Introduction

What is in this Study Guide?

We hope that this Life Sciences Study Guide will:

- Summarise important essential information, guidance and advice on issues of teaching, learning and student support
- Help you achieve your maximum potential taking modules and/or degrees offered by the College of Life Sciences

Key Dates in Academic Year 2013-2014

Semester 1

Freshers' Week:	2-6 September 2013
Teaching Weeks 1-5 & 7-12:	9 September - 11 October 2013 21 October - 29 November 2013
Unscheduled Teaching Week:	14-18 October 2013
Semester 1 Exam Weeks 13 & 14:	2-12 December 2013 inclusive
4 weeks Christmas Vacation:	16 December 2013 - 10 January 2014

Semester 2

Teaching Weeks 15-25:	13 January - 28 March 2014
3 weeks Easter Vacation:	31 March - 18 April 2014
Semester 2 Exam Weeks 26-30:	21 April - 23 May 2014 inclusive
Graduation ceremonies:	17-20 June 2014
Single resit diet for Semesters 1 & 2:	4-15 August 2014 inclusive

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SECTION 1: Management of undergraduate teaching

1.1 Key contacts

Some key members of staff in the School of Life Sciences Learning & Teaching (SLSL&T) are listed to the right. In addition, each module has academic staff responsible for its academic content and for running the module (the Module Manager). Module Managers have teams of academic, clerical and technical staff to help them run the various component parts of the modules for which they are responsible. Section 3 provides descriptions of individual undergraduate modules run by the College of Life Sciences and includes the names and emails of the module Managers.

Key Contacts in SLSL&T

Dean: Professor David Coates
Phone: 01382 385111
Email: d.coates@dundee.ac.uk

School Secretary: Mrs Brenda Murphy
Phone: 01382 386438
Email: b.m.murphy@dundee.ac.uk

Head of L1, L2 and L3: Dr Linda Morris
Phone: 01382 384682
Email: l.a.z.morris@dundee.ac.uk

Deputy Head of L1: Dr Nick Brewer
Phone: 01382 384706
Email: n.j.brewer@dundee.ac.uk

Deputy Head of L2: Dr David Booth
Phone: 01382 384278
Email: d.z.booth@dundee.ac.uk

1.2. Our responsibilities in the provision of teaching

The Module Manager is responsible for:

- producing a module handbook to explain the teaching aims and learning objectives of the module;
- explaining the procedures by which you will be taught and examined;
- providing opportunities for you to judge your progress in the module e.g. in the form of diagnostic or formative assessments;
- monitoring your attendance in classes, asking you to explain any unauthorised absence or other failure to participate in the work of the module, and reporting you to the relevant Head of Year any failure to attend and/or participate, or for poor academic performance.

1.3. Seeking help, advice and information from SLSL&T

The SLSL&T Office reception is in **Room C.G.14** of the Carnelley Building and is a "one-stop-shop", manned from 9am – 4.30pm Monday to Friday, if you wish to drop by in person.

To make an appointment to see the School Secretary or the Dean
Phone: 01382 384182 or
Email: SchoolOffice-LS@dundee.ac.uk

Contact details

L1 Teaching Support
Phone: 01382 388360
Email: lsuglevel1 @dundee.ac.uk

L2 Teaching Support
Phone: 01382 388360
Email: lsuglevel2@dundee.ac.uk

1.4. About MY DUNDEE

My Dundee is the University of Dundee's web-based student portal, giving you access to your learning materials, your student clubs and societies and many other College and discipline specific resources.

Logging into *My Dundee*

http://my.dundee.ac.uk/

The URL above takes you to the login page for *My Dundee* and requires the same username and password as your login to the University computer system. Alternatively, follow links to it from the University of Dundee Homepage, via Current Students > *My Dundee*. Your use of *My Dundee* is subject to University Regulations for the Use of Computer Facilities.

