work during the year and to participate actively in French.

#### FR 1003 Introduction to French Literature

This course will introduce students to French literature past and present. Drawing on examples of fiction, poetry and drama, it aims to foster literary critical skills through close textual analysis and the broader exploration of themes and structures. The course is taught by weekly lectures and tutorials. Students will be expected to do four pieces of written work during the year.

#### FR 1004 France-Midi

A weekly presentation of topical cultural events in France; presented in French with video support.

## FRENCH (Contd.)

## Notes for First Year Students:

- All courses are subject to revision from year to year.
- Arrangements for tutorial groups are made in the first few days of term. Information is
  posted on the French Department Noticeboards outside the French Department Seminar
  Room (A 318).
- Details of prescribed texts and examination formats are available in the brochure presenting First Year French courses, which may be obtained from the Secretary of the French Department (A 314).

## **SECOND YEAR (FR 2000)**

First Semester			
FR 2001	Français parlé et écrit (2) The study of French and francophone civilisation forms an integral element of this course.		
FR 2013	Core Course A (2) A literature course taught by weekly lectures and tutorials.		
FR 2014	Core Course B (2) A literature course taught by weekly lectures and tutorials.		
Second Semester			
FR 2051	Français parlé et écrit (2) The study of French and francophone civilization forms an integral element of this course. Prerequisite: FR 2001		
FR 2067	Option 1 (2) A literature/non-language option taught by weekly lectures and tutorials.		
FR 2068	Option 2 (2) A literature/non-language option taught by weekly lectures and tutorials.		
FR 2069	Option 3 (2) A literature/non-language option taught by weekly lectures and tutorials.		
FR 2070	Option 4 (2) A literature/non-language option taught by weekly lectures and tutorials.		

#### Notes for Second Year Students:

- All Second Year French courses were under review at the time this syllabus was being compiled. Details of courses and options available in 2001/2002 may be obtained from the Secretary of the French Department (A314) from the end of May 2001.
- All first-semester courses plus FR 2051 in the second semester are compulsory.
- Students select two of the four second-semester options.
- All students must take six units over each semester, accumulating twelve in all. Each semestrial course or option is worth two units.

#### FINAL YEAR (FR 3000)

$F_i$	rci	So	mo	ster.	

FR 3001 Français parlé et écrit (2)

The study of French and francophone civilisation forms an integral

element of this course.

Prerequisites: FR 2001 and FR 2051

FR 3017 *Option 1* (2)

A literature/non-language option taught by weekly lectures and tutorials.

FR 3018 *Option 2* (2)

A literature/non-language option taught by weekly lectures and tutorials.

FR 3019 *Option 3* (2)

A literature/non-language option taught by weekly lectures and tutorials.

FR 3020 Option 4 (2)

A literature/non-language option taught by weekly lectures and tutorials.

FR 3021 *Option 5* (2)

A literature/non-language option taught by weekly lectures and tutorials.

FR 3022 *Option 6* (2)

A literature/non-language option taught by weekly lectures and tutorials.

Second Semester:

FR 3051 Français parlé et écrit (2)

The study of French and francophone civilisation forms an integral

element of this course. Prerequisite: FR 3001

FR 3070 *Option 1* (2)

A literature/non-language course taught by weekly lectures and tutorials.

## FRENCH (Contd.)

FR 3071	Option 2 $(2)$ A literature/non-language option taught by weekly lectures and tutorials.
FR 3072	Option 3 (2) A literature/non-language option taught by weekly lectures and tutorials.
FR 3073	Option 4 (2) A literature/non-language option taught by weekly lectures and tutorials.
FR 3074	Option 5 (2) A literature/non-language option taught by weekly lectures and tutorials.
FR 3075	Option 6 (2) A literature/non-language option taught by weekly lectures and tutorials.

#### Notes for Final Year Students:

- All Final Year French courses were under review at the time this brochure was being compiled. Details of courses and options available in 2001/2002 may be obtained from the Secretary of the French Department (A314) from the end of May 2001.
- Courses FR 3001 and FR 3051 are compulsory for all students.
- Students select two out of six option courses in each semester.
- All students must take six units over each semester, accumulating twelve in all. Each semestrial course or option is worth two units.

#### **GAEILGE**

#### AN NUA-GHAEILGE

Cúrsa cuimsitheach acadúil é siollabas na Nua-Ghaeilge a bhfuil mar aidhm leis eolas domhain a thabhairt ar an nGaeilge agus ar an oidhreacht liteartha agus chultúrtha a bhaineann léi. Sa chéad bhliain déantar staidéar téacsúil ar an scríbhneoireacht chomhaimseartha. Sa dara agus sa tríú bliain déantar cúrsa leanúnach céime i léann na Gaeilge idir theanga is litríocht. Cuirtear rogha an-fhairsing ar fáil.

Is í an Ghaeilge gnáth-theanga na Roinne agus is trí Ghaeilge a dhéantar an cúrsa iomlán. Éilítear caighdeán ard i labhairt agus i scríobh na teanga agus, mar sin déantar cúram faoi leith de labhairt, scríobh agus ghramadach na Gaeilge sa chúrsa trí chéile. Cuireann an Roinn cabhair airgid ar fáil do mhic léinn chun tréimhse a chaitheamh sa Ghaeltacht. Tá cnuasach cuimsitheach ábhair sa Teanglann idir sheanchas, cheol is amhránaíocht ón uile cheantar Gaeltachta.

Sa Chéad Bhliain is féidir an Nua-Ghaeilge a thógáil i dteannta aon ábhair eile ach amháin *Iodáilis* nó *Fealsúnacht*. Sa Dara agus sa Tríú Bliain is féidir an Nua-Ghaeilge a thógáil

- (a) i dteannta aon ábhair eile (ach amháin *Iodáilis* nó *Fealsúnacht*).
- (b) mar ábhar sa Léann Ceilteach (Modh III).
- (c) mar ábhar leis an Sean-Ghaeilge (Modh I).

## AN CHÉAD BHLIAIN (IR 1000)

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IR 1002 Oidhreacht na Gaeilge I: An Fhiannaíocht.

IR 1003/1008 Cúlra na nualitríochta.
IR 1004/1009 Labhairt na Gaeilge.
IR 1005/1010 Scríobh na Gaeilge.

IR 1011 Caoineadh Airt Uí Laoghaire IR 1012 Stair Sheachtrach na Gaeilge

## AN DARA BLIAIN (IR 2000 - MODE II) (IR 2100 - MODE I)

# An Chéad Seimeastar

IR 2001	$Labhairt\ agus\ scríobh\ na\ Gaeilge\ I\ (1)$
IR 2002	An Nualitríocht I (1)

IR 2003 Teangeolaíocht na Gaeilge I (1)
IR 2004 Litríocht na Gaeilge 1600-1900 I (1)

IR 2005 An Litríocht Bhéil I (1)

IR 2006 An Ghaeilge Chlasaiceach I (1)

# AN NUA-GHAEILGE (Contd.)

# An Dara Seimeastar:

IR 2007	Labhairt agus scríobh na Gaeilge II (1)
IR 2008	Litríocht na Gaeilge 1600-1900 II (1)
IR 2009	An Ghaeilge Chlasaiceach II (1)
IR 2011	An Nualitríocht II (1)
IR 2017	Scríbhneoirí Próis an 17ú haois (1) nó
IR 2013	An Nualitríocht III (1) nó
IR 2014	An Litríocht Bhéil II (1) nó
IR 2015	Gaeilge na hAlban I (1) nó
IR 2016	An tSean-Ghaeilge I (1) nó
IR 2018	Oidhreacht na Gaeilge II (1)

# AN TRÍÚ BLIAIN (IR 3000 - Mode II) (IR 3100 - Mode I)

## An Chéad Seimeastar:

The Chedia Seinteas	tur.
IR 3001	Labhairt, scríobh is gramadach na Gaeilge III (1)
IR 3002	Teoiricí Critice I (1) nó
IR 3003	Litríocht na Gaeilge Clasaicí I (1)
IR 3004	An Nualitríocht IV (1)
IR 3005	Litríocht na Gaeilge 1600-1900 III (1)
IR 3006	An Litríocht Bhéil III (1) nó
IR 3007	An Ghaeilge Chlasaiceach III (1)
IR 3008	Teangeolaíocht na Gaeilge IV (1) nó
IR 3009	Gaeilge na hAlban II (1) nó
IR 3010	An tSean-Ghaeilge II (1)

## An Dara Seimeastar

IR 3011	Labhairt, scríobh is gramadach na Gaeilge IV (1)
IR 3024	Gearrscéalta an Chadhnaigh (1) nó
IR 3013	Litríocht na Gaeilge Clasaicí II (1)
IR 3014	An Nualitríocht V (1)
IR 3015	Litríocht na Gaeilge 1600-1900 IV (1)

IR 3016	Prós an 17ú haois (1) nó
IR 3017	An Ghaeilge Chlasaiceach IV (1)
IR 3018	Teangeolaíocht na Gaeilge V (1) nó
IR 3019	Gaeilge na hAlban III (1) nó
IR 3020	Gramadach na Gaeilge Clasaicí I(1)
IR 3021	An tSean-Ghaeilge III (1)
IR 3022	An Nualitríocht VI (1)
IR 3023	An Nualitríocht VII (1)

# GAEILGE NA hALBAN - Cúrsa an Léinn Cheiltigh

# AN CHÉAD BHLIAIN

Níl aon chúrsa ann.

## AN DARA BLIAIN

Mar atá faoi An Nua-Gaeilge: IR 2015.

## AN TRIÚ BLIAIN

Mar atá faoi An Nua-Gaeilge: IR 3009/3019.

#### GEOGRAPHY

The undergraduate course in Geography is intended to provide an appreciation of the scope of, and techniques relevant to, modern Geography. Integral to the programme are practical classes, laboratory work, project work and fieldwork as well as the normal lectures and tutorials. Fieldwork for on-site instruction and training in techniques is also an essential component of the Geography syllabus. During the three-year degree programme, all students are required to complete a minimum of 14 field classes from the programme of residential and non-residential classes organised by the Department. This programme will vary from year to year and students should consult the Department for further information. Students wishing to take a much wider and deeper range of Geography courses may pursue a Mode I (Single Subject) Honours degree programme. Information on the Geography Department and the courses it offers is also available on the UCD World Wide Web Server at www.ucd.ie.

*Note*: Although some school or other previous study experience of Geography is of course desirable, this is not an essential pre-requisite for entry to Geography at UCD.

#### FIRST YEAR (GEOG 1000)

There are two major components in the first year programme:

I. Geographical Perspectives (72 lectures), with courses on:

GEOG 1001 The Human Geography of Global Contrasts (12 lectures)

A perspective is offered on how geographers study the great contrasts in population growth and economic development which divide the modern world into regions of surplus and regions of scarcity.

GEOG 1012 Explorations in the Human Landscape (24 lectures)

This section moves from the global scale to the study of Geography at the regional and local scales. It introduces some other topics that geographers study, principally urban, social and historical issues.

GEOG 1013 Physical Geography (24 lectures)

This course will include a review of geomorphology at the global scale. Topics to be discussed will include global relief features and planetary structure in relation to global tectonics and lithospheric plate motions, the structure and evolution of the continents, and global denudation systems and surface materials. There will also be consideration of climatology and the environment.

GEOG 1014 Regional Geography (12 lectures)

Geographers have always sought to integrate their separate studies of economy, society and environment by examining their interrelationships within regions. This unit of the course takes one major world region to explore these approaches.

II GEOG 1020 Handling Spatial Data – Practical Course (20 x 1.5 hour sessions)

This component deals with the analysis of maps and the representation of statistical data on maps and diagrams. The design of maps forms a central part of the course and students will be introduced to Geographic Information Systems. It also includes an introduction to the use of the UCD Computing Network. Each student must keep, and submit as required during the year, a book containing the workings of the practical exercises.

In addition, first year students must participate in tutorials and must complete at least two days of field classes. A notebook record of the field classes must be kept and submitted for assessment

#### SECOND YEAR

The programme of courses offered by the Geography department is dynamic and constantly revised. The lists of courses on offer may change from year to year and the programme for any academic year is finalised only in September. What follows is based on the current syllabus and gives a good indication of the likely syllabus for the coming year but it may be changed as circumstances require.

#### **Mode II (GEOG 2000)**

Mode II students must complete 12 course units during their second year. The following 6 courses are taken by all Mode II students. Each course is two units.

GEOG 2001 Cultural Geography

This course explores selected themes in cultural geography, e.g. ways in which language, religion, economy and ethnicity vary and how they influence peoples' interactions with environments.

GEOG 2012 Europe

Geographical perspectives on the territorial organisation of Europe, with particular attention to the changing political, economic and cultural geography of the twentieth century. Several broad 'macro-views' of Europe will provide a framework for an exploration of current issues relevant regional development and territorial organisation.

GEOG 2021 Geomorphology

An introduction to (a) Quaternary geoscience, including the topics of oxygen isotope stratigraphy, terrestrial stratigraphy and correlation, geochronology, Quaternary climate change, glacial geomorphological processes, landforms and sediment systems as process and environmental surrogates and (b) the landforms, materials and processes associated with weathering, mass wasting, slopes and river systems.

## **GEOGRAPHY (Contd.)**

#### GEOG 2022 Climatology

This course will focus on understanding the processes responsible for climate. Lectures will introduce students to concepts of energy and mass exchanges within the climate system which give rise to circulation systems.

#### GEOG 2026 **Biogeography**

An introduction to the distribution patterns of species and ecosystems across the surface of the Earth and the factors that determine these patterns. Part of the course will examine aspects of the biogeography and conservation of biological diversity in two vastly different realms: Ireland and Australia.

#### GEOG 2060 Geographic Techniques – Practical Course

All students will take a two-unit practical and techniques course. The syllabus of this course will vary from year to year and will depend on available resources. Details will be made available at the beginning of the academic year.

Fieldwork is an essential component of the geography programme. The department organises a field course (GEOG 3050) abroad each year. While preference is given to third year students, second year Mode II students may participate in this course if space permits. However it is not possible to take this course for credit.

#### **Mode I (GEOG 2100)**

Mode I students must complete 24 course units during their second year. They take the six courses described above for the Mode II programme.

In addition all Mode I students take the following two-unit courses:

#### GEOG 2005 The Census of Population (L)

This course will introduce students to the Census of Population as a research tool. Emphasis will be on using the Small Area Population Statistics and participants will learn to extract, analyse and interpret these computer-based sources of data.

#### **GEOG 2008** Geomorphological Field and Laboratory Techniques (FL)

An introduction to basic field and laboratory techniques for the

description, mapping, measurement, sampling, analysis and interpretation

of glacial and fluvial landforms, sediments and processes.

#### GEOG 3013 Settlement and Society in Rural Ireland

This course deals mainly with the structure of rural communities in Ireland and the settlement patterns associated with them. Following an introductory examination of the cultural regions of Ireland, studies by social anthropologists, folklorists and others are considered along with the work of geographers.

## GEOG 2015 Introduction to Geographic Information Systems

Building on the skills learned in first year, this course explores the nature and use of geographical information systems as a research tool.

#### GEOG 2033 Environmental Cognition

This course concentrates on the "structural" element of the "image" of the city, "mental maps" and the cognition of geographical distances and relative locations

#### GEOG 2050 Field course

Normally this will be a residential field course in either Ireland or abroad of between 5 and 14 days duration. Details of the course on offer in any given year will be available early in the first semester. Students must bear the costs of this field course. Participants must complete a programme of work before, during, and after the field course.

#### Notes for Second Year students

- The selection of practical and techniques courses on offer in any year is dependent on the availability of the necessary resources. Limits will be placed on numbers in particular practical and techniques courses. A significant proportion of the programme is examined by continuous assessment and/or projects.
- Not all the courses listed above may be available in any one academic year. Courses
  additional to the list above may also be offered. The list of courses on offer in any
  academic year will be available in September.
- Students should note that where a choice of courses is offered, the choice made may influence the range of courses available in the final year. Students will be required to make binding course choices early in the first semester.

## FINAL YEAR Mode II (GEOG 3000)

The programme of courses offered by the Geography department is dynamic and is constantly revised. The lists of courses on offer may change from year to year and the programme for any academic year is finalised in September. What follows is based on the current year's syllabus and gives a good indication of the likely syllabus for the coming year but it may be changed as circumstances require. The department aims to offer the maximum amount of choice in courses to final year students within the context of a balanced overall geographical content. However, the limitations of the timetable may require that some courses run at the same time.

#### **GEOGRAPHY (Contd.)**

Mode II students must complete 12 course units during their third year. They choose **five** of the following six courses; each course is 2 units.

GEOG 3011 Historical Geography of Ireland in the Nineteenth Century

This course will consider methodology, practitioners, estates, tenants, famine, regional literature and land reform. Society and settlement will be the main

focus.

GEOG 3012 Central European Landscapes

This course explores the formation of the cultural landscape in this larger region. The organisation is chronological and place specific. The underlying theme is the relationship between society and settlement (including the environment) based on economic, social, political and cultural transformations channelled through dominant socio-economic

systems.

GEOG 3015 City of Dreams – the ideal urban settlement

This course will examine the search for the ideal urban settlement. Taking a broad sweep through space and time, it will be shown that there are very

different perspectives on what is 'ideal' and on how to achieve it.

GEOG 3030 Urban Geography and Planning

This course provides a systematic introduction to the study of the urban region and its planning processes. Attention is concentrated upon the western world, with the planning issues that confront urban areas in the latter part of the

twentieth century providing the central theme of the course.

GEOG 3032 Social Geography: City and Society

This course examines the social geography of large "western" cities with emphasis on the relations between spatial form and social processes and the links between social geography and urban sociology. Attention is paid to the

city not as an artefact but as a form of social organisation.

GEOG 3055 The Physical Geography of Rivers

This course examines the processes, landforms and surface materials of rivers and catchments in the contexts of global environmental change and resource

use.

#### **GEOG 3056**

Glaciation and the Quaternary of Ireland

This course will examine the evidence for the glaciation of Ireland during the Quaternary Period and will assess the applicability of global models of glaciation based upon both oceanic sediment cores and ice cores to Ireland. The course will begin with an investigation of key glaciological processes and their reflection in both glacigenic geomorphology and sedimentology before moving on to a survey of Ireland's Quaternary history. Course topics: Quaternary research in Ireland; glaciers and ice sheets; the dynamics of glaciers and ice sheets; glacial and glacigenic landforming processes; climate forcing and glaciation in the Pleistocene of Ireland; Milankovitch mechanisms and the Pleistocene Atlantic Ocean; glacial systems in Ireland and Britain through the Pleistocene; Quaternary geomorphology and ice sheet reconstructions in Ireland; physical characteristics of Ireland's glacigenic deposits; glaciological and environmental inferences based upon Ireland's glacigenic deposits; proposed Quaternary stratigraphies of Ireland; the Holocene interglacial transition in Ireland.

In addition, all Mode II students must choose one course from the following group of courses:

#### **GEOG 3060**

Dissertation

This is a substantial piece of research on a topic approved in advance by the Department. The dissertation shall involve a bibliographic review and shall also include a statement of the methods and results associated with the project. The dissertation may be taken only by those students who satisfy the Department of their suitability by reaching the required standard in the Second Year University Examinations in Geography. Details of the current standard required are available from the Department.

#### **GEOG 3001**

Nature and Culture in Global Perspective

This course examines ways in which "Nature" has been construed and deployed for various agenda in different cultural settings. It explores tensions among competing claims to knowledge and power, varieties of narrative imagination in the landscape and current environmental issues.

#### **GEOGRAPHY (Contd.)**

GEOG 3002 Nature, Space and Time

This course examines cross-cultural variations in human experience of environment. Complementing lectures, the course will include seminar discussions based on selected readings on the interactions of cognitive, behavioural, and bio-physical dimensions of everyday life, and the sources of stress and creativity in the contemporary world.

GEOG 3004 Environment and Development

This seminar deals with the challenge of harmonising development and environment on the European periphery, emphasising the need for elucidating human as well as bio-physical aspects of development. Growth strategies in peripheral regions may lead to situations where short-term gains in economic development place pressures on natural resources; however, long-term sustainability depends on maintaining environmental quality. Unit 1 of this course will comprise a series of lectures, discussions, and final examination; Unit 2 will involve an independent project.

GEOG 3005 Cartographic Ideas

This course will be concerned with issues relating to the production and critical analysis of all types of maps. Topics covered may include (a) accuracy and generalisation in maps, (b) maps as information systems, (c) maps as forms of "power knowledge" and (d) arguments for "deconstructing maps". These will be developed in relation to (i) the formulation of thematic maps for demographic and regional development purposes and (ii) the history of cartography at the global and national scales. Some attention will be given to Ireland.

GEOG 3007 Environmental Remote Sensing (L)

This course covers the physical bases of remote sensing – radiation, spectral responses, sensor systems and images. It includes air photo interpretation, satellite digital image processing, enhancement and analysis, using the ERDAS system, Case study applications and project work.

GEOG 3009 Geomorphological Field and Laboratory Techniques (FL)

This course introduces techniques for morphological mapping, air photo analysis, surveying for the description, sampling, analysis and interpretation of sediments and for the measurement of geomorphological processes. The course includes laboratory and fieldwork and several projects.

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GEOG 3010 History and Practice of Geography

This course covers the nature of geography, its theories and methods, and major changes in ideas and practices during its development as a discipline. It also examines varieties in geographical thought in different cultural traditions and the societal and technological context within which its major styles of enquiry have emerged in Euro-American schools. Special attention is given to the relationship between physical and human branches of enquiry within the field and the challenge of integrated approaches to the study of environment today.

GEOG 3013 Settlement and Society in Ireland

This course deals mainly with the structure of rural communities in Ireland and the settlement patterns associated with them. Following an introductory examination of the cultural regions of Ireland, studies by social anthropologists, folklorists and others are considered along with the work of geographers.

GEOG 3024 Holocene Fluvial Geomorphology (F)

This course deals with the characteristics and formation of alluvial landscapes and floodplains during the Holocene in the context of environmental change and with particular reference to the recently glaciated valleys in upland areas of Ireland and Britain. It is based largely on field teaching classes. Various pre-requisites apply, contact the department for details.

GEOG 3025 Ice Age Ireland: Field Studies in Glacial Geology (F)

This course is intended to complement GEOG 3056. The course will be oriented mainly towards fieldwork and will introduce students to both field techniques in glacial geology and to sites of special interest in the field of Irish Quaternary research. Students must obtain a minimum qualifying standard in relevant second year courses to participate in this course.

GEOG 3026 Geomorphological Techniques (FL)

This course builds on GEOG 2008 to enhance skills in Geomorphological mapping, in the environmental interpretation of sediments and in absolute dating. Various pre-requisites apply, contact the department for details.

GEOG 3034 The Geography of Social Problems and Contemporary Issues
This course presents a geographical approach to the study of social problems.
The main concern will be with the contemporary "western" city although it
may be useful to venture beyond this empirical frame. Topics covered are
likely to include the following (i) problems associated with the built
environment; (ii) elements of environmental stress; (iii) deprivation;
(iv) deviance; (v) minorities; (vi) social "malaise" and social "well being".

#### **GEOGRAPHY (Contd.)**

GEOG 3035 Social Geography and Human Territoriality

The social, cultural and political organisation of and behaviour within and between spatially defined units is examined on a wide variety of geographical and temporal scales. Ideas drawn from ethnology and sociometrics provide theoretical underpinnings.

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GEOG 3037 Introduction to Retailing

This course is concerned with the processes of development and change within the retail system. It focuses on the locational bases of these changes, with attention being concentrated on the interrelationships between the retail and consumer subsystems, and the development of new retail formats and

locations.

GEOG 3038 Store Location Analysis

This course focuses on the processes and techniques of assessing the performance of existing retail locations and the potential of new retail locations. The course will be strongly practical, analysing and teaching specific locational techniques. Participants must have completed GEOG 3037

(Introduction to Retailing).

GEOG 3039 Geography of Elections

The key to the functioning of the modern state is the acquisition and retention of power through the medium of elections. This course focuses upon the processes and patterns of modern electoral systems, examining varying electoral methods, underlying socio-economic and political cleavages,

electoral abuses, and geographical influences on elections.

GEOG 3041 Aspects of the Geography of the Third World

An examination from a geographical perspective of a selection of issues as they affect the Third World. The course will examine the Geography of World Trade, Industrialisation, Population Dynamics, Food Production and Urbanisation with particular emphasis on the choices faced by Third World

countries as they attempt to develop their societies.

GEOG 3042 Dublin: The Historical Geography of a Capital City

This course explores the evolution of the capital city: the Viking and medieval inheritance, the classical town in the modern city, the nineteenth century slum

problems and the rising bourgeoisie in the early twentieth century.

GEOG 3043 The Growth and Development of Dublin in the twentieth century

This course is concerned with the study of the growth of the city in the twentieth century. Main areas of interest will be the development of the residential component of the city, changing economic and commercial geography and the socio-demographic spatial structure of the city.

GEOG 3044 Regional Geography

An in-depth study of the geography of a major region of the earth. The focus

of the course will change from year to year.

GEOG 3046 Climate near the Ground

This course focuses on boundary-layer climates, those which form adjacent to a surface and whose special properties are derived by interaction with the surface. The subject matter includes the climates of vegetated surfaces, of animals and plants, of humans and buildings. During the term students will

use meteorological instruments.

GEOG 3050 Field Course

Normally this will be a residential field course in either Ireland or abroad of between 5 and 14 days duration. Details of the course on offer in any given year will be available early in the first semester. Students must bear the costs of this field course. Those participating for unit credit must complete a programme of work before, during and after the field course. Places will be limited and it will not be possible to allocate places until midway through the first semester.

The field course may be taken for credit and may replace <u>any</u> one of the courses described above

#### **Mode I (GEOG 3100)**

Mode I students must take 24 course units during their final year. They must choose **at least** four of the following two-unit courses:

GEOG 3011	Historical Geography of Ireland in the nineteenth century
GEOG 3012	Central European Landscapes
GEOG 3015	City of Dreams – the ideal urban settlement
GEOG 3030	Urban Geography and Planning
GEOG 3032	Social Geography – City and Society
GEOG 3055	The Physical Geography of Rivers
GEOG 3056	Glaciation and the Quaternary of Ireland

In addition they must take GEOG 3061 (Dissertation) and additional courses to make up their required total of 24 units. They may choose any courses from the <u>complete</u> list of courses on offer to Mode II students, *with the exception of GEOG 3060*, providing that any course chosen has not already been taken as part of their second year programme. Opportunities may be provided to permit students to take up to four units in other Departments of the Faculty of Arts and in the Geology Department, Faculty of Science, with the approval of the Geography Department and the receiving Department. Details of availability and conditions may be obtained from the Geography Department. Many courses are examined in part or totally by continuous assessment and in making their selection, students must ensure that no more than 25% of their total marks is derived from continuous assessment. The dissertation (GEOG 3061) is excluded from this total.

#### **GEOGRAPHY (Contd.)**

GEOG 3061 Dissertation

This is a research project of some originality on a topic approved in advance by the Department of approximately 10,000 words in length. It is expected that this project will be of substantially greater scope and depth than GEOG 3060, reflecting its four-unit weighting. The dissertation will involve a bibliographic review and will include a statement of the methods and results associated with the project.

#### Notes for all Final Year Students

- Not all the courses listed above will be available in any one academic year and courses
  additional to this list may also be offered.
- Continuous assessment is a central part of many courses. In addition an F following a
  course title indicates that the course involves fieldwork, and an L that it involves
  laboratory or practical work. Students who do not complete assignments, fieldwork,
  laboratory or practical work may be required to withdraw from a course. In such
  circumstances s/he will not be permitted to sit any written examination in that course.
- Courses will not be offered where demand is not sufficient while it may be necessary to
  limit enrolment in other cases. The list of courses on offer in any academic year will be
  available in September and students will be required to make a binding choice of courses
  early in the first semester. Some courses have pre-requisites which in some cases
  require attendance at specific courses either in second year or third year Geography.
  Most courses begin in the first semester.

### **GERMAN**

Students require a good Higher Level grade in Leaving Certificate German to be successful in the programme. The Department operates a language barrier: in order to pass a specific year of study in German, students are required to obtain certain specified standards in the language components of the examinations.

*Note:* Students of German are normally required to spend a total period of at least three months in a German-speaking country in the course of their undergraduate studies. The Department participates in a number of exchange programmes in order to facilitate students spending a year abroad. This year is taken between the second and third year of the programme.

## FIRST YEAR (GER 1000)

The first year of the BA programme aims at improving students' overall competency in German and at training their study skills to such an extent that they can cope in a university environment.

<u>Study skills</u>: Students will be expected to have mastered the following tasks by the end of the year: students should be able to take useful lecture notes, to use the library, to source information, to write essays in English in an appropriate register.

<u>Literature:</u> By the end of the year students should be able to read selected contemporary literary texts, apply analytical concepts to literary texts, comprehend extracts from older texts, to understand narrative structure and dramatic structure and selected secondary material.

<u>Language</u>: By the end of the year students should be able to read literary and non-literary contemporary texts, give a presentation in German, participate in discussions and master appropriate written assignments. Students should also have a good command of German grammar and be able to tackle weaknesses autonomously.

#### Semesters 1 and 2

#### GER 1001

#### Language Classes

Students will have three language classes per week throughout the year. This course follows a very focused and coherent programme. The year begins with an "Einstufungstest" which tests students' ability in German. This will be used to assign students to a group which is appropriate for their level and needs.

# **GERMAN (Contd.)**

GER 1002 Literature Lecture

The lecture introduces students primarily to modern German literature. The lecture programme aims at enhancing students' analytical skills by addressing the following themes: how to read in a foreign language; what is a narrative? characterisation and narrative viewpoint; time and space in narratives; what is a drama? what is a tragedy? modern drama; language in poetry.

GER 1003 Literature Seminars

The lecture programme will be supported by a literature seminar (2 hours per week) which explores the themes and topics covered by the lectures. Close reading of the core texts will be practised. Some secondary

material will be discussed in class.

GER 1004 Introduction to German Language and Linguistics

This course aims at introducing first year students to basic concepts of linguistics (phonology, morphology, syntax and pragmatics) in order to enable them to analyse modern spoken and written German. For this reason all theoretical concepts will be explored with reference to examples from the German language. The course will be taught through

English.

GER 1005 Linguistics Tutorials

The GER 1004 course will be backed up by practical tutorials.

## **SECOND YEAR (GER 2000)**

The second year of the BA programme aims at deepening students' overall competency in German and at training students' study skills to such an extent that they can cope in a German university environment.

#### First Semester

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GER 2001	Language Classes (Textstunde)
GER 2002	History of Germany (1750-1900)
GER 2007	Aspects of German Economic History
GER 2008	Austrian 'Popular Theatre' of the 19th and 20th centuries
GER 2009	Resistance to the System
GER 2010	Goethe's "Urfaust" und die Moderne
GER 2011	Theories of Language Acquisition
GER 2012	Introduction to German Opera
GER 2013	Kriminalerzählung

Second Semester GER 2051	Language Classes (Textstunde) (Continuation of GER 2001).
GER 2058	Trauma and Memory in Contemporary German Literature
GER 2059	Introduction to Pragmatics and Discourse analysis
GER 2060	The Woyzeck-Film
GER 2061	Georg Büchner
GER 2062	Introduction to Documentary Theatre
GER 2063	Deutschland und Österreich heute

# Notes for Second Year Students

- All Second Year German courses were under review at the time this syllabus was being
  prepared. Details of courses and options available in 2001/2002 will be outlined in the
  German Departmental Handbook which can be obtained from the German Department
  Office (D321) from the end of August 2001.
- Courses GER 2001 and GER 2051 are compulsory for all students.
- Students have to choose a total of **three options** in the academic year, on aspects of the literature, linguistics, history and economy of the German speaking countries. Either two options may be taken in the first semester and one in the second semester **or** vice versa. It is **not** possible to choose three options in one semester.
- All Second Year BA (International) students and Erasmus candidates will be required to participate in the course *Deutschland und Österreich heute* (GER 2063).

## FINAL YEAR (GER 3000)

The final year of the BA degree programme aims at teaching the German language and culture on a level that implements the expressed goal of the German Department (a) to train competent speakers of German who can express themselves fluently both in spoken and written German; (b) to develop students' analytical, historical and cultural competence by exposing them to literary and cultural themes, styles and discourses which enhance their understanding of the cultures of the German speaking countries. In order to achieve these goals the syllabus contains a core element which is obligatory for all students and optional courses which can be chosen by students.

Please note: As in all other years, the Department operates a language barrier: if a student fails two of the language elements s/he does not pass the year.

# **GERMAN (Contd.)**

First Semester	
GER 3001	Language Classes (Textstunde)
GER 3011	Dutch for Beginners
GER 3013	Reading Brecht
GER 3015	Contemporary German Dramas
GER 3016	Rhetorik
GER 3056	Viennese Drama around 1900
GER 3060	Thomas Mann, 'Buddenbrooks'
Semester Two	
GER 3051	Language Classes (Textstunde) (continuation of GER 3001)
GER 3057	Deutschland 1871-1945
GER 3058	Wirtschaftskurs for Arts Students
GER 3059	Natur und Katastrophe in Erzählungen des 19. Jahrhunderts
GER 3061	Dutch (Part 2) – continuation of GER 3011
GER 3064	Das deutsche bürgerliche Trauerspiel
GER 3065	Erzählen um 1900
GER 3067	Sociolinguistics

## **Notes for Final Year Students**

- All Final Year German courses were under review at the time this syllabus was being
  prepared. Details of courses and options available in 2001/2002 will be outlined in the
  German Departmental Handbook which can be obtained from the German Departmental
  Office (D321) from the end of August 2001.
- Courses GER 3001 and GER 3051 are compulsory for all students.
- Students have to choose four special subjects (two per semester) on aspects of the
  literature, linguistics and history of the German speaking countries. These special
  subjects are designed to allow students to develop areas of specialised interest.

#### GREEK

#### FIRST YEAR

### Mode A (GRK 1000)

(Students must have attained a good standard in Greek to enter this mode.)

GRK 1002 Prescribed Texts (For detailed study: Euripides *Medea*; Plato *Apology*,

Crito. For translation only: Thucydides VII.)

GRK 1003 Unseen Translation.

GRK 1004 Greek History: The Rise and Fall of Athens.

Students combining Greek with Greek and Roman Civilization will substitute for GRK 1004, Xenophon *Hellenica I*.

## Mode B (GRK 1001)

(This mode is intended only for students who have studied little or no Greek previously.)

GRK 1005 Grammar. Course Text: *Reading Greek*, Cambridge University Press.

GRK 1006 Elementary unprescribed translation.

GRK 1007 (a) Greek History: The Rise and Fall of Athens; or (b) (for students taking

Greek and Roman Civilization) Homer Odyssey VI (selections as in

Reading Greek 19).

## SECOND YEAR

## Mode A (GRK 2000)

(deemed equivalent to twelve units)

GRK 2002 Prescribed Texts (For detailed study: Sophocles *Trachiniae*; Homer

Iliad IX; Plato Symposium. For translation only: Demosthenes Olynthiacs

and Plutarch Pericles.)

GRK 2003 Unprescribed translation.

GRK 2004 Greek History: The Rise of Macedon.

Students taking Greek and Roman Civilization will substitute for GRK 2004, Plato Republic I

## Mode B (GRK 2001)

(deemed equivalent to twelve units)

GRK 2005 Prescribed Texts (For detailed study: Euripides *Medea*; Plato *Apology*,

Crito; Homer Iliad IX. For translation only: Demosthenes Olynthiacs.)

GRK 2006 Unprescribed Translation.

GRK 2007 Greek History: The Rise of Macedon.

Students taking Greek and Roman Civilization will substitute for GRK 2007, Plato Symposium.

## **GREEK (Contd.)**

# FINAL YEAR (GRK 3000)

# Modes A and B

(deemed equivalent to twelve units)

GRK 3001 Prescribed Texts (For detailed study: Aeschylus Eumenides;

Aristophanes Birds; Thucydides II. For translation only: Herodotus VI,

Sophocles Oedipus Tyrannus).

GRK 3002 Unprescribed Translation.

GRK 3003 Special subject, or subject to approval by the Head of Department, an

extended essay (GRK 3004) of approximately 12,000 words.

### General Notes

- It is recommended that, during the summer between first and second year, students try to improve their fluency in the language by reading widely in the following: Xenophon *Anabasis*. Arrian *Anabasis*.
- In the second year unseen paper, there will be two prose and two verse passages. The verse will be taken from the work of Euripides; one prose passage will be taken from either Xenophon's or Arrian's *Anabasis*, the other from Demosthenes.

## **GREEK AND ROMAN CIVILIZATION**

#### FIRST YEAR (GRC 1000)

GRC 1001

Greek History: The Rise and Fall of Athens.

Fifth-century Athens was an energetic, cosmopolitan city which was to have an extraordinary impact on western culture. Yet it was to end the century defeated in a long and destructive war, and putting its most famous philosopher to death. This course examines the development of the Athenian empire, the democracy at the heart of it, and the war that broke it. Understanding how to use evidence will be an important part of the course, with particular reference to Thucydides' *History of the Peloponnesian War* and selected inscriptions.

GRC 1002

Greek Art and Archaeology: 750-350 BC

This course is an illustrated survey of the development of Greek art from the Geometric period (750 BC) to the High Classical Period (400 BC) of Classical/Periklean Athens. As well as learning to recognise famous vases, statues and buildings, students are encouraged to read and understand the basic aesthetic principles of ancient art.

GRC 1003

Greek Philosophy: Socrates; Plato's Apology.

The prescribed text for this course is Plato's *Apology* (in translation). The lectures deal with the life of Socrates, early Greek Philosophy, the explanation of Socrates' unpopularity, the argument against the prosecution's charges, the morality and religion of Socrates.

GRC 1004

Greek Literature: Homer Iliad and Odyssey.

The prescribed texts for this course are Homer's *Illiad* and *Odyssey* in translation. The lectures deal with the historical background to Homer, and with the structure, themes, and characters of the two works. The course focuses on the epic heroes Achilles and Odysseus, on the role of the gods in the *Illiad*, and on women in the *Odyssey*.

GRC 1005

Roman History: The Fall of the Roman Republic.

GRC 1006

Roman Art and Archaeology: The Roman City

In this course we are going to look primarily at Pompeii, probably the best preserved Roman town of the Roman empire and find out how it worked and how typical it is for a small town of the Roman empire. Topics covered include the town and its infrastructure, the forum, the baths, the amusement areas, the temples, housing, the economy and the city's hinterland.

**GRC 1007** 

Roman Literature: Virgil, Aeneid.

The course points to an appreciation of the text of Virgil's Aeneid in both its literary and historical context - i.e. respectively Homer and Augustus. The lectures guide the reader through the complexities of Virgil's narrative and forms, in constant 'dialogue' with the Greek model on the one hand and contemporary Rome on the other. Four books are singled out for detailed study as they allow the reader to explore a theme particularly relevant to our understanding of Virgil's art (Books 4, 6, 10 and 12), but an accurate knowledge of the whole text is required. A brief account of the reception of Virgil throughout the centuries is meant to provide links to the many other subjects influenced by the classical heritage (medieval and modern literature, art and music).

# **GREEK AND ROMAN CIVILISATION (Contd.)**

# **SECOND YEAR (GRC 2000)**

(deemed equivalent to twelve units)

GRC 2001 *Greek History:* The Rise of Macedon.

GRC 2002 Greek Art and Archaeology: The Archaeology of Greek Society.

This course builds on the 1<sup>st</sup> year Greek Archaeology course. It covers the same periods and material, but they are approached as a method for understanding Greek society. Themes covered include: mythology and art as propaganda, sport and welfare, burial customs, the symposium and prostitution, gender relations. Students are thus introduced to archaeology as a method for social interpretation and understanding.

GRC 2003 Greek Philosophy: Plato, Phaedo.

The prescribed text for this course is Plato's Phaedo. In this dialogue Plato portrays Socrates at his death arguing for the immortality of the soul. Lectures deal with the personal and philosophical presentation of Socrates, the arguments for the soul's immortality, with special reference

to Plato's Forms, and the myth near the end.

GRC 2004 Greek Literature: Greek Tragedy: Aeschylus, Prometheus Bound and Other Plays; Sophocles, Electra and Other Plays; Euripides, Medea and

Other Plays (all in Penguin Classics).