- *The My Dundee screen:* The initial screen that appears once you log on provides access to your modules, announcements, calendar, tasks and additional areas. You can customise your *My Dundee* page by adding extra features and changing the colours and layout.
- *My Modules:* All modules you are enrolled in are available from the Course List under My Modules tab, or from My Modules on the right hand side of the *My Dundee* screen.
- *My Files:* This tab gives access to a personal file store on *My Dundee* which you will need if your course or module is making use of electronic portfolios.
- *My Webmail:* This tab gives access to your University email account.
- *PC Requirements:* You can access *My Dundee* using PCs in the University's IT suites. However, if you wish to logon from outside the University please follow the links below:

Browser and platform compatibility checks:
http://kb.blackboard.com/pages/viewpage.action?pageId=71860304

We also provide a link to a browser checker so that users can check their own setup:
http://www.dundee.ac.uk/elearning/browserchecker/

BSG275 Module : Life Sciences Undergraduate Students: Useful Information is the module where general useful information such as Degree Regulations, and various important school documents such as the Student Notification of Absence Form, is stored for your information and use.

Further Help

If you have any problems using *My Dundee*, consult the Help tab, or try:

- ✓ *visiting* the IT Service Desk in the Tower Basement IT Suite or Main Library.
- ✓ *emailing* a description of your problem to elearning@dundee.ac.uk.
- ✓ *telephoning* – use the 'Service Desk' button on a phone in an IT Suite or on other phones dial extension 88000 (or 01382 388000 externally).

1.5. Help with academic matters

- Help from staff or Module Managers: If you have queries regarding module content or you wish one of the teaching staff or Module Managers to provide a reference or special letter, email the staff member specifying your query or requesting an appointment.
- Help from your Adviser of Studies: It is imperative that you speak to your Adviser of Studies if you are intending to make changes to your programme of study whether it is changing modules or changing degree programme. Your Adviser of Studies can also provide references for you. In addition, if you are having problems that are affecting your ability to study, it is advisable to report these to your Adviser of Studies and the Head of Year.
- Help from Heads of Years: You can also seek help from the Head of Year who is Dr Linda Morris l.a.z.morris@dundee.ac.uk, for levels 1, 2 and 3.

1.6. Help with regulatory matters from the School Secretary:

Occasionally health or personal problems have such a debilitating effect that you may have to consider withdrawing temporarily from your studies if you are continuously absent from your studies for **3 weeks or more**. In this event you should discuss the matter with the School Secretary, who can advise on issues relating to Regulations and funding. Such discussions will be kept confidential, unless there are circumstances in which your interest would be best served by divulging the confidential information to other staff. Your permission would be sought in this event.

Degree examination timetables

Please note that Registry publish degree exam timetables on the University web site in November for semester 1, in March for semester 2 and in July for the resit diet. The examinations only take place on Campus and only at the particular times published in the exam timetables. There are no exceptions so beware when booking holidays or flights home within the semester dates given on the back cover of this booklet.

Degree examination results

Provisional semester 1 degree examination results will be available via eVision from the second week in January. The official results for both semester 1 and 2 will be available via eVision and also sent by post in June following the examination board meetings. The resit results will be available via eVision and by post in late August. Please note that examination results will NOT be conveyed via the telephone. Therefore, please **do not** telephone the SLSL&T office teaching support requesting this information.

SECTION 2: Your responsibilities as a student - learning, attendance and communication

2.1. Communication

It is your responsibility to keep yourself informed about the modules you are taking by reading and referring to the individual module handbooks available on-line via *My Dundee* and checking the following at least **once per day** for any urgent updates or rescheduling notices. You must use your University e-mail address for all communications with staff.

Check the following at least once per day for urgent updates or rescheduling notices

- ✓ **Your Dundee university Email account**
- ✓ ***My Dundee 'Announcements'***

From week 4 on a regular basis check

- ✓ **eVision**

and report any discrepancies, by email, to lsuglevel1@dundee.ac.uk for Level 1 and lsuglevel2@dundee.ac.uk for Level 2 asap

2.2. Student attendance and participation

2.2.1 Attendance at compulsory classes and coursework submissions

You are encouraged to attend all lectures and scheduled classes in the timetables for all SLSL&T modules. However, for all modules, attendance at workshop and practical classes is **COMPULSORY**; attendance registers are taken and it is your responsibility to ensure your attendance is noted each time.