The prescribed texts for this course are Aeschylus' *The Persians* and *Prometheus Bound*; Sophocles' *Ajax* and *Women of Trachis*; Euripides' *Medea, Hecabe* and *Heracles*. The lectures deal with the social and theatrical context of Greek Tragedy, and with the structure and themes of the seven plays. The course focuses in particular on the justice of the gods, on the nature of heroism (both male and female), and on the

problem of revenge.

GRC 2005 Roman History: The Early Roman Empire.

The Roman Empire from the assassination of Caesar to the natural death of Hadrian with particular emphasis on the role of Augustus in the establishment of the imperial system. The course explores the empire through a series of themes, such as the Senate, the Army, the People, Italy, Rome's subjects, and the Imperial Cult. Among the evidence used will be Tacitus' *Annals*, Suetonius' *Lives of the Caesars*, and selected

inscriptions.

GRC 2006 Roman Art and Archaeology: Imperial art and architecture.

Official art in the Roman empire was more than just decoration for the towns of the Roman empire. It fulfilled a vital political role. During the course we will look at the "language" of Roman art and learn how to read the political messages in some of the big monuments in Rome and elsewhere, and how this "language" survived into European culture. The

period covered is the first to fifth century.

GRC 2007

Roman Literature: The Satires of Horace, Persius and Juvenal, The

Satires (World's Classics, trans. N. Rudd).

Satire was the only literary form which the Romans invented. The three authors covered - Horace with his urbane moralising, Persius with his doctrinaire preaching and Juvenal with his bitter tirades - give us an insight into the realities of life in Rome.

**GRC 2008** 

Ancient Society: Stoics and Epicureans.

The Stoics and Epicureans were the two philosophical movements which had the greatest direct influence on the everyday lives of ancient Greeks and Romans. They held that a moral code could be based on reasoned argument in the context of an understanding of our physical environment. This course examines how they justified their moral code and the kind of physical universe which they claimed we inhabit. As far as possible this will be done through the words of the philosophers themselves, in the case of the Epicureans through Lucretius' poem *On the Nature of the Universe* 

# FINAL YEAR (GRC 3000) (deemed equivalent to twelve units):

Subject to certain restrictions in choice, students will be required to choose four courses from a list of courses which will be offered each year. Subject to approval by the Head of Department, a student may substitute an extended essay (GRC 3010) of approximately 12,000 words for one of these courses.

The following courses may be offered in the session 2001/2002:

GRC 3001 The Archaeology of Minoan Crete

GRC 3002 Aristotle's Physics

GRC 3003 The Oedipus Myth

GRC 3008 Introduction to Neoplatonism: Plotinus

GRC 3011 The Roman Novel

## General Notes:

- The texts listed above are prescribed and available in the Penguin Classics series except
  where indicated. A list of recommended further reading will be issued at the
  commencement of the courses. Details of courses may have to be altered at short notice
  because books are not available or for other urgent reasons.
- Students will be expected to attend tutorials and to maintain a satisfactory standard in essay work connected with them.

#### HERREW

# FIRST YEAR (HEB 1000)

HEB 1001 Hebrew Grammar Text: T.O. Lambdin. Introduction to Biblical Hebrew.

HEB 1002 Translation of prescribed texts (as found in Lambdin) and unseen

passages.

HEB 1003 Introduction to History and Literature of Israel.

# SECOND YEAR (HEB 2000)

HEB 2001 Hebrew Prose Composition (2)

> Instruction and practice in translation from English to Classical Hebrew prose. The course includes lectures on Hebrew syntax, and practice in the accurate vocalisation of unpointed texts.

HEB 2002 Hebrew Texts I (2)

The Hebrew short story; Ruth, Esther.

HEB 2003 Hebrew Texts II (4)

> The textual and literary analysis of the Deuteronomic tradition with particular reference to the book of Deuteronomy and certain prophetical books

**HEB 2004** Hebrew Texts III (2)

A study of Hebrew, Moabite and Phoenician inscriptions.

HEB 2005 Seminar: The History of Israel (2)

Methodological issues in the study of Israelite history.

# FINAL YEAR (HEB 3000)

HEB 3001 Hebrew Prose Composition (2)

> Instruction and practice in translation from English to Classical Hebrew prose. The course includes lectures on Hebrew syntax, and practice in the accurate vocalisation of unpointed texts.

HEB 3002 Hebrew Texts I (2)

The textual and literary analysis of the so-called "Succession Narrative" -

2 Sam 9-20; 1 Kings 1-2.

HEB 3003 Hebrew Texts II (4)

> An exact and detailed examination of detailed prophetical books of the Old Testament. The course will include textual criticism, philological analysis, literary and form criticism and an examination of the historical setting of the texts.

HEB 3004 Hebrew Texts III (2)

The Dead Sea Scrolls. A study of selected texts discovered at Khirbet Qumran, including the Manual of Discipline, the Pesher of Nahum, and

the Pesher of Habakkuk.

HEB 3005 Seminar: The Conflict with the Dragon and Sea Myth (2)

An intensive discussion of the Canaanite myth of Ba'al's combat with Sea and Leviathan, and the reflexes of the myth in the Old Testament.

# HELLENISTIC GREEK (Minor Subject in Mode III Near Eastern Languages)

#### FIRST YEAR

Courses not offered.

# **SECOND YEAR (HGRK 2000)**

(For Mode III)

HGRK 2001 Prescribed texts: Selected passages from the Acts of the Apostles, and the

New Testament Epistles; Polybius; Plutarch; the Didache.

HGRK 2002 The history of the text of the New Testament.

HGRK 2003 The history of Hellenistic Greek literature, with particular reference to

New Testament literature.

## FINAL YEAR (HGRK 3000)

(For Mode III)

HGRK 3001 Prescribed texts: Selected passages from the four Gospels; selected

passages from the Septuagint; Philo Judaeus; selected papyri; Clement's

Epistle to the Corinthians.

HGRK 3002 The distinguishing grammatical features of New Testament Greek.

HGRK 3003 The history of the Septuagint.

Note: For the unit values of courses in Hellenistic Greek, please consult the Department of Near Eastern Languages.

#### HISTORY

# [Modern History; Modern Irish History; Medieval History; Early (including Medieval) Irish History]

There are four separate departments which together form the Combined Departments of History. For undergraduate teaching they operate as a single unit, although students may concentrate on one or other of the four areas at different stages of their university careers.

There is a wide variety of courses, ranging in time from the fifth century AD to the year 2000. The history of Ireland, Britain and continental Europe receives particular emphasis. American history is taught in all three years, and some courses also deal with other areas of non-European history such as Australian.

Prospective students should note that a prior knowledge of history is *not* necessary for first year courses.

The departments teach through tutorials, seminars and lectures. In the tutorial system students meet weekly or fortnightly in groups; write essays regularly throughout the year; and discuss particular historical issues and problems with their tutor and with each other. They acquire practice in organising and expressing their arguments, both verbally and in writing.

Attendance is obligatory in all three years, and up to 25% of the marks in the second and third year examination *will* be awarded for students' tutorial performance.

## FIRST YEAR (HIS 1000)\*

For timetable purposes History is a B subject and can, therefore, be taken with subjects from any of the other sections listed on page 10. It cannot be taken with Greek, Welsh, Music or Statistics. Students must ensure that their initial choice of subjects enables them to pursue the combination they wish in second and third year.

Courses in first year are designed to introduce students to the study of history at university level. There are two courses, each of which examines historical problems in a variety of countries over a long chronological period.

The courses for 2001/2002 will be similar to the following:

HIS 1001

Federalists, Jacobins, United Irishmen and Bolsheviks: the revolutionary experience in America. France. Ireland and Russia. 1776-1935

This course provides a comparative view of revolt and revolution in Europe and America since the late middle ages, examining the causes, the course and the consequences of four of the following five major events: European revolts of the fourteenth century, the American revolution, the French revolution, the Russian revolution and the Irish revolution. Introductory lectures will explore the theory of comparative revolution, and each of the four revolts and revolutions will then be lectured in separate modules. Students will do four essays on the course in tutorials and sit a three hour examination at the end of the year in which they will be required to answer three questions.

HIS 1002 Colonies and Empires

This course examines the interaction of colonisation and imperialism in different periods of history and in different parts of the world. Four different relationships are discussed, including the Anglo-Irish experience. Introductory lectures will explore theories of imperialism and colonisation. Students will do four essays on the course in tutorials and sit a three hour examination at the end of the year in which they will be required to answer three questions.

## Mode I (HIS 1100) only

First Year Mode I (HIS 1100) students take two courses, as outlined above, and also HIS 1901 *Historians and their craft.* 

\*Note: Please note that courses are subject to change from year to year. Details are available from the Department Office.

#### SECOND YEAR\*

In second year, Mode II (HIS 2000) students take course HIS 2001 and two other courses chosen from a list similar to that below. Not all courses will be offered in any one year. There will be restrictions on choice imposed by class size, timetables and, in certain cases, subject matter. Mode I (HIS 2100) students take three courses, as outlined above, and also HIS 2901, HIS 2902, HIS 2903.

HIS 2001	Topics in European culture and society, 600-1700. (4)
HIS 2102	Women in early Irish society (4)
HIS 2103	'Ireland in the 'Golden Age', 650-750 (4)
HIS 2201	The Crusades (4)
HIS 2202	The Lordship of Ireland, 1169-1541 (4)
HIS 2203	The Age of the Vikings (4)
HIS 2204	War and Society in medieval Europe (4)
HIS 2205	Saxons, Normans and Celts: the island of Britain, 1100-1400 (4)
HIS 2301	Early Modern Europe, 1453-1660 (4)
HIS 2302	The First Modern Revolution: Early Modern Britain, 1500-1700 (4)
HIS 2304	The German Question 1848-1948 (4)

# **University College Dublin**

# HISTORY (Contd.)

HIS 2305	Australian History since 1788 (4)
HIS 2307	The Development of the United States, 1800-1918 (4)
HIS 2308	The Age of Churchill (4)
HIS 2309	East Central Europe, 1848-1914 (4)
HIS 2310	France since 1930 (4)
HIS 2311	The Politics of Film (4)
HIS 2312	Politics, ideology and society in Britain, 1815-1905 (4)
HIS 2313	Twentieth century Britain (4)
HIS 2314	Politics and society in late Hapsburg Europe (4)
HIS 2315	Stuart England, 1603-1689 (4)
HIS 2316	The United States, 1877-1952: policy and society (4)
HIS 2317	The German military in politics and society, 1800-1989 (4)
HIS 2318	Nationalism and socialism in Eastern Europe, 1815-1989 (4)
HIS 2319	Britain's Irish Policy, 1912-1985 (4)
HIS 2320	Culture and Society in Europe, 1750-1914 (4)
HIS 2321	The rise of the Asian Tigers: Japan and Korea c.1580-c.1980 (4)
HIS 2322	The politics of culture: the United States, 1919-2000 (4)
HIS 2401	Early modern Ireland, 1534-1660 (4)
HIS 2402	Ireland, 1945-2000 (4)

# Mode I (HIS 2100) only

HIS 2901	Medieval History Seminar: The Crusades (4)
HIS 2902	${\it Modern\ History\ Seminar:\ Classical\ Republicanism\ from\ Machiavelli\ to\ Robespierre\ (4)}$
HIS 2903	Modern Irish History Seminar: The Foundations of the 'Protestant Ascendancy' 1650-1760 (4)

<sup>\*</sup>Note: Please note that courses are subject to change from year to year. Details are available from the Department Office.

## FINAL YEAR\*

In Final Year, Mode II (HIS 3000) students take <u>three</u> courses from a list similar to that below. Not all courses will be offered in any one year. There will be restrictions on choice imposed by class size, timetables and, in certain cases, subject matter. Mode I (HIS 3100) students take three courses, as outlined above, and also HIS 3901, HIS 3902, HIS 3903.

HIS 3101	Irish Saints' Lives in the Seventh Century (4)
HIS 3103	The Book of Kells and its world (4)
HIS 3104	Ireland and the Ancient World (4)
HIS 3105	'Strange new worlds'; medieval Irish voyage tales (4)
HIS 3201	The Creation of Christendom: European Society from Charlemagne to the Millenium, 750-1000 (4)
HIS 3202	Medieval Dublin (4)
HIS 3203	The Italian Communes: city states in Lombardy and Tuscany in the Middle Ages and early Renaissance, 1050-1350 (4)
HIS 3204	Churches and Peoples; Religion in Late Medieval & Early Modern Ireland (4)
HIS 3205	Britain and Ireland 1100-1400: Comparisons, Contrasts and Connections (4)
HIS 3206	Murder in the cathedral: church and crown in twelfth-century England (4)
HIS 3207	From the Crusades to Christopher Columbus: Europe and the wider world (4)

# HISTORY (Contd.)

HIS 3208	War and society in Medieval Europe (4)
HIS 3301	American foreign relations (4)
HIS 3303	Popery and Party Politics in Restoration England, 1660 - 1688 (4)
HIS 3304	The French Revolution (4)
HIS 3305	Russia: society and culture (4)
HIS 3306	The US Civil War, 1850 - 1877 (4)
HIS 3307	Twentieth Century Music: a Political History (4)
HIS 3308	The West and the Middle East, 1919 - 1973 (4)
HIS 3309	The United States in World War Two (4)
HIS 3310	The Common Market, 1945 - 1973 (4)
HIS 3311	Australia since 1945 (4)
HIS 3312	Democracy and Christianity in the US and UK since 1870 (4)
HIS 3313	The United States in the twentieth century (4)
HIS 3314	Early modern France, 1530 - 1715 (4)
HIS 3315	The German and Swedish ancien régime, c. 1640 - c.1806 (4)
HIS 3316	The age of Churchill: British politics and the world role, 1900 - 1965 (4)
HIS 3317	Nineteenth-century Paris: politics and culture (4)
HIS 3318	Australia in international politics and war, 1880 - 2000 (4)
HIS 3319	The American West in film, fact and fiction (4)
HIS 3320	The Irish in America, 1760 - 1880 (4)
HIS 3321	Nationalism in east central Europe, 1848 - 1914 (4)
HIS 3322	The Weimar Republic, 1918 - 1933 (4)

HIS 3323	The rise of the Dutch Republic and its seabourne Empire, c.1559 - c.1789 (4)
HIS 3401	Restoration and revolution: Ireland and the later Stuart monarchy, 1660 - 1714 (4)
HIS 3402	Religion and politics in Ireland, 1690 - 1830 (4)
HIS 3403	Protestant state, catholic nation: Ireland c.1750 - c.1800 (4)
HIS 3404	Poverty and public health in nineteenth-century Ireland (4)
HIS 3405	History and historiography of the Great Famine (4)
HIS 3406	Catholicism and secularism in Independent Ireland, 1922 - 1968 (4)
HIS 3407	Irish Foreign Policy 1919 - 1973(4)
HIS 3408	Confederate Ireland 1641 - 1649 (4)
HIS 3409	The Irish Revolution 1910 - 1923 (4)
HIS 3410	Ireland and the Empire 1689 - 1782 (4)
HIS 3411	Landlords and tenants: law and society in nineteenth century Ireland (4)
HIS 3412	The vanishing Irish: population problems in Independent Ireland, 1922 - 1966 (4)
HIS 3413	Popular protest in Ireland 1860 - 1835 (4)
Mode I (HIS 3100) HIS 3901	only Medieval History Seminar: Alfred the Great (4)
HIS 3902	Modern History Seminar: Between the Wars: Britain among the Great Powers 1918 - 1939 (4)
HIS 3903	Modern Irish History Seminar: Ireland in an age of revolution 1775 - 1805 (4)

<sup>\*</sup>Note: Please note that courses are subject to change from year to year. Details are available from the Department Office.

## HISTORY OF ART

## FIRST YEAR (HA 1000)

The survey course in First Year is designed to introduce students to the history of art from Antiquity to Modernism. Incorporated into the chronological survey is one lecture per week on the tools of Art and Art History. The course comprises four lectures per week and one tutorial. Students are expected to write essays and fulfil slide test requirements. Prospective students should note that a prior knowledge of art history is not essential for the First Year programme.

HA 1005

Survey 1: Ancient and Medieval Worlds (3)

The course opens with an examination of what is painting, sculpture and architecture. In Survey 1 the art of ancient Greece and Rome is explored. followed by the art of the Early Christian Period. Byzantine, Romanesque and Gothic are also addressed. Specific buildings such as the Partheonon and Chartres Cathedral are examined. Studies in technique include vase painting and marble and bronze sculpture.

HA 1006

Survey 2: Late Medieval and Renaissance Art (3)

The work of Giotto introduces the late Medieval period, which also includes Duccio and the Sienese painters. A study of Early Netherlandish painting includes specific examination of Van Eyck's Ghent Alterpiece. A general introduction to the Florentine and High Renaissance is given in conjunction with studies into the techniques of fresco and oil painting. The work of Brunelleschie, Piero della Francesca, Leonardo, Michelanglo and Raphael is considered individually. Survey 2 ends with a study of Mannerism

HA 1007

Survey 3: Art and Architecture of the 16<sup>th</sup> and 17<sup>th</sup> centuries (3)

This course comprises an introduction to Venetian 16<sup>th</sup> century painting. examining in particular the work of Titian and Tintoretto. architecture of Andrea Palladio is studied and technical studies include consideration of architectural drawings. Baroque art and architecture in Italy, France, Spain and Dutch 17<sup>th</sup> century art form a major part of this course. Individual artists such as El Greco, Durer and Holbein are also examined.

HA 1008

Survey 4: From Rococo to Modernism (3)

This course begins with an exploration of Rococo art, focusing on Watteau and 18<sup>th</sup> century Venetian painting. This is followed by a study of British portraiture of the 18<sup>th</sup> century and the art of Neoclassicism. 19<sup>th</sup> century topics include Romanticism, Realism and Impressionism. Survey 4 concludes with an examination of Cubism and Abstract art. The techniques of pastel and watercolour are studied in this course and theories of colour are explored.

# SECOND YEAR (HA 2000)

HA 2006

Medieval Art and Architecture (3)

The course begins with the Late Roman period and examines parallel developments in early Christian art. Specific reference is made to the age of Justinian and early Byzantine building. Byzantium and its influences on western art, especially Sicily, is also considered. The course then examines art in the reign of Charlemagne in the west and the transition to early Medieval art and architecture in the Romanesque period. Particular attention is given to architecture and sculpture in Ireland during this time. The artistic activities of the Gothic period in terms of architecture, sculpture, stained glass painting, precious objects, illuminated manuscript and late medieval painting are explored. Finally, the course considers the overall evolution of the Gothic form in Western Europe.

HA 2007

Studies in Italian Renaissance (3)

This course will examine the theoretical foundations of the arts of the ancients from 1400-1600 in Florence, Rome, Venice and other Italian cities. Particular attention will be given to the work of Leonardo, Raphael and Michelangelo and to the diffusion of their styles throughout Europe. Patronage will be a central concern of the course and the impact on the arts of the Reformation and the Counter-Reformation will be considered in the political and economic contexts.

HA 2003

Modernism (3)

This course is an introduction to art in the 20<sup>th</sup> century. It will explore various art works, issues and Modernist and Post-Modernist movements, independently and interrelated, from Art Nouveau to Concept Art. While the focus will be on the works and the study of images, the significance of the theoretical writings of both artists and critics will be examined. The course will end with an outline of the manner in which contemporary art practices relate to and reassess Modernism.

HA 2008

*Irish Painting* (3)

The principal aim of this course is to give an acquaintance of Irish painting of the period from 1640 to 1950. The work of Irish painters both at home and abroad will be examined and comparisons will be made with contemporary work in a European context.

## Notes for Second Year Students:

- Students must accumulate the twelve units described above.
- Please note that courses are subject to change from year to year. Details of recent changes are available from the Department Office.

# **HISTORY OF ART (Contd.)**

# FINAL YEAR (HA 3000)

HA 3007 The Grammar of Ornament (1.5)

A history of European Ornament from the fifteenth to the eighteenth centuries. The course will examine in detail the role of engraved ornament and its application to the Decorative Arts such as woodcarving, silver and stuccowork, culminating in the Rococo style.

HA 3009 Art Historical Issues in Contemporary Art (1.5)

Since the Twentieth Century is now history, this course will explore ways in which the (New) Art History can approach late twentieth century art (since c.1960). It seeks to establish how current art practice finds its traditions and sources of inspiration in both modernist works and more recent theoretical debates.

Some of the issues which can be raised in relation to contemporary art are: truth, canonicity, cultural studies and iconology, the total work of art, sexuality, the viewers, open works, rhizomes, chaos and computers, memory and private mythologies, rites of passage, the dematerialisation of art, art and literature, religious art, migration, identity, political art, education and display.

Visits to galleries and museums will be incorporated into the programme.

HA 3006 Interior Design and the Applied Arts 1500 - 1800 (1.5)

This lecture course examines three centuries of European decorative design and the applied arts from the High Renaissance in Italy to the Neoclassical movement in the second half of the eighteenth century. The lectures will deal with decorative design and the applied arts in Britain and the Continent and with stuccowork, and all aspects of the applied arts

in Ireland from c.1550-1800.

HA 3008 Irish Art: Modernism and Post-Modernism (1.5)

This course will look at the major developments in Irish art from 1939 to 1990. A central theme of the lectures will be the expansion of painting and sculpture throughout the country and internationally. The course will look at the national, corporate and private patronage involved, and the roles of the artists-galleries and exhibitions in the development of Irish art. It will discuss to what extent Irish art has reflected the modernisation of Irish society and influenced its modernisation, and how Irish artists have responded to international art practices in this period.

Lecture Course (3)

Each student must participate in one of the optional lecture courses:

HA 3010 Aspects of Sculpture from Neo-Classicism to Post Modernism

HA 3016 Modern Architecture 1890-1990.

# Seminar Course (3)

Each student must also participate in one of four optional lecture courses and his/her choice of seminar topic will be related to the choice of lecture course as follows:

# Sculpture Course

HA 3011 Rembrandt in Context

HA 3012 The Grand Tour

# Architecture Course

HA 3015 Velazquez

HA 3014 Printmaking in Europe 1500-1800.

# Notes for Final Year Students:

- A total of twelve units must be accumulated in the course of the year.
- Please note that courses are subject to change from year to year. Details of recent changes are available from the Department Office.

## INFORMATION STUDIES

The undergraduate programme in Information Studies provides an understanding of the interaction between people and recorded knowledge from a humanistic perspective. It examines the generation, representation, storage, organisation, communication and use of knowledge by individuals, groups and society as a whole.

The four first year courses provide a basic foundation in key areas of the subject, namely: information use in society, literacy and reading patterns, the organisation of information, and the presentation of information. Students have the opportunity to study specific aspects of each of these areas in further depth in second and third year. Specific assignments, e.g. essays, seminars, reports and projects, will form an important part of the learning process in all years of the Information Studies programme.

*Note:* It is important to dispel two possible misconceptions about this subject:

- (i) It is not a professional qualification in librarianship or information work;
- (ii) It is not a technological subject.

# **INFORMATION STUDIES (Contd.)**

## FIRST YEAR (IS 1100)

Each student takes the following four foundation courses:

# IS 1112 Presentation of Information I

This two-unit course introduces students to the main modes and media through which information is presented and communicated. It begins with printed information, analysing the characteristics of the external and internal forms of a range of typical information documents (formats, typography, typographic structuring and cueing, conventions) and critically assessing these against a document's intended function. Next, the characteristics and potential functions of alternatives to the printed word in presenting information are examined (still pictures and symbols, diagrams, charts, maps, films and video) and their use in sample applications is assessed. The final focus of the course introduces students to computer-based presentations, including multimedia, and considers whether key principles emerging in earlier sections of the course may be applied to presentations on the electronic screen.

# IS 1113 Information and Society

This two-unit course introduces students to the general phenomenon of information generation and use in society, looking at broad perspectives and general trends. Three issues dominate discussion: the historical rise of an Information Society, the conceptualisation of information, and a review of the history of attempts to establish political control over the generation and use of information since the development of printing. The course develops in students an ability to construct arguments which assist the development of understanding about the role of information as a cultural phenomenon today.

# IS 1142 Studies in Literacy and Literature I

This two unit foundation course assesses literacy and reading patterns in Ireland and internationally. The rise of literacy in the western world and issues of present day adult literacy world-wide are explored. Important components of the course include: reading patterns past and present, the culture of reading, and book reception history. An exploration of popular literature of the eighteenth and nineteenth centuries to the present day, including the effect of new technologies on reading patterns, is undertaken. The course provides a context for assessing the experience of reading and general patterns of print media consumption in both current and recent generations of Irish society.

# IS 1151 Organisation of Information

This two-unit foundation course examines the ways in which information is organised and represented in retrieval systems for a wide range of applications and users. It presents an overview of the principles of information retrieval and relates these to practice in libraries, museums, art galleries, archives and other information agencies. Specific topics covered include: conceptual approaches to the organisation of information; information items and their surrogates; subject content analysis; electronic data models; retrieval issues for textual, visual and audio items. The relationships between alternative approaches to the organisation of knowledge are explored, e.g. philosophers' approaches to classification, general library classification schemes; catalogues and indexes.

## SECOND YEAR (IS 2200)

Each student takes twelve units from the range of courses offered. The following list of sixteen course units is typical of the choice which will be offered in any year.

Units	Course	Title
2	IS 2211	Information in Organisations
1	IS 2212	Information Behaviour and Users
2	IS 2217	Communications and the Consumer
2	IS 2241	General Information Resources
2	IS 2254	Cataloguing
2	IS 2255	Classification
2	IS 2261	Introduction to Information Technology
2	IS 2262	Introduction to Databases
2	IS 2265	Presentation of Electronic Information

## THIRD YEAR (IS 3300)

Each student takes twelve units from the range of courses offered. The following list of fourteen course units is typical of the choice which will be offered in any year:

Units	Course	Title
2	IS 3311	Information Policy
2	IS 3312	Culture, Information and Technology
2	IS 3313	Issues in Information Studies
2	IS 3331	Management of Information Agencies
2	IS 3344	Introduction to Electronic Resources
2	IS 3347	Literature for Children
2	IS 3365	Electronic Publishing
2	IS 3423	History of the Book

# EARLY (INCLUDING MEDIEVAL) IRISH

# FIRST YEAR (EMIR 1000)

EMIR 1001 *History of Early Irish literature.* 

EMIR 1002 *Outline of Early Irish social, religious and cultural institutions.* 

EMIR 1003 Introduction to Old and Middle Irish.

EMIR 1004 *Elementary study of selected early Irish texts in prose and verse.* 

A reading list will be available at the beginning of term.

# **SECOND YEAR (EMIR 2000)**

Major Subject (deemed equivalent to twelve units)

EMIR 2001 Early Irish Grammar

EMIR 2002 Studies in Early and Middle Irish literature.

EMIR 2003 Study of Selected Texts I

EMIR 2004 *Selections from early Irish poetry.* 

EMIR 2005 Study of Selected Texts II
EMIR 2006 Study of Selected Texts III

# EMIR 2MIN Minor Subject in Celtic Studies (Mode III)

As a minor subject in Celtic Studies, Early Irish may be taken initially in the second year. This course will have a more marked linguistic orientation than the first year course. Courses will be chosen from the above list in consultation with the department.

Cúrsa do mhic léinn na Nua-Ghaeilge (ach amháin i Modh III).

Gramadach na Sean-Ghaeilge agus forás na teanga.

Prós agus filíocht na Sean- agus na Meán-Ghaeilge (toghfar téacsanna).

# FINAL YEAR (EMIR 3000)

Major Subject (deemed equivalent to twelve units)

EMIR 3001	Extended study of Old Irish Language
EMIR 3002	Selected specialised literary texts
EMIR 3003	Analysis of Middle Irish texts
EMIR 3004	Studies in selected legal texts
EMIR 3005	Studies in selected historical texts
EMIR 3006	Studies in selected ecclesiastical texts

EMIR 3MIN Minor Subject in Celtic Studies (Mode III)

Study of early Irish language, literary history and texts. Courses will be chosen from the above list in consultation with the Department.

Cúrsa do mhic léinn na Nua-Ghaeilge (ach amháin i Modh III).

Gramadach na Sean-Ghaeilge agus forás na teanga.

Prós agus filíocht na Sean- agus na Meán-Ghaeilge (tochfar téascanna).

Stair na litríochta.

## IRISH FOLKLORE

## FIRST YEAR

Courses not offered.

## **SECOND YEAR (IRFL 2000)**

Major Subject in Celtic Studies, Mode III (deemed equivalent to twelve units)

Lectures and seminars will be offered on the following topics:

- 1. Field work and archiving.
- 2. Folk narrative.
- 3. Belief and custom.
- 4. Folklife.

Since a high proportion of the material is in the Irish language, students cannot be accepted until they can show the necessary competence in that language. Knowledge of a second modern language is also desirable.

Students will be expected to take part in field trips and individual field work.

A reading list will be available at the beginning of term.

#### FINAL YEAR (IRFL 3000)

Major Subject in Celtic Studies, Mode III (deemed equivalent to twelve units)

A course of study in Irish Folklore in continuation of work done in the second year with special reference to:

- 1. Research methods.
- Folk narrative.
- 3. Aspects of folk belief.
- Social tradition.

A reading list will be available at the beginning of term.

#### ITALIAN

No prior knowledge of the language is required; beginners are given an intensive language course which aims to bring them up to the level of non-beginners by the end of the first year and to allow them to cope with the demands of the various language and literature courses in their second and final years.

The three-year Italian programme is designed to make students proficient in the four language-skills (reading, writing, listening and speaking) and to familiarise them with the history and culture of Italy from the Middle Ages to the present. Particular attention is paid to the culture of different periods and to ways of reading and interpreting literature.

Students proceeding to a degree in Italian are normally required to spend a total of at least three months in Italy during the period of their undergraduate studies. Exceptions may be made in special circumstances. The Department will provide help and advice for those visiting Italy to satisfy this requirement.

Booklists and further information about courses will be supplied by the Department.

## FIRST YEAR (ITAL 1000)

The main emphasis in first year Italian is on language: two-thirds of all classes are language classes (grammar classes, reading classes, language laboratory sessions and conversation classes), and half the marks in the examination are allocated to language work. But courses are also given on the history of modern Italy and on twentieth-century literary texts, thus consolidating the student's grasp of the contemporary language.

There are separate language classes for beginners and non-beginners, but otherwise all students are taught together and take the same examination at the end of the year. This is because many students discover their ability and interest in languages only when they come to university. A proportion of the marks in the examination will be allocated to written work presented during the year. In order to be admitted to the examination, students must have attended all classes throughout the year and carried out all assignments.

## **SECOND YEAR (ITAL 2000)**

Six units are taken in each semester, as follows:

First Semester:

ITAL 2011 Italian Language (3)

Comprehension; translation from and into Italian; prose composition;

conversation.

ITAL 2012 Italian Language and Literary Culture (1)

The external (non-technical) history of the Italian language and of the cultural forms in which it manifested itself between its origins and the

Renaissance

ITAL 2013 Italian Literary Texts (2)

Including Dante (Vita nuova), Calvino (Il sentiero dei nidi di vagno),

Ginzburg (Lessico famigliare) and Sciascia (Il contesto).

Second Semester:

ITAL 2021 Italian Language (3)

Comprehension; translation from and into Italian; prose composition;

conversation.

ITAL 2022 Italian Language and Literary Culture (1)

The external (non-technical) history of the Italian language and of the

cultural forms in which it has manifested itself between the Renaissance

and the present.

ITAL 2023 Italian Literary Texts (2)

Including Dante (Inferno), Petrarch (lyric poetry) and Manzoni (I

promessi sposi).

# FINAL YEAR (ITAL 3000)

Six units are taken in each semester, as follows:

First Semester:

ITAL 3011 Italian Language (3)

Comprehension; translation from and into Italian; prose composition;

conversation.

ITAL 3012 Aspects of Italian Cultural History (3)

Including Dante (Purgatorio), Ariosto (Orlando furioso), Machiavelli

(political writings), and one optional area of study to be selected from the

following:

Historical Grammar of Italian

The Renaissance in the Kingdom of Naples Poetry and Drama in the Operatic Theatre

Twentieth-century 'Insular' Historical Fiction

Ungaretti and Montale

These optional elements are not necessarily all available in any one year.

## ITALIAN (Contd.)

Second Semester:

ITAL 3021 Italian Language (3)

Comprehension; translation from and into Italian; prose composition,

conversation.

ITAL 3022 Aspects of Italian Cultural History (3)

Including eighteenth- and early nineteenth-century literature (Goldoni,

Alfieri, Foscolo), Modernist fiction, and one optional area of study to be

selected from the following:

Italian Sociolinguistics

Dante, Paradiso

Leopardi

Selected Writings of Luigi Pirandello

Selected Twentieth-century Women Writers

These optional elements are not necessarily all available in any one year.

## LATIN

#### FIRST YEAR

## Mode A (LAT 1000)

Students must have a good standard in Latin to enter this mode.

LAT 1002 Prescribed texts: Sallust, Catiline; Cicero, In Catilinam II; Virgil,

Aeneid IV, II. (Students will be required to read the rest of the Aeneid in

translation).

LAT 1003 Unprescribed translation.

LAT 1004 Roman History: The Fall of the Roman Republic.

Students combining Latin with Greek and Roman Civilization will substitute for course 3 Cicero *In Catilinam I*.

# Mode B (LAT 1001)

This mode is intended only for students who have done little or no Latin previously. It is not available to students who have matriculated in Latin.

LAT 1005 Grammar and prescribed reading. Course text: P.V. Jones and K.C.

Sidwell, Reading Latin (Cambridge University Press).

LAT 1006 Unprescribed translation.

LAT 1007 Roman History: The Fall of the Roman Republic.

Students combining Latin with Greek and Roman Civilization will substitute for course 3 Catullus and Virgil (selection as in *Reading Latin* 6).

A list of recommended further reading will be issued at the commencement of the course.

### SECOND YEAR

# Mode A (LAT 2000)

(deemed equivalent to twelve units)

LAT 2002 Prescribed texts (For detailed study: Pliny, Fifty Letters, ed. A.N.

Sherwin-White; Lucretius de rerum natura V; Horace, Satires I. For translation only: Caesar, Gallic War VI; Seneca, Seventeen Letters, ed. Costa; Juvenal, 1, 3, 10; Horace, Satires II. 1, 5, 6; Terence, Adelphi).

LAT 2003 Unprescribed translation.

LAT 2004 Roman History: The Early Roman Empire.

# Mode B (LAT 2001)

(deemed equivalent to twelve units)

LAT 2005 Prescribed texts (For detailed study: Pliny, *Fifty Letters*, ed. A.N.

Sherwin-White: Virgil. Aeneid IV: Horace. Satires I. For translation

only: Reading Latin, ch. 6).

LAT 2006 Unprescribed translation.

LAT 2007 Roman History: The Early Roman Empire.

## FINAL YEAR

## Modes A and B (LAT 3000)

(deemed equivalent to twelve units)

LAT 3001 Prescribed texts (For detailed study: Suetonius, *Augustus*; Catullus;

Horace, Carmina III. For translation only: Ovid, Ars Amatoria I; Cicero,

Pro Caelio; Tacitus, Annals XIV; Seneca, de constantia sapientis).

LAT 3002 Unprescribed translation.

LAT 3003 Special subject

or

LAT 3004 Subject to approval by the Head of Department, an extended essay of

approximately 12,000 words.

## LINGUISTICS

# FIRST YEAR (LING 1000)

All first year Linguistics students will take the following courses:

First Semester:

LING 1001 Introduction to Syntactic Theory I (1)

Descriptive vs. prescriptive grammar; constituent structure; phrasehood; structural ambiguity. Introductory generative syntax of English: phrase

structure rules.

LING 1002 Introduction to Language Comparison (1)

Diversity of languages. Observations of language similarities and differences. Explanations of similarities. Genetic relationship among languages. Language families. The Indo-European language family:

main branches and subgroups.

LING 1003 Introduction to Phonetics and Phonology (1)

Description and classification of speech sounds: consonants, vowels, glides, diphthongs. Assimilation processes in English and other

languages.

LING 1004 Investigating Language I (1)

The properties of human language. Language versus communication. Linguistics as a science. Language and thinking. Language acquisition.

Feral/isolated children and language.

Second Semester:

LING 1051 Introduction to Syntactic Theory II (1)

Transformational analyses of various English constructions (e.g. Passive, Dative, *There*-sentences). Ordering of transformations; form rules

(morphosyntactic rules).

LING 1052 Historical Linguistics I (1)

Nature of language change. Triggers of language change. Phonetic

change. Morphological change. Borrowing.

LING 1053 Introduction to Phonology and Morphology (1)

Distributional patterns of sounds in languages. Typology of phonological processes. Introduction to basic concepts in descriptive morphology: morphemes (bound/free), allomorphy; inflectional vs. derivational morphemes; word formation processes; structural ambiguity;

productivity; morphological typology.

LING 1054 Investigating Language II (1)

Multilingualism. Language Universals. Language Typology. Approaches to language. Functions of language. Sociolinguistics.

Semantics. Pragmatics.

Students are also required to attend a weekly tutorial and a phonetics laboratory session.

## **SECOND YEAR (LING 2000)**

First Semester:

LING 2001 *Syntax I* (2)

Intermediate-level generative syntax of English: nonfinite complements (Raising, Equi, *Tough*-constructions); bounded and unbounded

transformations; cyclic application of rules.

LING 2002 Phonology I (2)

Phonemic and phonological analysis. Phonological representation and the nature of phonological rules. Distinctive feature theory. Development of analytic argumentation and formalism using data from

sound systems of various languages.

LING 2003 Language Variation (1)

Dialects (standard, urban, rural). Regional variation; traditional dialectology (aims and methods). Social variation; some sociolinguistic studies. Language contact: convergence, pidgins/creoles, language

shift/death.

LING 2004 Writing and Language (0.5)

Writing as a system of signs. Features and functions of writing systems. Orthography and the problems of English spelling. Types of writing (logographic, syllabic, alphabetic). The evolution of the alphabet in

Europe. Some non-European writing systems.

LING 2005 Logic in Linguistics (0.5)

Set theory. Propositional logic. Quantifiers. Modal logic.

Second Semester:

LING 2051 Syntax II (2)

Relative clauses; constraints on transformations (e.g. Wh-Island Constraint, Complex NP Constraint, Sentential Subject Constraint); trace

theory; structure preservation; X-bar theory; Extended Standard Theory.

LING 2052 Phonology II (1)

Introduction to non-linear models of phonological representation.

Syllable/prosodic theory. CV-phonology. Templatic morphology.

## LINGUISTICS (Contd.)

LING 2053 Historical Linguistics II (2)

Evidence of language change. Methods to study language change. Types of language change: phonological change, morphological change,

syntactic change, lexical change.

LING 2054 Semantics (1)

Some traditional notions of meaning in language. Logic and language. Lexical semantics. Generative semantics vs. Interpretative semantics.

Philosophy of language.

Students are also required to attend a weekly tutorial and a speech analysis laboratory session.

## FINAL YEAR (LING 3000)

First Semester:

LING 3001 Syntax III (2)

Survey of the Principles and Parameters (Government and Binding) approach: NP-movement; analyses of Passive, Raising, Control,

Exceptional Case Marking (Raising to Object).

LING 3002 Phonology III (2)

Non-linear segmental representation. Autosegmental theory: assimilation, dissimilation, harmony systems, transparency and opacity in long-distance processes. Theories of lexical and phonetic representation. Organisation of the segmental melody: feature classes, dependency

relations.

LING 3003 Historical Linguistics III (1)

Theoretical models of language change: The Neogrammarian hypothesis, the structuralist/functionalist approach, the transformational-generative model. Language change and sociolinguistic studies of W. Labov.

Lexical diffusion

LING 3004 Pragmatics (1)

Introduction to major areas of pragmatics: deixis; conversational

implications; presupposition; speech acts; syntax and pragmatics.

Second Semester:

LING 3051 Syntax IV (2)

Wh-movement. Constraints on movement: Subjacency, Empty Category Principle. Cross-linguistic and parametric variation (e.g. V2 parameter,

Headedness Parameter, VSO languages).

LING 3052 Phonology IV (2)

Tonal Phonology - autosegmental representation of tonal phenomena: association patterns, stability, contour and floating tones. Comparison with segmental phonology. Metrical Phonology - parametric approach to the representation of stress: directionality, headedness, edge effects, weight sensitivity.

LING 3053 Comparative Linguistics (1)

Methods in comparative linguistics: Comparative method, Internal reconstruction. Reconstruction of Indo-European vocalic system. Ablaut. Laryngeal theory. Reconstruction of Indo-European consonantal system. Typology and reconstruction. Glottalic theory. Non-phonological reconstruction. Realism in reconstruction. Linguistic palaeontology.

LING 3055 Final Year Option Course (1) (subject to availability)

change: rule addition/deletion.

- (a) Historical Syntax (1)
  Overview of approaches to diachronic syntax. Processes of syntactic change: word order changes, grammaticalisation, syntactic analogy, morphosyntax. The Transformational Grammar approach to syntactic
- (b) Introduction to child language acquisition (1)
  Theories of child language acquisition. Methods of studying child language acquisition. Pre-linguistic stage. First word stage. Semantic development. Syntactic development. Phonological development. Morphological development. Pragmatic development.
- (c) Philosophy of Language (1)
  The history of philosophy of language. The history of Innate ideas.
  Internalism/Externalism. Wittgenstein and private languages. Language and thought. Platonist, nominalist and conceptualist grammars.
- Students must attend all core courses and, in addition, one option course from LING 3055.
- Students are also required to attend a weekly seminar.

LOGIC

**NOTE:** Logic will not be available as a subject in the session 2001/2002.

## MATHEMATICAL STUDIES

# FIRST YEAR (MST 1000)

First Semester:

MST 1001 Calculus of a Single Real Variable I

MST 1002 Calculus of a Single Real Variable II

Limits of functions, continuous functions, differentiation of trigonometric and hyperbolic functions, the chain rule, implicit differentiation, optimisation problems, curve sketching, definite and indefinite, methods of integration, the fundamental theorem of calculus, applications of

integration.

MST 1011 Combinatorics and Number Theory

Combinations and permutations, counting arguments, modular arithmetic, Euclidean algorithm, Chinese remainder theorem, Fermat's and Euler's theorems, fundamental theorem of arithmetic, the integers are a principal ideal domain, quotients of the integers, construction of the field of *p* 

elements.

MST 1012 Matrix Theory

Systems of linear equations and matrices, determinants, vectors in 2-

space and 3-space.

# SECOND YEAR (MST 2000)

First Semester:

MST 2001 Calculus of Several Variables (2)

Functions of two or more independent variables, limits and continuity, partial derivatives, differentiability, linearisation and differentials, the chain rule, maxima, minima and saddle points, Lagrange multipliers, line

integrals, double integrals, triple integrals, change of variables.

MST 2002 Sequences and Series (2)

Limits of sequences of numbers, infinite series, the comparison, integral, ratio and root tests, alternating series, absolute convergence, power series,

Taylor series and Maclaurin series, remainders.

MST 2004 Foundations of Analysis (2)

The real numbers, continuous functions, the intermediate value theorem,

the mean value theorem. Riemann integral.

# MST 2011 Linear Algebra (2)

General vector spaces, subspaces, linear independence, basis and dimension, inner product spaces, length and angle in inner product spaces, orthonormal bases, Gram-Schmidt process, coordinates, change of basis, eigenvalues and diagonalisation of matrices, complex vector spaces.

# MST 2012 Algebraic Structures I (2)

The field of real numbers, the ring of integers, the ring of integers modulo m. Complex numbers, polar representation of complex numbers, de Moivre's theorem, quaternions. Equivalence relations, Groups, permutation groups, subgroups, cosets, Lagrange's theorem, homomorphisms, normal subgroups, the Homomorphism theorem.

# MST 2021 Programming in UBASIC (2)

Using a computer, designing a programme, using UBASIC, structured programming, mathematical applications.

# MST 2022 Mathematics of Finance (2)

Rates of interest, annuities, discount, capital redemption policies, fixed-interest securities, immunisation, stochastic interest rates.

# THIRD YEAR (MST 3000)

# MST 3001 *Metric Spaces* (2)

Topology of the real line, Euclidean spaces, normed spaces, metric spaces, open and closed sets, complete spaces, compact spaces, fixed-point theorem for a contraction, connected spaces.

# MST 3002 Abstract Algebra and its Applications (2)

Some examples of the theory and application of groups, rings and fields.

# MST 3003 Complex Analysis (2)

Differentiation, integration, Taylor series, harmonic functions, Liouville's theorem, fundamental theorem of algebra, Cauchy's residue theorem with applications.

## MST 3011 Graph Theory (2)

Paths and circuits, trees, cut sets, planar and dual graphs, matrix representation, directed graphs, algorithms.

# **MATHEMATICAL STUDIES (Contd.)**

MST 3021 Differential Geometry (2)

Curves in 3-space, Frenet-Serret equations, curvature, torsion, surfaces in 3-space, tangent space, first and second fundamental forms, normal and geodesic curvature of curves in a surface, Weingarten map, Gaussian

curvature, theorema egregium.

MST 3022 History of Mathematics (2)

Topics chosen from: Greek mathematics, geometry, algebra and analysis,

Cartesian geometry, non-Euclidean geometry.

MST 3023 Special Topics (2)

## **MATHEMATICS**

## FIRST YEAR (MATH 1000)

Honours Course

MATH 1001 Linear Algebra and Geometry (Vector geometry, linear

equations, determinants, matrix algebra).

MATH 1002 Introduction to Analysis (Sequences and series, continuity and

differentiability of functions, differential equations).

## **SECOND YEAR (MATH 2000)**

Second Year Honours courses consist of the following list:

MATH 2001 *Vector Spaces and Linear Transformation* (2)

MATH 2002 Advanced Linear Algebra (2)

MATH 2003 Metric Spaces (2)

MATH 2004 Functions of Several Variables (2)

MATH 2005 Number Theory and Group Theory (2)

MATH 2006 Foundations of Analysis (2)

# FINAL YEAR (MATH 3000)

MATH 3001	Field Theory and Galois Theory (3)
MATH 3002	Ring Theory (3)
MATH 3003	Measure Theory (3)
MATH 3004	Complex Variable Theory (3)
MATH 3005	Differential Geometry (3)
MATH 3006	Probability and Statistics (3)
MATH 3007	Group Theory (3)
MATH 3008	Special Topics (3)

# Notes for Final Year Students:

- Students take four courses (twelve units).
- A student's choice of courses is subject to departmental approval.

#### MATHEMATICAL PHYSICS STUDIES

### FIRST YEAR (MPST 1000)

### 1. Mathematical Modelling and Numerical Methods

First order differential equations: Examples of modelling leading to differential equations; homogeneous equations with constant coefficients; separable equations; integrating factors. Inhomogeneous equations. Linear second order differential equations: Independent solutions and Wronskians; reduction of order; variation of parameters; initial and boundary value problems. Systems of equations; phase plane, classification of critical points. Approximate solutions of nonlinear equations. Chaotic dynamics.

Numerical methods: Solutions of ordinary differential equations, quadrature formulae, root finding.

#### 2. Introduction to Mechanics

Motion in a line, displacement-time graphs, velocity-time graphs and acceleration. Motion with constant acceleration, free fall under gravity. Introduction to vectors, scalar product, relative velocity. Force, momentum and Newton's laws of motion. Statics and friction.

Kinetic and potential energy, work and power. Elastic strings and springs, Hooke's law and elastic potential energy. Projectiles. Impulse, collisions and the law of restitution. Circular motion. Simple harmonic motion, motion in a plane and under variable forces. Stability and small oscillations.

Coplanar forces in equilibrium. Centre of gravity and moments of inertia. Dynamics of a rigid body in two dimensions. The compound pendulum. Polar co-ordinates. Central forces, angular momentum and orbits. Satellite motion.

#### SECOND YEAR (Mode I MPST 2100: Mode II MPST 2200)

MPST 2111 *Methods A* (3)

Vector Calculus:

Vector differentiation (Frenet-Serret formulae).

Directional derivatives, Grad, Div, Curl.

Vector integration (line, surface and volume integrals).

Integral Theorems (Divergence theorem and Stokes' theorem with proofs).

Grad, Div and Curl in Orthogonal curvilinear coordinates.

Linear Differential Equations:

Existence and uniqueness of solutions, dimension of solution space,

Wronskians, Green's functions.

### MPST 2141 Computational Physics (3)

Ordinary Differential Equations: Euler and Runge-Kutta methods. Adaptive techniques. Satellite motion, three-body problem. Projectiles. Lorenz model.

Finite Differences: Difference schemes, linear advection equation.

FTCS and Lax methods. Modelling traffic flow.

Linear equations: Gaussian elimination, iterative methods. Coupled

harmonic oscillators.

Monte-Carlo Methods: Uniform and non-uniform deviates. Integration.

Ideal gas model.

### MPST 2121 Mechanics A (3)

Dynamics of rigid bodies, rotating earth, spinning top, moments of inertia, principal axes, Euler's equations of motion. Lagrange's equation, variational principles. Small oscillations, normal modes.

### MPST 2131 Mechanics B (3)

Hamiltonian Mechanics: Hamilton's equations, canonical transformations, Poisson brackets, Hamilton-Jacobi theory. Special Relativity: Inertial frames, Lorentz transformations, spacetime, tensors, relativistic mechanics, energy-momentum conservation.

### Notes for Second Year Students

- All students take the above courses.
- Mode I students in addition take either MST 2001, 2002, 2004, 2011, 2012 and 2021 or MATH 2001-2006.

### FINAL YEAR (Mode I: MPST 3100) (Mode II MPST 3200)

# MPST 3111 *Methods B* (2.4)

Complex Variables:

Cauchy-Riemann equations, singular points.

Complex integration (Cauchy's theorem, line integrals)

Taylor and Laurent series.
The Residue Theorem

Eculidean Spaces:

Convergence, Bessel's inequality, Parseval's equality.

Fourier series (Piecewise continuous functions, Riemann-Lebesgue

lemma

Weierstrass approximation theorem, Pointwise convergence).

Orthogonal series of polynomials (Legendre polynomials, Hermite

polynomials, Laguerre polynomials, Bessel functions).

### MATHEMATICAL PHYSICS STUDIES (Contd.)

### MPST 3120 Methods C (2.4)

First order partial differential equation. Second order linear partial differential equations – classification, uniqueness, stability. The wave equation, diffusion equations and Laplace's equation. Separation of variables, Laplace and Fourier transforms. Green's functions.

Perturbation methods.

### MPST 3130 Thermal and Statistical Physics (2.4)

Thermodynamics: Laws of thermodynamics, temperature, entropy,

Clausius's theorem, Maxwell's relations.

Kinetic Theory: Maxwell's distribution, the Boltzmann equation,

Maxwell-Boltzmann distribution.

*Introduction to Statistical Mechanics:* The microcanonical, canonical and grandcanonical ensembles, the classical ideal gas, quantum statistical mechanics, the ideal Fermi and Bose gases, the imperfect Fermi gas.

### MPST 3141 Potential Theory (2.4)

Electrostatics: electrostatic potential; Gauss's law; Poisson's equation;

dielectrics; electrostatic energy.

Magnetic fields due to steady currents: vector potential; Ampère's

circuital law; magnetic materials.

### MPST 3151 Electromagnetic Theory (2.4)

Maxwell's equations.

Energy and momentum: Poynting vector.

Plane waves in non-conducting and conducting media. Wave guides.

Radiation from bounded sources. Liénard-Wiechert potentials.

Relativistic formulation of electromagnetic theory.

#### MPST 3161 *Ouantum Mechanics* (2.4)

This course is an introduction to Ouantum Mechanics:

Hilbert spaces, operators, probability measures, spectral measures.

Postulates of quantum mechanics, uncertainty principle.

Harmonic oscillator, creation and annihilation operators.

Angular momentum, hydrogen atom.

Rayleigh's variational principle.

Time evolution in the Schrödinger picture and Heisenberg picture.

### MPST 3171 Fluid Mechanics (2.4)

Representation of fluid flow, elementary physical considerations, Stokes' analysis.

Velocity potential for irrotational flows, stream functions for

incompressible flows. Navier Stokes' equations.

Inviscid flow equations, motion of a sphere through an incompressible

fluid, 2D incompressible flows, conformal.

### MPST 3180 Dynamical Systems and Chaos (2.4)

Phase portraits, flows and evolution.

*Linear systems:* Classification of linear systems, phase portraits of linear systems.

Non-linear systems in the plane: Local and global behaviour, fixed points, linearization, stability of fixed points, limit points and limit cycles, Poincaré-Bendixson theory.

Non-linear systems in higher dimensions: hyperbolic and non-hyperbolic

fixed points, closed orbits, attracting sets and attractors.

Chaotic orbits.

### MPST 3190 Special Topics (4.8)

#### Notes for Final Year students

- Mode II students take MPST 3111, MPST 3130, MPST 3161, MPST 3171 and either MPST 3120 or MPST 3180.
- Mode I students take all the above courses

#### MATHEMATICAL PHYSICS

N.B. FROM THE 2002/2003 SESSION SECOND YEAR MATHEMATICAL PHYSICS (PASS AND HONOURS) WILL BE REPLACED BY SECOND YEAR MATHEMATICAL PHYSICS STUDIES

#### SECOND YEAR

Pass Course (MAPH 2002)

MAPH 2012 *Mechanics 1* (P) (3)

Particle dynamics: Forced and damped harmonic oscillations. Resonance. Motion of a particle under central forces. Central orbits.

Planetary and satellite motion.

Introduction to Special Relativity: Lorentz transformation and relativistic Kinematics.

MAPH 2022 *Mechanics 2* (P) (3)

*Rigid body dynamics*: Vector identities. Indical notation. Kronecker delta. Eigenvalues and Eigenvectors of symmectric 3 x 3 matrices. Gibbs decomposition. Rigid body motion with one point fixed. Angular velocity. Kinetic energy. Inertia tensor. Examples. Angular momentum. Applied torque. Spinning top.

Introduction to Analytical Mechanics: Lagrange's equations for a conservative system.

*MAPH 2032 Methods 1 (P) (3)* 

Applied Vector Calculus: Surfaces and curves in space: Line integrals. Work and potential. Introduction to partial differentiation. Grad, Div and Curl. Stationary values of functions of many variables: Lagrange multipliers. Multiple integrals. Cylindrical, polar coordinates. Surface, volume integrals. Divergence and Stokes' Theorems. Mass, moments of inertia and potential. Continuity equation.

MAPH 2042 *Methods 2* (P) (3)

Linear ordinary differential equations. Solution in series. Special functions. Separation of variables for partial differential equations. Eigenvalue problems. Factorisation method. Fourier series. Wave equation.

### Honours Course (MAPH 2102)

# MAPH 2112 *Methods A* (H) (2)

Vector Calculus:

Vector differentiation (Frenet-Serret formulae).

Directional derivatives, Grad. Div. Curl.

Vector integration (line, surface and volume integrals).

Integral Theorems (Divergence theorem and Stokes' theorem with proofs).

Grad, Div and Curl in Orthogonal curvilinear coordinates.

Linear Differential Equations:

Existence and uniqueness of solutions, dimension of solution space,

Wronskians, Green's functions.

### MAPH 2122 Mechanics A (H) (2)

Dynamics of rigid bodies, rotating earth, spinning top, moments of inertia, principal axes, Euler's equations of motion. Lagrange's equation, variational principles.

Small oscillations, normal modes.

### MAPH 2132 Mechanics B (H) (2)

Hamiltonian Mechanics: Hamilton's equations, canonical transformations, Poisson brackets, Hamilton-Jacobi theory.

Special Relativity: Inertial frames, Lorentz transformations, spacetime, tensors, relativistic mechanics, energy-momentum conservation.

### MAPH 2113 *Methods B* (H) (2)

Complex Variables:

Cauchy-Riemann equations, singular points. Complex integration (Cauchy's Theorem, line integrals). Taylor and Laurent series. The Residue Theorem.

Euclidean Spaces: Convergence, Bessel's inequality, Parseval's equality. Fourier series (Piecewise continuous functions, Riemann-Lebesgue lemma, Weierstrass approximation theorem. Pointwise convergence). Orthogonal series of polynomials (Legendre polynomials, Hermite Polynomials, Laguerre polynomials, Bessel functions).

### MAPH 2123 Continuum Mechanics (H) (2)

Cartesian Tensors: Change of frame, alternating symbol, decomposition theorems of Gibbs and Hamilton, polar decomposition theorem, isotropic tensors, integral theorems, reciprocal triads, spectral decomposition. Continuum Mechanics: Kinematics. Change in volume, area. Shear, special deformations, infinitesimal strain.

Material, spatial coordinates, material time derivative, stretching, shearing. Balance laws. Equations of motion. The stress tensor.

### **MATHEMATICAL PHYSICS (Contd.)**

### MAPH 2133 Thermodynamics and Methods (H) (2)

Thermodynamics: Laws of thermodynamics, temperature, entropy,

Clausius's theorem, Maxwell's relations.

Kinetic Theory: Maxwell's distribution, the Boltzmann equation,

Maxwell-Boltzmann distribution.

Methods: Boundary Value Problems: Regular single points, separation

of Variables, Laplace and Fourier transforms.

Applications of wave, heat, Laplace's and Bessel's equations. Derivations of these equations. Initial and boundary conditions.

### MAPH 2163 Quantum Mechanics (H) (2)

This course is an introduction to Ouantum Mechanics.

Hilbert spaces, operators, probability measures, spectral measures.

Postulates of quantum mechanics, uncertainty principle, harmonic oscillator, creation and annihilation operators, angular momentum, hydrogen atom, Rayleigh's variational principle, time evolution in the Schrödinger picture and Heisenberg picture.

### MAPH 2173 Fluid Mechanics (H) (2)

Representation of fluid flow, elementary physical considerations, Stokes' Analysis, velocity potential for irrotational flows, stream functions for Incompressible flows, Navier Stokes' equations, inviscid flow equations, motion of a sphere through an incompressible fluid, 2D incompressible flows, conformal transformations, sound waves, water waves.

#### Notes for Second Year Students:

- Mode I students must take twelve courses: MAPH 2112 to MAPH 2132, MAPH 2113, MAPH 2123, MAPH 2133, MAPH 2163, MAPH 2173 and MATH 2001 to MATH 2004.
- Mode II (pass) students must take four courses: MAPH 2012 to MAPH 2042.
- Mode II (honours) students must take six courses: MAPH 2112 to MAPH 2113, MAPH 2113 and two courses from MAPH 2123 to MAPH 2173. Students should consult the department about their choice of courses as certain second year courses are required as prerequisites for final year courses..

#### FINAL YEAR

Pass Course (MAPH 3002)

MAPH 3012 Electromagnetic Theory (P) (3)

Electrostatics. Magnetostatics. Maxwell's equations. Plane electromagnetic waves. Scalar and vector potentials, radiation. Relativistic formulation of electromagnetic theory.

### MAPH 3022 Continuum Mechanics (P) (3)

Conservation equations. Strain, stress. Elements of tensor calculus. P and S waves. Rayleigh waves. Hydrodynamic waves.

### MAPH 3032 Analytical & Quantum Mechanics (P) (3)

Analytical Mechanics:

Lagrange's equations, calculus of variations, Hamilton's principle and

Hamilton's equations. Poisson brackets.

**Ouantum Mechanics:** 

Hilbert spaces and operators, probabilities, postulates of quantum mechanics, uncertainty principle, one-dimensional systems including the harmonic oscillator, angular momentum, hydrogen atom, time evolution.

### MAPH 3042 *Methods 3* (P) (3)

Partial Differential Equations of Physics

First order ordinary differential equations. Systems of first order linear and non-linear ordinary differential equations; critical points and stability. First order linear and non-linear partial differential equations and the method of characteristics. Classification of second order linear partial differential

equations. Integral transforms.

### MAPH 3072 Numerical Methods (P) (3)

Solution of equations by iteration. Numerical integration and differentiation.

Numerical methods for differential equations. Systems of linear equations.

Gauss elimination.

### Honours Course (MAPH 3102)

#### MAPH 3113 Methods I (H) (3)

First order partial differential equations. Second order linear partial differential equations – classification, uniqueness, stability. The wave equation, diffusion equation and Laplace's equation. Green's functions. Perturbation methods

### MAPH 3123 Methods II (3)

Differential Geometry:

Tensor algebra. Differentiable manifolds. Affine connections. Torsion tensor. Curvature tensor of a connection. Pseudo-Riemannian manifolds. Riemann curvature tensor. Bianchi identities. Ricci identities.

Functional Analysis:

Hilbert spaces. Bounded and unbounded operators. Adjoints of operators. Self-adjoint extensions. Spectral theory. The Spectral Theorem for bounded and unbounded self-adjoint operators.

### **MATHEMATICAL PHYSICS (Contd.)**

### MAPH 3133 Continuum Mechanics (H) (3)

Analysis of strain – finite and infinitesimal. Balance of mass, momentum, moment of momentum.

Stress. Existence of stress tensor. Principal stresses. Maximum shear stress. Equations of motion. Finite elasticity. Classical linear elasticity. Beltrami-Mitchell equations. Uniqueness theorem. Reciprocal theorem. Elastic waves. Waves in ideal fluids. Viscous flow problems.

### MAPH 3143 Quantum Mechanics (H) (3)

Periodic potential, energy bands. Approximation methods of bound states, Helium atom. Zeeman effect. Angular momentum, Clebsch-Gordon coefficients, Wigner-Eckart theorem. Non-relativistic hydrogen atom with spinning electron. Relativistic theory of the electron. Scattering theory.

# MAPH 3153 Statistical Mechanics (H) (3)

Classical Statistical Mechanics:

The microcanonical ensemble, time averages, ergodicity.

The canonical and grand-canonical ensemble, equivalence of ensembles, the thermodynamic limit and phase transistions.

Lattice gases and magnetic systems.

**Ouantum Statistical Mechanics:** 

Trace class operators, density matrices, Fock space, ideal Bose and Fermi gases, Bose-Einstein condensation, lattice models, the Mermin-Wagner argument.

# MAPH 3163 Computational Physics (H) (from 2001/2002) (3)

Parabolic equations in one space variable (Schrödinger equation, Diffusion equation). Parabolic equations in two and three dimensions - ADI methods. Hyperbolic equations - Lax Wendroff scheme, flux-limiter methods (fluid dynamics, wave equation). Consistency, convergence and stability. Elliptic equations (Poisson's equation). Finite element method. The Metropolis Algorithm (Ising Model), Quantum Monte Carlo (Molecular dynamics).

# MAPH 3173 General Relativity(H) (3)

Einstein's field equations. Physical interpretations of the energy-momentum-stress tensor. Newtonian approximation. The Schwarzschild solution. The Kruskal extension of the Schwarzschild manifold. Experimental tests. Interior Schwarzschild solution. Kinematics of a continuous medium. The Robertson-Walker cosmos. The equation of geodesic deviation. Plane gravitational waves and their interaction with clusters of test particles. (This course requires MAPH 3183 and parts of MAPH 3123 as pre/corequisites).

### MAPH 3183 Electromagnetic Theory (H) (3)

Electrostatics: electrostatic potential; Gauss's law; Poisson's equation, dielectrics; electrostatic energy.

Magnetic fields due to steady currents: vector potential; Ampère's circuital law; magnetic materials.

Maxwell's equations. Energy and momentum: Poynting vector. Plane waves in non-conducting and conducting media. Wave guides. Radiation from bounded sources. Liénard-Wiechert potentials. Relativistic formulation of electromagnetic theory.

(This course may only be taken in conjunction with MAPH 3113,

MAPH 3143 or MAPH 3173).

### MAPH 3193 Theoretical Astrophysics (H) (3)

Theory of astrophysical gas dynamics; shock waves, accretion flows, ideal Magnetohydrodynamics, supernova remnants and the interstellar medium.

Radiative processes and the theory of radiative transfer. Elements of nuclear and high energy astrophysics. Galatic dynamics.

### MAPH 3213 Numerical Analysis (H) (3)\*

- (a) Berstein polynomials. Weierstrass approximation theorem.
   Lagrange and Hermite interpolation polynomials. Cubic splines. Functional iteration. Second order functional iteration.
   Newton's method. Method of false position. Aitken's method.
- (b) Integration. Ordinary differential equations. Introduction to partial Differential equations and Poisson's equation in two dimensions. Linear algebraic equations. Iterative methods. Matrix eigenvalues.

### Note for Final Year Students:

- Pass students must accumulate a total of twelve units from MAPH 3012, MAPH 3022, MAPH 3032 and either MAPH 3042 or MAPH 3072.
- Honours students (Mode I) must accumulate a total of twenty-four units from MAPH 3113 to MAPH 3193 and MAPH 3213.
- Honours students (Mode II) must accumulate a total of twelve units from MAPH 3113 to MAPH 3193 and MAPH 3213.

<sup>\*</sup>This course is given jointly with the Mathematics Department.

#### MUSIC

For details of courses in Music as a subject for the BA (Honours) Degree, as well as for courses leading to the Degree of BMus, see separate booklet Music.

### FIRST YEAR (MUS 1000)

Courses are available

### **SECOND YEAR (MUS 2000)**

Courses (deemed equivalent to twelve units) are available.

### FINAL YEAR (MUS 3000)

Courses (deemed equivalent to twelve units) are available.

# NEAR EASTERN CIVILIZATION (Minor Subject in Mode III Near Eastern Languages)

Students taking this subject must choose either option A or option B in both second and final year.

#### FIRST YEAR

Courses not offered.

#### **SECOND YEAR (NECV 2000)**

Mode III

#### Option A

NECV 2001 Medieval Arabic Historiography; or

NECV 2002 Medieval Arabic belle-lettres Literature (Part 1); or

NECV 2003 The Modern Arabic Novel and Short Story (Part 1).

#### Option B

NECV 2004 The Origins of Early Syriac Christianity.

NECV 2005 Symbolism and Typology in the Fourth-Century Syriac Fathers.

### FINAL YEAR (NECV 3000)

Mode III

#### Option A

NECV 3001 Early Modern Arabic Historiography; or

NECV 3002 Medieval Arabic belle-lettres Literature (Part 2); or

NECV 3003 The Modern Arabic Novel and Short Story (Part 2).

#### Option B

NECV 3004 Syriac Poetry, Themes and Imagery.

NECV 3005 Medieval Syriac Historiography.

#### Note:

 For unit values of courses in Near Eastern Civilization, please consult the Department of Near Eastern Languages.

# PERSIAN (Minor Subject in Mode III Near Eastern Languages)

**NOTE:** The subject Persian may not always be offered.

#### FIRST YEAR

Courses not offered.

#### **SECOND YEAR (PER 2000)**

Mode III

PER 2001 Persian morphology and syntax. A.K.S. Lambton, *Persian Grammar* (Cambridge University Press).

PER 2002 Translation of unseen passages from Persian into English.

### FINAL YEAR (PER 3000)

#### Mode III

PER 3001 Translation of unseen passages from Persian into English.

PER 3002 Prepared translation and study of selected Persian texts.

#### Note:

 For unit values of courses in Persian, please consult the Department of Near Eastern Languages.

#### PHILOSOPHY

### FIRST YEAR (PHIL 1000)

The object of this course is to introduce students to the study of philosophy through the critical study of ideas and forms of philosophical argumentation. The course will examine the origins of philosophy in ancient Greece, and will provide a broad historical introduction to the development of western philosophy down to the twentieth century. Students will be encouraged to gain a first-hand knowledge of classical philosophical texts including Plato's *Republic*, Descartes' *Meditations*, and selected works by Nietzsche, Kierkegaard and Sartre. Basic moral issues and concepts in aesthetics will also be discussed.

Participation in tutorials and essay writing is an important feature of the course, and will count in examinations. No previous knowledge of philosophy is required.

The first year course will include some or all of the following:

PHIL 1001 Introduction to Modern Philosophy

PHIL 1002 Introduction to Greek Philosophy

PHIL 1003 Introduction to Contemporary European Philosophy

PHIL 1004 Introduction to Social Philosophy

PHIL 1005 Introduction to Ethics

PHIL 1006 Introduction to Philosophical Problems

PHIL 1007 Introduction to Oriental Philosophy

PHIL 1008 Introduction to Philosophical Anthropology

PHIL 1009 Essays and Tutorial assessment

### Note for First Year Students:

The provision of a particular course is subject to the availability of staff. Courses
additional to those listed may be provided in a particular year. Notice of the exact
course titles will be announced at the beginning of the session.

#### SECOND YEAR (Mode I - PHIL 2100) (Mode II - PHIL 2000)

The second year Philosophy course provides a deeper treatment of the history of philosophy and of selected philosophical problems. Students will study the development of Western philosophy from Plato and Aristotle through the Medievals to Kant and Hegel. Texts of Plato, Aristotle, Aquinas, Hume, Kant, Hegel, Kierkegaard and Nietzsche will be read and discussed. In addition, there are courses in moral philosophy, aesthetics, logic, metaphysics, philosophy of religion etc. The course aims to develop critical reasoning skills and a deeper sense of the intellectual formation of Western culture.

Some or all of the following courses will be offered:

PHIL 2001	The Rationalists (1)
PHIL 2002	Aesthethics (1)
PHIL 2003	The Enlightenment (1)
PHIL 2004	Philosophical Anthropology (1)
PHIL 2005	Philosophy of Imagination (1)
PHIL 2007	Medieval Philosophy (1)
PHIL 2008	Philosophy of Being I (1)
PHIL 2010	Propositional Logic (1)
PHIL 2012	Introduction to Semiotics (1)
PHIL 2013	Modern Moral Philosophy (1)
PHIL 2014	Philosophy of Religion (1)
PHIL 2015	Classical Theories of Knowledge (1)
PHIL 2020	The Philosophy of Whitehead (1)
PHIL 2021	Dilemmas (1)
PHIL 2022	Contemporary Political Philosophy (1)
PHIL 2023	The Philosophy of Time (1)
PHIL 2024	Greek Tragedy (1)
PHIL 2025	Seminars (2)
PHIL 2026	Essays and tutorial assessment (2)
PHIL 2027	Contemporary Moral Philosophy (1)
PHIL 2028	Pragmatism and Epistemology (1)
PHIL 2029	Ethics (1)

### PHILOSOPHY (Contd.)

PHIL 2030	The Moral Foundations of Law (1)
PHIL 2031	Kant's Critical Philosophy (1)
PHIL 2032	Empiricism and Naturalism (1)
PHIL 2033	Problems of Philosophy II (1)
PHIL 2034	Existentialism and Marxism (1)
PHIL 2035	Perception and Imagination in Phenomenological Philosophy (1)
PHIL 2036	Contemporary Ethical Theory (1)
PHIL 2037	Morality and Civilization (1)
PHIL 2038	The Politics of Pleasure: Power and Discourse (1)

### Notes for Second Year Students:

- Students for the BA Mode II must complete twelve units (or equivalent in second year)
  through a combination of required courses and selected options. Required courses and
  options will be specified at the beginning of the session. Candidates for the BA Mode I
  (Philosophy) must complete twenty-four units (or equivalent).
- The courses on offer in each academic year will be posted at the beginning of the session. The provision of a course in any particular year is subject to the availability of staff and, in the case of an option, its selection by a sufficient number of students.
   Courses additional to those listed may be provided in a particular year.
- Students in second year Philosophy must register with the Department for tutorials and
  must submit a number of essays during the academic year. Tutorial work and essay
  writing will be assessed for examination purposes.
- Students following the Mode I course may take a course (in an area related to Philosophy) in another Department provided that the course is approved by the Head of the Department of Philosophy, and permission to attend the course is granted by the Head of the other Department involved. Adequate notification must be given to the Departments concerned in order to arrange assessment of the student's work in the course.

### FINAL YEAR (PHIL 3100 - MODE I) (PHIL 3000 - MODE II)

The final year Philosophy course provides an intensive study of some major philosophical texts and deeper study of philosophical problems and traditions. Special attention is given to contemporary philosophical issues and approaches, especially to Contemporary Continental Philosophy and to Analytic Philosophy in the Anglo-American tradition.

Final year Mode II students choose twelve course units, comprised of required courses and selected options. Mode I students, in addition to their course work, are required to undertake a research project and write a minor thesis (the BA thesis) on a topic agreed with the Head of Department, and supervised by a member of staff.

Some or all of the following courses will be offered:

PHIL 3001	Philosophy of Mind (1)
PHIL 3002	Philosophy of Being II (1)
PHIL 3003	Analytic Philosophy (1)
PHIL 3004	Phenomenology to Deconstruction (1)
PHIL 3005	Aesthetics II (1)
PHIL 3006	Philosophy of Religion (1)
PHIL 3008	Philosophy and Science (1)
PHIL 3009	Structuralism and Hermeneutics (1)
PHIL 3012	Advanced Logic (1)
PHIL 3013	Philosophy of Religion (1)
PHIL 3017	Contemporary American Philosophy (1)
PHIL 3018	Philosophy of Music (1)
PHIL 3019	Aquinas' Philosophy of God (1)
PHIL 3020	Philosophical Anthropology (1)
PHIL 3021	Critical Theory (1)
PHIL 3022	Seminars (2)

### PHILOSOPHY (Contd.)

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PHIL 3023	Mode I Project (2)
PHIL 3024	Essays and Tutorial Assessment (2)
PHIL 3025	German Philosophy (1)
PHIL 3026	Contemporary Moral Theories (1)
PHIL 3027	Contemporary Issues in Philosophy (1)
PHIL 3028	Kant's Critique of Judgement and its Significance (1)
PHIL 3029	Nineteenth-Century German Philosophy (1)
PHIL 3030	Epistemology (1)
PHIL 3031	Introduction to Phenomenology (1)
PHIL 3032	Post-Kantian German Philosophy (1)
PHIL 3033	Predicate Logic (1)
PHIL 3034	Time and Intuition in Heidegger and Levinas (1)
PHIL 3035	Post-Kantian German Philosophy (1)
PHIL 3036	Hegel's Phenomenology of Spirit (1)
PHIL 3037	Realism and Anti-Realism (1)
PHIL 3038	Philosophy of Narrative and History (1)

#### Notes for Final Year Students

- Students for the BA Mode II must complete twelve units (or equivalent) in Philosophy.
   The required courses and options will be announced at the beginning of the session.
- Students must register with the Department for tutorials.
- Students may take a course (in an area related to Philosophy) in another Department, provided that the course is approved by the Head of the Department of Philosophy, and the student is accepted by the Head of the Department offering the course. No more than three units may be taken outside the Department of Philosophy.
- The provision of a course in any particular year is subject to the availability of staff and, in the case of an elective, its selection by a sufficient number of students. Courses additional to those listed may be provided in a particular year.

#### POLITICS

The subject Politics is concerned with the different political systems of the world – how they work, and what ideas underpin them. It has a number of sub-divisions:

- political systems of particular countries
- comparative politics
- international relations
- normative political theory
- research methods and the theory of science.

One major area of politics covers the study of political institutions and processes governments, parliaments, elections, political parties, civil services, armies, pressure groups. It examines how they operate in different countries of the world, and makes comparisons across political systems. Building on descriptions of this kind, we can go on at a later stage to generalise about such issues as how political parties are managed and how voters typically cast their ballots.

The second major area is political philosophy. Here, fundamental questions are raised about politics and political ideas, for instance: What are the characteristics of a good political leader? Is democracy a good form of government? How much power should governments have? What conception of freedom should be embodied in political life? What is the relationship between the state and society? These questions are studied largely through the works of historical and contemporary thinkers.

More information on the Politics Department and the courses it offers is available on the UCD web-server at www.ucd.ie/~politics/.

#### FIRST YEAR (POL 1000)

The object of the first year programme is to introduce students to the main features of politics, and especially of democratic government, in their practical and theoretical aspects. Students are required to take the following courses:

POL 1001	Introduction to the Irish Political System (24 lectures)
POL 1002	Political Theory: Models of Democracy (24 lectures)
POL 1003	Europe in International Politics since 1945 (12 lectures)
POL 1004	Government and Politics of the USA (12 lectures)
POL 1005	Introduction to Comparative Government (12 lectures)
POL 1006	Introduction to the European Union (12 lectures)
POL 1007	Tutorials

In practice, this means that students attend four lectures and one tutorial per week for two semesters. Tutorials meet in groups of about ten students. Assessment is mainly by written examination papers at the end of the second semester. Certain percentages of marks are allocated to tutorial attendance, class participation and essay-writing.

### **POLITICS (Contd.)**

### SECOND YEAR (POL 2000)

The academic objective of the second year programme is to develop students' basic understanding of political concepts in the areas of political theory, comparative politics and international relations, to introduce them to the rudiments of research methodology within the discipline (including an introduction to computer-based data analysis techniques), and to develop their knowledge in some of the major sub-fields. Students take four compulsory courses:

POL 2001	Civic Republican and Contractarian Political Thought (2 units) (semester 1)
POL 2002	Comparative Politics (2 units) (semester 1)
POL 2003	Research Methods (2 units) (semesters 1 and 2)
POL 2004	Introduction to International Relations (1 unit) (semester 2)

Students are also required to take three optional courses selected from the following five. Each has the value of one unit. The list may vary from year to year but the following five courses were on offer in 2000/2001:

POL 2005	Politics of Germany (1 unit) (semester 2)
POL 2008	Law, Politics and Human Rights (1 unit) (semester 2)
POL 2011	Divided Societies, Disputed States (1 unit) (semester 2)
POL 2014	Issues in democratic theory (1 unit) (semester 2)
POL 2016	Why Yugoslavia died: nationalism in a multi-ethnic state (1 unit) (semester 2)

In addition, students attend compulsory tutorials (POL 2010: 2 units). Assessment is based on project work, on exercises submitted electronically, on written examination papers at the end of the second semester and on tutorial attendance, class participation and essay writing.

# FINAL YEAR (POL 3000)

The objective of the final year programme is to allow students to choose particular areas of specialism and to develop further their analytical skills. Students select four courses from the list of those on offer; each course is worth 3 units. The following courses were on offer in 2000/2001 and are subject to change

POL 3001	Dynamics of European Integration (3 units) (semester 1)
POL 3007	Legislatures (3 units) (semester 1)
POL 3010	Political Communication (3 units) (semester 2)
POL 3011	Politics and Nationalism (3 units) (semester 1)
POL 3013	Northern Ireland (3 units) (semester 1)
POL 3014	State and Nation (3 units) (semester 1)
POL 3018	Equality (3 units) (semester 1)
POL 3020	Rational choice and modelling collective decision making (3 units) (semester 2)
POL 3021	Legitimacy, power, and consent (3 units) (semester 2)
POL 3022	Contemporary Irish Politics (3 units) (semester 2)
POL 3023	Politics in America (3 units) (semester 2)
POL 3024	Liberalism and its critics (3 units) (semester 2)

Each course is confined to a single semester, and students take two courses in each semester. Tutorials are arranged by lecturers in a way that responds to the particular needs of the courses. Assessment is mainly by means of an examination at the end of the year but credit may be given for essay or project work in certain courses.

#### PSYCHOLOGY

NOTE: Psychology may only be taken beyond First Arts as a single Honours subject (Mode I: 35 places through denominated entry - DN054, 35 places for students who entered through DN012, on the results of the First Arts examination). The numbers in brackets after course titles refer to the number of units comprising the course where one unit equals twelve hours.

### FIRST YEAR (PSY 1000)

All first year Psychology students will take the following courses:

PSY 1001	Biological Psychology (1)
PSY 1002	Perception (1)
PSY 1003	Cognitive Psychology (1)
PSY 1004	Socialisation and Personality Development (1)
PSY 1005	Developmental Psychology (1)
PSY 1006	Statistics (1)
PSY 1007	History of Psychology (1)
PSY 1008	Psychology and Society (1)

Students are also required to attend tutorials and submit essays.

Notes for First Year Students who entered through DN012:

- Students wishing to enter Mode I courses in their second year must complete the appropriate form **before 15 February 2002**. These forms are available from the Department of Psychology. Students will receive a receipt on submission of the completed form which they must keep as evidence of eligibility for consideration when quota places are allocated on the basis of first year examination results.
- Repeat first year Psychology students are required to reach at least 65% in Psychology to be eligible for one of the places in Mode I Psychology.

# **MODE I (PSY 2100)**

Mode I students (i.e. single honours Psychology) will take the following courses in their second and final years:

### SECOND YEAR

PSY 2001	Physiological Psychology (1)
PSY 2002	Psychopharmacology (1)
PSY 2003	Perception (1)
PSY 2004	Introduction to Behaviour Analysis (1)
PSY 2005	Cognitive Development (1)
PSY 2006	Social and Emotional Development (1)
PSY 2007	Theories of Personality (1)
PSY 2008	Introduction to Social Psychology (1)
PSY 2009	Psychology of Language (1)
PSY 2010	Developmental Disabilities and Persons with Special Needs (1)
PSY 2011	Psychopathology (1)
PSY 2012	Philosophy of Mind (1)
PSY 2013	Psychological Statistics and Experimental Research Methods (2)
PSY 2014	Design and Application of Psychological Research Methods (3)
PSY 2015	Laboratory Practicals in Psychology (8)
PSY 2016	Foreign Language (2) - optional course

Students are also required to attend tutorials and departmental seminars, and to submit essays. Practical work may also be required in certain courses.

# PSYCHOLOGY (Contd.)

# FINAL YEAR (PSY 3100)

PSY 3001	Neuropsychology (2)
PSY 3002	Advanced Cognitive Psychology (2)
PSY 3003-5	Advanced Social Psychology (2)
PSY 3006	Theoretical Aspects of Self and Identity (1)
PSY 3007	Applied Psychology and Work (1)
PSY 3008	Language Acquisition (1)
PSY 3009	Interdisciplinary Perspectives on Human Development (2)
PSY 3010	Applied Issues in Developmental Psychology (1)
PSY 3011	Intelligence (1)*
PSY 3012	Debates in Psychology (1)
PSY 3013	Philosophical Psychology (1)*
PSY 3014	Advanced Psychological Statistics and Computer-Based Data Analysis (2)
PSY 3015	Research Project (5)

# Optional Courses\*\*

PSY 3016	History and Psychology (1)
PSY 3018	Counselling and Psychotherapy (1)
PSY 3021	Comparative Psychology (1)
PSY 3023	Emotion and Mind in Psychology (1)
PSY 3025	Psychology and Crime (1)
PSY 3026	Culture and Psychology (1)

PSY 3027 Spirituality, Psychology, Psychotherapy (1)\*

PSY 3028 Clinical Neuropsychology (1)\*

\* Course outline will be provided in Class

\*\* Not all options may be offered in any given year.

Total number of units = 24 units (22 core units and 2 elective units).

#### Notes for Final Year Students:

- Psychology students are required to undertake a research project which they write up as a minor thesis under the direction of individual academic staff members for the degree examination. In addition, students are required to attend departmental research seminars and discussion groups.
- All courses are taught once a week for two semesters or twice a week for one semester.
- Some courses may not be offered in a particular year.
- Students should note that the course PSY 3014 Advanced Psychological Statistics and Computer Based Data Analysis will be assessed in a three hour examination at the commencement of the second semester.

### **SOCIOLOGY**

Sociology is a popular choice for students who wish to discover more about the way we live our lives. We now live in an era of rapid social, economic and cultural change, and sociologists seek to understand and explain the causes and consequences of these changes. In spite of the pervasiveness of change, we take for granted what we are used to, regarding it as simple and obvious. In reality, social life is a complex network of interdependent human beings organised as families, communities, institutions and states. Sociology examines these networks and structures so that through awareness and critical reflection we can change, control or enhance them. This is achieved by studying not just the society in which we live now, but also the very different ways in which human beings have organised their lives together, elsewhere and in the past.

Note:

The provision of a course in any particular year is subject to the availability of staff and, in the case of an option, to its selection by a sufficient number of students. Certain optional courses may only be available timetable permitting. Courses additional to those listed may be provided in a particular year.

Students may also take, as options within Sociology, certain courses taught by other departments, notably the Department of Philosophy. The express permission of the Head of the Department of Sociology and of the Head of the other relevant departments is required.

#### SOCIOLOGY (Contd.)

#### FIRST YEAR (SOC 1000)

First year students take all of the following lecture courses and, in addition, a fortnightly small group seminar:

### SOC 1001 Introduction to Sociology

(2 units)

An introduction to basic concepts of sociology, and a discussion of how from its earliest origins, human society reached its present condition - from foraging, through agrarian to industrial and post-industrial societies, with special emphasis on war, violence, power and changing morals and manners.

### SOC 1002 The Emergence of Sociological Perspectives

(2 units)

The origins of sociological perspectives which are central to understanding contemporary society. Particular attention will be paid to the classical sociological theories of Karl Marx, Emile Durkheim and Max Weber.

### SOC 1003 Studies in Applied Sociology

(2 units)

This course introduces students to the way sociologists carry out research into specific areas of social life. Different areas are examined from year to year. The four areas examined currently are: how people behave in social groups and organisations; the social and cultural differences between men and women; youth subcultures; and the Catholic Church in modern Irish society.

### SOC 1004 Contemporary Irish Society

(1 unit)

The changing social structure of Ireland, with particular emphasis on developments over recent decades. Demographic change: marriage, fertility and migration patterns. The class structure of Irish society and the impact of industrialisation on social structure.

### SOC 1005 Sociology of Development I

(1 unit)

Review of concepts and theories used in understanding rural social change in various parts of the world, including Ireland. The structure of rural society; the conditions that transform rural social and economic life; processes and rates of change in the culture and social organisation of rural areas; and the behaviour of rural people determined by the social characteristics of the groups to which they belong.

### **SECOND YEAR (SOC 2000)**

Students must take a total of twelve units.

Core Courses (These courses are taken by all students)

### SOC 2001 Sociological Theory I

(1 unit)

This course aims to introduce students to modern debates in sociological theory. It examines both symbolic interactionism, through the work of Mead, Goffman and Blumer, and functionalism, through the contributions of Parsons and Merton. Contemporary critiques of these approaches and their further elaboration are also addressed

### SOC 2002 Sociological Theory II

(1 unit)

This course develops issues raised in Sociological Theory I. Phenomenology and ethnomethodology as developed by Schutz and Garfinkel are discussed. Also examined are neo-Marxist perspectives, in particular the work of Gramsci and Lukás, as well as the structuralism of Lévi-Strauss.

### SOC 2004 Social Stratification

(1 unit)

Inequalities in society in relation to economic class (wealth and income), social status and power, drawing mainly on Irish examples. Social mobility, the role of education. Theories of the labour market, especially the situation of women and ethnic minorities.

### SOC 2005 Sociology of Development II

(1 unit)

This course examines the conditions and prospects of less developed countries, the 'South' within the context of differences in natural resources, the impact of colonialism and the international economic order. The internal dynamics of less developed countries are analysed with reference to classes, ethnicity, interest groups and political factors and the implications of population expansion. Particular attention is paid to the position of women. The 'North' (or advanced industrial capitalist countries) is identified as part of the problem - can it be part of the solution? This question is examined in relation to the operation of transnational corporations and the role of aid.

### SOC 2006 Sociology of Communications I

(1 unit)

Major theoretical perspectives in the sociology of communications: Marxism and pluralism, critical theory and dependency theory, feminist and cultural studies views. Review of research on media audiences. Historical and sociological examination of broadcasting in Ireland.

### SOC 2007 Sociology of Gender

(1 unit)

This course offers an introduction to gender issues, especially in sociology. Sociological theory is examined in the context of gender and the wider body of feminist thought. Specific topics include the social construction of male and female roles, work, health, crime and violence, and the study of masculinity.

### **SOCIOLOGY (Contd.)**

### SOC 2008 Research Methods and Data Analysis

(4 units)

The objective of this course is to give students a good grounding in the methodologies utilised by sociologists in the researching of social issues, as well as an understanding of the theoretical approaches underlying these methodologies. A twice-weekly lecture course is combined with practical handson experience in the carrying out of a research project by each student. In the lecture course, the three main approaches to social research are studied, namely documentary research, survey research and the use of qualitative methods. An introduction is given to evaluation research. In addition to the lecture course, each student is required to carry out a research project.

### SOC 2010 Sociology of Northern Ireland

(1 unit)

This course examines various aspects of Northern Irish society, both in terms of historical debates and contemporary developments. The course considers some of the competing/overlapping explanations for the conflict and for its (potential) resolution, focusing in particular on the social dynamics involved in these processes. Our concern throughout the course will be to develop a critical understanding of such concepts as history, community and culture, and how these intersect with other debates about the nature of Northern Irish Society.

### SOC 2009 Seminar Essay

• Other optional courses may be offered in Second Year. See Third Year option list.

### FINAL YEAR (SOC 3000)

Students must take a total of twelve units.

Core Courses (These courses are taken by all students)

### SOC 3030 Sociological Theory III

(1 unit)

A central goal of this lecture course is to examine linkages between contemporary sociological theory and empirical social research. Contemporary theoretical advances within major sociological traditions are discussed and empirical case studies within these traditions are considered. In particular, issues dealing with agency and structure, as well as that of modernity, are raised.

#### SOC 3002 Theory Seminar

(1 unit)

SOC 3003 Special Interest Seminar - small group course

(1 unit)

### **Optional Courses**

Students take seven optional courses, at least four in the first semester.

### SOC 3004 Sociology of Education

(1 unit)

Key perspectives in the sociological analysis of education. The role of education in the process of social reproduction, and conversely the impact of social class and family background on educational performance. Special attention is given to quantitative and qualitative empirical research, with particular reference to Ireland

### SOC 3005 Sociology of the Family

(1 unit)

The institution of the family has been described as the most critical organisational context in any society. This course examines a range of sociological literature, both theoretical and empirical, on the family. Issues in defining the family are examined in the context of diversity in family forms and historical controversies about the family. A major focus of the course is change and the family, with particular reference to the economy and familial roles. There is a special emphasis on Irish studies of the family. Other themes in this course include those of violence in the family, mate selection and marital quality.

### SOC 3006 Sociology of Health and Illness

(1 unit)

This course is concerned with the relationship between society and matters of health and illness. It has three major components: (i) the distribution of health and illness in society; (ii) the roles and settings of medical practice; and (iii) public health policy. The following are the principal topics discussed: how people define health and illness; the social causes of disease; the distribution of illness among different social groups; stigmatising illness; the sick role; the professional-patient relationship; hospital organisation; the social impact of advances in medical technology; public health policy.

### SOC 3007 Research Methods: Data Analysis

(1 unit)

It is not necessary to be a mathematician or statistician to develop an understanding of quantitative data or how they can be analysed. Data analysis is not an alternative to 'Statistics' but has its own distinct meaning. Data analysis is concerned with making social researchers aware of the use, interpretation and evaluation of relevant data rather than a formal understanding of statistics. It is important to remember that data analysis should be a tool that you use to arrive at an understanding of the operation of social processes. The objective of this course is to ensure that students acquire practical research skills. Students will be introduced to the statistics package SPSS for Windows. It is intended that through learning technical skills, students will acquire a basic comprehension of the principles of statistical testing.

SOC 3031 Research Methods: Data Analysis II

(1 unit)

### **SOCIOLOGY (Contd.)**

### SOC 3008 Sociology of Religion

(1 unit)

Classical sociological understandings of religion and how they relate to the development of contemporary religion and culture, with specific reference to whether there is a process of secularisation in Western societies and Irish society in particular.

### SOC 3009 Sociology of Mental Health

(1 unit)

The sociological study of madness and mental health. Historical and theoretical aspects of insanity. Contemporary models of madness and sociological interpretations. Freud and psychoanalysis; the role of the psychiatric patient; gender and madness.

### SOC 3010 Sociology of Childhood

(1 unit)

The social construction of childhood; the implications of declining birth rates and new family forms, the trends towards institutionalisation and segregation of children; the professionalisation of child care and the de-skilling of parenting; children's activities, time-budget studies; the economics of childhood and issues of autonomy, protection, exclusion and inequality.

### SOC 3011 European Ethnic Relations 1

(1 unit)

Ethnic conflict in Eastern Europe and sociological patterns of ethnic and majority/minority relations generally. Ethnic relations in former Yugoslavia and the Balkans, and in the Baltic and East Slavic areas of the former USSR are studied to approach a range of problems including the nature of ethnicity and the cultural meaning of nation. Comparison with Western European ethnic relations.

### SOC 3012 European Ethnic Relations 2

(1 unit)

### SOC 3013 Sociology of Sex

(1 unit)

Sex in relation to gender, eroticism, religion and morality. Sexual repression and emancipation. Changing attitudes and practices, particularly in Ireland.

### SOC 3014 Public Discourse and the Media

(1 unit)

This course analyses the role of the media in mature democratic societies, particularly in relation to the news, information and debate and discussion in the public sphere. The course looks at the way news stories are created, the role of journalists and sources, whether objectivity is possible, the influence of the State, censorship, restricted ownership, access, coverage of minority issues, and how the media set agendas and define morality.

### SOC 3015 Producing Media Messages

(1 unit)

This course examines the contribution of sociology to public debate and discussion through the media. The course centres on the practice of writing and producing creative sociological messages for the media, including letters to newspapers, press releases, book reviews and proposals for radio documentaries.

### SOC 3016 Reading Media Messages

(1 unit)

This course examines different forms of media messages and the ways they can be read and understood, that is semiological, content, materialist and feminist analyses. A variety of sources are used including newspapers, magazines, photographs, television programmes (particularly soap operas), advertisements and films.

### SOC 3017 Sociology of Technology

(1 unit)

This course examines the relationship between technology and society. This involves a discussion of a variety of issues: is technology being used to de-skill people? Does technology embody particular values? What effect will the Internet and genetic engineering have on society? The course is built around the competing perspectives of technological determinism and the social shaping of technology.

# SOC 3018 Social Organisation

(1 unit)

This course is not the standard introductory course to the sociology of organisations or organisational sociology as it is called. Its aim will be to present a number of new perspectives that have emerged in the field of social organisation in the last two decades. It will attempt to introduce the student to a new and hitherto neglected perspective of social organisational theory. Although incorporating many contributions from the fields of industrial sociology and organisation theory it also transcends these with new perspectives. The course will attempt to show that social organisation theory is a potentially fruitful field of sociological theory and research, at once both theoretical and 'applied', that is capable of illuminating many facets of contemporary society.

### SOC 3019 Sociology of Emotions

(1 unit)

This course challenges the usual sociological approach to the problem of social order, which is based on mentalist or cognitivist presuppositions: values and norms are things that minds deal with. The course argues that the role of emotions and of affective bonds has been denied and neglected to the detriment of the entire sociological enterprise *tout court*. This course is organised around an explication of the master social emotions of pride and shame and examines their role in the regulation of social life and, specifically, social relationships. Topics covered are: the history of shame, social conformity, the role of emotions in work and the emotions and violence.

### **SOCIOLOGY (Contd.)**

### SOC 3020 Sociology of Racism

(1 unit)

This course aims to enable students to develop a broad-based understanding of theories and issues surrounding the concepts of 'race', identity and nation. The course begins by examining the main theoretical paradigms in the study of 'race' and racism: pseudo-scientific, psychological, sociological, Marxist and Postmodernist. Following the development of these analytical tools, it then goes on to analyse issues concerning the construction of social identity in terms of essentialism, difference and opposition. Finally, issues concerning identity formation in terms of nation and nationalism in a global cultural context are examined by analysing *inter alia* the racialisation of British identity, whiteness, Muslim identification, and various forms of social fundamentalism.

## SOC 3021 Visual Sociology

(1 unit)

Visual Sociology uses and produces visual material sociologically. It includes both theoretical approaches to the use of visual material as well as empirical approaches to the production of visual material. To a large degree visual sociologists attempt to be inclusive and are therefore unwilling to restrict visual sociology with a narrow definition. Discursively, visual sociology has developed continuously during its 'two-decade history'. Empirically, visual sociology is a form of visual ethnography. Images are defined by the context in which they are employed; for visual sociology this context should be sociological.

### SOC 3022 Economic Sociology

(1 unit)

This course is concerned with the following issues: sociological context of economic life; Irish industrial policy in the context of the international division of labour; dynamics of work organisations and labour markets. The changing GNP and GDP of Ireland and the classification of the changing Irish occupational structure from 1961 to date.

### SOC 3024 Sociology of Sport

(1 unit)

This course will start with a consideration of some basic definitional issues and proceed to an examination of the functions of sport and leisure. Attention will next be paid to the development of modern sport as a 'civilising process' (Elias) and, in that context, the sport of Ancient Greece and Rome and medieval Europe will be discussed for comparative purposes. The course will conclude with an examination of the following issues: the commercialisation of sport, sport and the media; sport and race; sport and gender; sport and violence, especially soccer hooliganism.

### SOC 3025 Representation and Identity

(1 unit)

### SOC 3026 Fashion Appearance and Gender

(1 unit)

Fashion is a discourse of historical developments, social trends, human relations and self definitions. As a material symbolic system it encodes cultural values (e.g. beauty, morality, authenticity), cultural fantasies, power positionings (e.g. gender, class, sexuality, ethnicity) and constitutes a site of struggle between dominant ideologies and subversive challenges. The course examines certain aspects of this uniquely Western capitalist development and its recent transformation from a class phenomenon to a consumer phenomenon.

### SOC 3027 Sociology of the Environment

(1 unit)

This course examines the relationship between society and the biophysical environment. It draws on constructivist, realist, marxist and eco-feminist approaches; analyses the theory of 'risk society'; examines the consequences of economic globalisation for the ecosystem; discusses the development of environmental movements; and explores the role of the media in placing environmental issues on the public agenda.

### SOC 3028 Issues in Social Psychology

(1 unit)

Social psychology occupies a very special position between individual psychology focusing on a micro level of analysis, and sociology which is concerned with a macro level. Somewhere in the space between them social psychology seeks to understand human behaviour neither in terms of personality or individual mechanisms, nor in terms of societal processes. Rather, it seeks explanations at the level of small group processes, where both person elements and social elements function as background variables. For this end it employs historical research methods that simulate certain aspects of social life while partialling out others, as well as discursive and ethnographic methods.

#### SOC 3032 Crime and Social Control

(1 unit)

This course considers a broad range of theoretical and policy-oriented debates concerning issues of crime and social control, focusing on three main issues in particular. First, it examines the major theoretical explanations of criminal behaviour and considers their policy implications. Second, it addresses how various forms of inequality intersect with issues of crime and social control. Finally, it considers the relationship between crime, social control and broad processes of social change.

### SOC 3033 Policing and Social Order

(1 unit)

The focus of this course is, firstly, on the major historical and sociological debates surrounding 'policing' and 'the police', and secondly, on contemporary developments in, and possible futures of, policing in Ireland and elsewhere. Throughout the course, we will consider the relationship between policing and social order, exploring in a variety of substantive ways, how social and economic divisions impact upon police practice, and how policing is enmeshed in the reproduction of social inequalities.

### SOCIOLOGY (Contd.)

### SOC 3034 Urban Sociology

(1 unit)

Modern life is city life. Urban landscapes, cultures and economies provide the quintessential expression of the dynamics of modernity. This course will explore a variety of overlapping concerns including: local economic strategies and the changing political-economy of cities; social stratification and patterns of collective consumption; landscapes of race and class (e.g. gentrification, the underclass 'ghetto', ethnic cultural quarters such as 'China Town'), contested representation of cities, for instance by local boosters ('place marketing') or in popular culture (e.g. crime novels, TV, the media); globalisation, global cities and supra-national urban hierarchies; the post-modern city.

### SOC 3039 Environmental Sociology II

(1 unit)

The relationship between humanity and nature is central to a wide range of contemporary issues. This course looks at issues relating to people, animals, landscapes and eco-systems against the historical and evolutionary backdrop of biological anthropology. Topics include: animal rights, wolf-introductions, GM agriculture, artificial eco-systems, synthetic wilderness, global warming, the sociology of pets, anti-roads protesters, hunt saboteurs, the ecology of human culture, the myth of the 'ecological Indian', the sociology of landscape, and 'Gaia'.

#### SOC 3036 Political Sociology

(1 unit)

'What is power?' and 'Where is it exercised?' are two major questions in political sociology. The earlier sociological approach to the political tended to concentrate on the exercise of power by and within the state. New Political Sociology, however, looks for power throughout society. Thus, the question 'Who are we?' becomes a political question. In this course conceptualizations of power will be addressed, as will notions of political space, political action and identity. You will be introduced to debates about the more macro level of state, civil society and the public sphere, as well as the more micro and meso levels of identity and social movements.

#### SOC 3037 Health. Illness and the Media

(1 unit)

This course will examine representations of health and illness in the mass media. A particular area of interest is the role of the media in what Radley et al (1997:5) term 'the making of health'. One feature of late-modern societies is that all of us are consumers of multiple messages in relation to what we should and should not do to our bodies in order to be healthy. Even a brief overview of the Irish media illustrates the pervasiveness of health related topics. Following Giddens (1992), it might be suggested that reading health promotional material, reading newspaper or magazine articles dealing with health issues and listening to or watching programmes dealing with health related topics all provide information that can enable individual reflexive projects. The media have a key role to play in moralising health. The media also play a crucial role in the commodification of health. The aim of this course will be to critically examine these themes. Topics will include: an introduction to health promotion and the media; risk; the internet and cyber-coping.

SOC 3038 Work and Industry

(1 unit)

# SOC 3029 Sociology of Food and Eating

(1 unit)

Theoretical approaches: functionalist, structuralist, ecological-materialist, developmental. Social influences on appetite. Eating disorders: obesity, anorexia nervosa, bulimia. Food and gender. The history of culinary cultures. Professional and domestic cookery. Food technology and its impact. Gastronomy and gastronomic publics.

### Notes for Second and Final Year Students:

- The provision of a course in any particular year is subject to the availability of staff and, in the case of an option, to its selection by a sufficient number of students. Certain optional courses may only be available timetable permitting. Courses additional to those listed may be provided in a particular year.
- Students may also take as options within Sociology timetable permitting certain
  courses taught by other departments, notably the Department of Philosophy; the express
  permission of the Head of the Department of Sociology and of the Head of the other
  relevant department is required.
- Optional courses listed above for the third year may from time to time be offered as
  options in the second year and vice versa.

#### **SPANISH**

Students with no previous studies of Spanish, but who are reasonably well qualified in other languages, may take up Spanish as beginners in the first year day course; selection of beginners will be by interview held at the beginning of term. Beginners are expected to have attained a level of competence comparable with non-beginners by the end of the course.

*Note:* Students of Spanish are normally expected to spend a total of at least three months in Spain (or another Spanish-speaking country) in the course of their undergraduate studies.

### FIRST YEAR (SPAN 1000)

- SPAN 1001 Language work, involving reading, writing, speaking and listening; the language laboratory will be used.
- SPAN 1003 Brief introduction to contemporary Spain.
- SPAN 1004 Prescribed literary texts (a list will be available at the beginning of the session).

#### **SECOND YEAR (SPAN 2000)**

- SPAN 2001 Spanish Language IIA (2 units)
- SPAN 2011 *Modern Literature in Spanish* (3 units)
  (i) Novel; (ii) Verse; (iii) Contemporary Literature/Film.
- SPAN 2012 *Modern Literature in Spanish* (2 units)
  A reduced version of SPAN 2011, for students who are taking Portuguese; either part (ii) or part (iii) of the course may be omitted.
- SPAN 2022 Estudios interculturales (1 unit)
- SPAN 2051 Spanish Language IIB (2 units) Prerequisite: SPAN 2001.
- SPAN 2071 Spanish Literature of the medieval period and the Golden Age (3 units) (i) Medieval; (ii) Golden Age Novel; (iii) Golden Age Drama.
- SPAN 2072 Spanish Literature of the medieval period and the Golden Age (2 units)
  A reduced version of SPAN 2071, for students who are taking Portuguese; either part (ii) or part (iii) of the course may be omitted.
- SPAN 2081 Spanish Linguistics I (1 unit)

### Notes for Second Year Students:

- Students must accumulate twelve units over two semesters.
- Courses SPAN 2001 and SPAN 2051 are compulsory. The reduced courses SPAN 2012 and SPAN 2072 are available only to students who are taking Portuguese.
- Courses PORT 2001 and PORT 2051 are available to day students of Spanish who attained an acceptable standard in the *language* component of the First Arts examination in Spanish.
- Details of prescribed texts are available from the Department.

### FINAL YEAR (SPAN 3000)

SPAN 3001	Spanish Language IIIA (2 units) Comprising grammar, translation, oral and practical Spanish. Prerequisites: SPAN 2001 and SPAN 2051.
SPAN 3045	Traducción literaria: teoría y práctica (2 units)
SPAN 3071	Golden-Age Drama (2 units)
SPAN 3011	Novel under Franco (2 units)
SPAN 3031	Medieval Spanish Literature II (2 units)
SPAN 3034	Fiction, History and Story in Contemporary Hispanic Narrative (2 units)
SPAN 3080	La expresión escrita (2 units)
SPAN 3051	Spanish Language IIIB (2 units) Comprising grammar, translation, oral and practical Spanish. Prerequisites: SPAN 2001, SPAN 2051 and SPAN 3001.
SPAN 3065	Poetry of the Generation of 1927 (2 units)
SPAN 3041	Nineteenth-Century Realism (2 units)
SPAN 3062	Ficción hispanoamericana contemporánea (2 units)
SPAN 3055	Don Quijote I (1 unit)
SPAN 3033	Romantic Drama (1 unit)
SPAN 3081	Historical Linguistics of Spanish (1 unit)
SPAN 3085	Golden-Age History (1 unit)

### Notes for Final Year Students:

SPAN 3032

- Students must accumulate twelve units over two semesters.
- Courses SPAN 3001 and SPAN 3051 are compulsory.

Semántica (2 units)

- Choice and combination of non-language courses will be made after consultation with the Spanish Department.
- Courses PORT 3001 and PORT 3051 (ONE unit each) are available to day students of Spanish who attained an acceptable standard in the language component in both Spanish and Portuguese.
- The Spanish Department does not guarantee the availability of all courses in any given year, and reserves the right to re-allocate courses to different semesters.
- Details of prescribed texts are available from the Department.

#### PORTUGUESE

Portuguese is at present available only to students of Spanish as an option in second and final year. To qualify for admission to Portuguese courses, students must have achieved an Honours standard in the *language* components of the First Arts Examination in Spanish.

# **SECOND YEAR (PORT 2000)**

First Semester:

PORT 2001 Portuguese IA (1)

An introduction to the Portuguese language, both spoken and written.

Second Semester:

PORT 2051 Portuguese IB (1)

A continuation of PORT 2001. Prerequisite: PORT 2001.

# FINAL YEAR (PORT 3000)

First Semester:

PORT 3001 Portuguese IIA (1)

A continuing study of oral and written Portuguese and of Portuguese literary texts. Prerequisites: PORT 2001 and PORT 2051.

Second Semester:

PORT 3051 Portuguese IIB (1)

A continuation of PORT 3001. Prerequisites: PORT 2001, PORT 2051 and PORT 3001.

#### STATISTICS

# FIRST YEAR (STAT 1000)

STAT 1001 Descriptive Statistics and Statistical Computing

Types of Variables and Data. Stem-and-Leaf Displays. Frequency Distributions. Histograms. Samples and Populations. Transforming Data. Numerical Summary Measures. Summarising Bivariate Data. Introduction to Statistical Programming and MINITAB.

STAT 1002 Introduction to Probability and Statistical Inference

Probability concepts. Random variables and probability distributions. The binomial distribution. The normal distribution. Checking for normality. The distribution of a sample mean. Point and interval estimation using a single sample. Hypotheses and test procedures. Errors in hypothesis testing. Tests for population means and proportions using a single sample. P-values.

STAT 1003 Statistical Inference and Goodness-of-Fit

Tests and estimation procedures for a difference between two population means or proportions using two independent samples. Tests and estimation procedures for differences using paired data. Distribution free procedures. One- and two-way frequency tables. Hypothesis testing for proportions and independence. Testing the fit for a population model.

STAT 1004 Linear Regression and Analysis of Variance

The simple linear regression model. Inferences based on the estimated regression line. Inferences on the population correlation. Checking model adequacy. Single factor ANOVA. Multiple comparisons. Randomized block experiment. Two-factor ANOVA.

# **SECOND YEAR (STAT 2000)**

STAT 2005 Statistical Theory I: Probability (2 units)

Probability theory. Combinatorics. Random variables: univariate, bivariate and multivariate. Moment generating functions. Functions of a random variable. Standard probability laws.

STAT 2006 Statistical Theory II: Statistical Inference (2 units)

- (a) Estimation theory: Law of large numbers. Chebyshev Inequality. Central Limit theorem. Methods of moments and maximum likelihood. Point estimation and interval estimation.
- (b) Hypothesis testing: Neyman Pearson Lemma. Likelihood ratio tests.
- STAT 2007 Statistical Theory III: Bayesian Statistics and Stochastic Processes (2 units)
  Bayesian statistical inference. Stochastic processes. Poisson processes. Birth and death processes. Branching processes.

# STATISTICS(Contd.)

### STAT 2008 Statistical Methods I (2 units)

Simple linear regression. Hypothesis testing and inferences concerning the regression equation. Polynomial and multiple regression. Regression diagnostics and transformations. Selecting the best regression model.

# STAT 2009 Statistical Methods II (2 units)

One- and two-way analysis of variance. Fixed, random and mixed effects models. Contrasts. Interaction. Multiple comparison procedures. Introduction to experimental design. Nonparametric statistics. Introduction to generalized linear models.

STAT 2010 Data Analysis and Statistical Software (2 units)

Data screening and cleaning. The SAS software package for data analysis.

#### FINAL YEAR (STAT 3000)

STAT 3011 Data Analysis I (2 units)

# STAT 3012 Applied Statistics I (2 units)

Design and Analysis of Experiments. Complete Block Designs (Randomized Block and Latin Square Designs). Incomplete Block Designs. Factorial Designs. Confounding and Fractional Factorial Designs. Statistical Software.

# STAT 3013 Applied Statistics II (2 units)

Introduction to Sample Surveys. Contingency Table Analysis. Logistic Regression. Log-linear Models. Statistical Computing.

#### STAT 3014 Time Series Analysis (2 units)

Characteristics of time series. Autocorrelation and cross-correlation function. Stationary time series. Autoregressive and moving average processes. Nonstationary time series. Model specification and estimation. Model diagnostics. Forecasting. Special topics.

# STAT 3015 *Multivariate Analysis* (2 units)

Random vectors. Multivariate Normal Distribution, Correlation and Regression. Hotelling's T<sup>2</sup> Statistic. Discriminant Analysis. Canonical Correlation. Principal Components Analysis. Multivariate Analysis of Variance.

#### STAT 3016 Actuarial Statistics I (2 units)

Decision Theory. Loss Distributions. Risk Models. Run Off Triangles and Experience Rating Systems.

# STAT 3017 Actuarial Statistics II (2 units)

Ruin Theory. Bayesian Statistics. Credibility Theory. Introduction to Generalised Linear Models.

# STAT 3018 Survey Sampling (2 units)

Elements of the sampling problem. Simple random sampling. Stratified random sampling. Ratio estimation. Cluster sampling. Systematic sampling.

### STAT 3019 *Quality Control and Reliability* (2 units)

Aims of quality control. Acceptance sampling. Operating characteristic curves. Sampling schemes. Sampling by Variables. Control and Cusum charts

# STAT 3022 Stochastic Processes I (2 units)

An introduction to the classification and simulation of stochastic processes. Discrete and continuous time models. Stochastic calculus.

# STAT 3023 Official Statistics (2 units)

Collection of official statistics including macro-economic, business, demographic and social statistics. Accessing official statistics and their applications. Estimation, imputation and seasonal adjustment.

# STAT 3024 Statistics and Visualization (2 units)

Descriptive statistical and graphical methods for displaying data. From data to information. Visualization and presentation of data. Aspects of multivariate analysis. Simulation, S-plus software.

#### STAT 3031 Linear Models with Complex Structure (2 units)

Analysis of unbalanced data from surveys and experimental designs. Means model. Estimation of variance components in unbalanced mixed and random effect models. Methods for the analysis of repeated measures designs.

#### STAT 3032 Topics in Biostatistics (2 units)

This course covers specialised applications of statistics in biology. Topics include the following: pharmaceutical statistics, ecological statistics, medical and epidemiological statistics.

# STAT 3033 Nonparametric Statistics (2 units)

Distribution-free statistics; statistics utilising counting and ranking; Wilcoxon statistics; Kruskal-Wallis statistic. Friedman statistic; Spearman's statistics; Permutation procedures; Power functions and asymptotic distribution. Nonparametric regression.

# STATISTICS (Contd.)

# STAT 3035 Survival Analysis (2 units)

Censoring. Life tables. Kaplan Meier estimate. Mantel-Haenzel statistics. Parametric methods. Cox's proportional hazards model. Goodness-of-fit.

# STAT 3036 Statistical Computing (2 units)

Fixed point and floating point arithmetics. A review of programming style. Random number generators. Monte Carlo applications. A review of maximum likelihood. Unconstrainted nonlinear optimisations. Accessing Fortran libraries

STAT 3040 Data Mining (2 units)

# Notes for Final Year Students:

- Students are required to take twelve units, and the selection of courses is subject to departmental approval.
- All students must undertake a project in Data Analysis on Applied Statistics as
  prescribed by the Department of Statistics.

# UGARITIC (Minor Subject in Mode III Near Eastern Languages)

#### FIRST YEAR

Courses not offered.

### **SECOND YEAR (UGAR 2000)**

Mode III	
UGAR 2001	Ugaritic Grammar: Text: C.H. Gordon, Ugaritic Textbook.
UGAR 2002	Prescribed texts: The Legend of King Keret: the Baal and Anat Cycle.
UGAR 2003	The social and political institutions at Ugarit.

# FINAL YEAR (UGAR 3000)

UGAR 3001	Prescribed texts: The Aqhat Tale; The Birth of Dawn and Dusk; The
	Marriage of Yarikh and Nikkal; selected Ugaritic letters.
UGAR 3002	A comparative study of Ugaritic and early Hebrew poetry.
UGAR 3003	Comparative Northwest Semitic Philology.

*Note:* For the unit values of courses in Ugaritic, please consult the Department of Near Eastern Languages.

# WELSH

No previous knowledge of Welsh is required. Students are encouraged to use the facilities for developing ability in spoken Welsh available in the language laboratory. In the second and final years, visits are arranged to the University College of North Wales, Bangor.

# FIRST YEAR (WEL 1000)

WEL 1001	The structure of modern literary Welsh.
WEL 1002	Elementary composition and translation.
WEL 1003	Introduction to modern Welsh literature; selections from a representative

WEE 1000	sample of twentieth century writers.				
SECOND YEAR (WEL 2000)					
First Semester: WEL 2001	Composition, Translation and Spoken Welsh $I(1)$ The course is designed to further the student's ability in literary Welsh and to introduce the spoken language.				
WEL 2002	Introduction to Medieval Welsh Prose I (1) The study of an edited prose tale of the late medieval period.				
WEL 2003	Early Welsh Poetry I (1) Selection from various early poetic genres.				
WEL 2004	Introduction to the Literature of the Sixteenth to the Nineteenth Centuries (1) The course includes selections from early modern free verse and prose selections from various translations of the Bible.				
WEL 2005	Modern Welsh Literature $I(1)$ Representative samples from the leading exponents of present-day Welsh literature.				
WEL 2006	Medieval Breton: Structure and Texts $I(1)$ The grammar of medieval Breton and selections from the prose and verse of the period.				
WEL 2007	Welsh Linguistics $I(1)$ An introduction to phonological and grammatical structure.				

# WELSH (Contd.)

WEL 2008 An Approved Author or Topic I(1)The guided study of an author or topic not on the syllabus, or a deeper study of a listed topic. Students will submit an extended essay on the selected subject. WEL 2009 The History of Welsh Literature and Literary Criticism I (1) This course includes an assessment of the influence of the National Eisteddfod and other institutions on vernacular literature. Second Semester: WEL 2051 Composition, Translation and Spoken Welsh II (1) Further exercises in the various registers. WEL 2052 Medieval Prose II (1) Continuing study of a selected text. WEL 2053 Early Welsh Poetry II (1) A continuation of WEL 2003 WEL 2054 Welsh Metrics (1) The rules and development of 'cynghanedd' in Welsh strict metre poetry. WEL 2055 Selections from Modern Welsh Literature II (1) A continuation of WEL 2005. WEL 2056 Medieval Breton II (1) Further study of selections from the prose and poetry of the period. WEL 2057 Welsh Linguistics II (1) A continuation of WEL 2007. WEL 2058 *An Approved Author or Topic II* (1) A continuation of WEL 2008.

The History of Welsh Literature and Literary Criticism II (1)

A continuation of WEL 2009.

WEL 2059

# Notes for Second Year Students:

- All students must take WEL 2001-WEL 2005 (inclusive) and WEL 2051-WEL 2055 (inclusive). In addition to the courses listed above, one from each of courses WEL 2006-WEL 2009 and WEL 2056-WEL 2059 is required. (Selection will be made in consultation with the Head of Department and will depend on the availability of courses).
- Students selecting Welsh as a minor subject in Celtic Studies (Mode III) will choose
  three from each of courses WEL 2001-WEL 2009 and WEL 2051-WEL 2059.
  (Selection will be made in consultation with the Head of Department and will depend on
  subject combination).

#### FINAL YEAR (WEL 3000)

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WEL 3001 Composition, Translation, Spoken Welsh I (1)

The course is designed to further the student's ability to handle the

literary and spoken language.

WEL 3002 *Medieval Prose I* (1)

The prose genres of the medieval period, including selections from

original and translation material.

WEL 3003 Medieval Poetry I (1)

A survey of the development of the bardic order and its main\_metre, the

cywydd deuair hirion in the fourteenth to sixteenth centuries. Textual

work concentrates on the poems of Dafydd ap Gwilym.

WEL 3004 Twentieth Century Prose I (1)

Representative samples from the compositions of modern prose writers

and modern playwrights.

WEL 3005 Twentieth Century Poetry I (1)

Selections from the major poets and schools of twentieth century

modernism.

WEL 3006 *Modern Breton: Structure and Texts I* (1)

The grammar of modern (KLT) literary Breton, including a detailed study

of a published folk-tale.

WEL 3007 *Medieval Cornish: Structure and Texts I* (1)

The grammar of medieval Cornish, including the detailed study of the

Cornish 'passion' poem.

WEL 3008 *Old Welsh* (1)

Prose texts of the ninth to eleventh centuries.

# WELSH (Contd.)

WEL 3009 An Approved Author or Topic I(1)

The guided study of an author or topic not on the syllabus, or a deeper study of a listed topic. Students will produce an extended essay on their

chosen subject.

Second Semester:

WEL 3051 Composition, Translation and Spoken Welsh II (2)

Advanced composition and translation exercises and a study of the

various written and spoken registers of Modern Welsh.

WEL 3052 *Medieval Prose II* (1)

A continuation of WEL 3002.

WEL 3053 *Medieval Poetry II* (1)

A continuation of WEL 3003.

WEL 3054 Twentieth Century Prose II (1)

A continuation of WEL 3004.

WEL 3055 Twentieth Century Poetry II (1)

A continuation of WEL 3005.

WEL 3056 *Modern Breton Structure and Texts II* (1)

Further study of the grammar of Modern Breton, including readings from

present-day prose compositions.

WEL 3057 *Medieval Cornish: Structure and Texts II* (1)

A further study of medieval Cornish texts.

WEL 3058 History of the Welsh Language (1)

Change and development in orthography and grammatical structure

during the medieval and modern period.

WEL 3059 An Approved Author or Topic II (1)

A continuation of WEL 3009

# Notes for Final Year Students:

- Students selecting Welsh as a major subject in Celtic Studies (Mode III) will take, in addition to the courses listed above, *one* from each of courses WEL 3006-WEL 3009 and WEL 3056-WEL 3059. (Selection will be made in consultation with the Head of Department and will depend on availability).
- Students selecting Welsh as a minor subject in Celtic Studies (Mode III) will choose three from each of courses WEL 3001-WEL 3009 and WEL 3051-WEL 3059. (Selection will be made in consultation with the Head of Department and will depend on subject combination).

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Old and Middle English	
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Italian	
Latin	
Linguistics	
Logic	
Mathematical Studies	
Mathematics	
Mathematical Physics Studies	
Mathematical Physics	
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