At the end of the second week of teaching in both Semester 1 and 2 you will receive a general email reminding you of the importance of attending classes and submitting compulsory coursework. This is the only formal reminder you will receive about your attendance and submission of coursework.

Your attendance and coursework submissions are strictly monitored and you should notify the School Office of any non-attendance or non-submissions using the appropriate procedure described in Section 2.2.3 below.

An accumulation of more than **one** unauthorised absence (AB) for either non-attendance and/or non-submission of coursework may result in your Duly Performed (DP) status being withdrawn for the affected module. DP status is a requirement for eligibility to take the degree examination, so withdrawal of your DP means that you are debarred from taking the degree examination for the module at both the first and second diet of exams. If your affected module is assessed by 100% coursework you will not be eligible to receive a grade for this module. You will receive a formal letter advising you of your DP withdrawal and offered an opportunity to meet with the School Secretary and Head (or Deputy Head) of Year.

2.2.2 Submitting your coursework

Submission of all coursework assignments (paper-based or electronic) are **COMPULSORY** and should be submitted according to the instructions given in the Assessment and Submission Deadline sections in individual module handbooks. Unless otherwise informed, **ALL** coursework should be submitted in the black boxes in the basement level of the Carnelley Building. You will have your marked paper-based assessments returned to you through the School Office Reception in Carnelley room C.G.14. Students will be notified by email that coursework is ready for collection. Extensions to a submission deadline can only be given by a Module Manager and must be recorded by the School Office

2.2.3 What to do when absent from compulsory classes or examinations

If you are absent from classes, it is important that you complete a **Student Notification of Absence form**, available from the Life Sciences School Office reception in Carnelley room C.G.14, either before or within **SEVEN DAYS** following the class and/or assessment. Depending upon the circumstances, as outlined below, you may also be required to provide a medical certificate or letter explaining your absence.

- **Absences of up to 5 days:** You can self-certify by completing a Student Notification of Absence form. For minor illnesses, an MC grade will be entered into your assessment record. If your absence is due to a cause other than illness and the reason given on the Student Notification of Absence form is considered legitimate, then a certified absence (CA grade) will be granted.
- **Absences of more than 5 days:** If an illness results in an absence of more than 5 days, then, in addition to the Student Notification of Absence form, a medical certificate signed by a GP will also be required. If the absence is for reasons other than illness, then you must submit a letter explaining the prolonged absence. In the latter case, you will be informed if your reason for absence is deemed to be certified.
- **Absence requests for extra curricula activities** must be made in writing to the School Office well in advance of the event, **not after**. You are unlikely to be retrospectively awarded a Certified Absence.
- **Self Certification :** Please note that in the interest of ensuring you receive the optimum learning experience and reach your full potential on your modules, only two occasions of self-certified absences/non-submission of coursework can be sustained. If your attendance record shows more than two MC's (Medical related) or CA's (non-medical related) you will be invited to meet with the School Secretary and Head (or Deputy Head) of Year, to review your position with regard to missed classes and/or coursework.

2.2.4. Absence from exams (in-course tests as well as degree exams)

Email SchoolOffice-LS@dundee.ac.uk or telephone 01382 384182 as soon as possible. In addition, if you miss the examination due to illness, you must send in a medical certificate within **SEVEN DAYS** following the examination. Self-certification is not allowed for absence from examinations. If you miss an examination, through no fault of your own, for reasons other than illness, then you must submit corroborative documentation within **SEVEN DAYS** following the examination.

2.2.5. Life Sciences Scrutiny Committee procedure

If, during the course of your studies, you experience unforeseen and unavoidable circumstances that you believe have had a **significant negative impact** on your performance in coursework and/or examinations, you should submit your case (including supporting evidence where possible) in confidence for consideration by the College of Life Sciences Scrutiny Committee. The Scrutiny Committee meets in advance of the examination boards for modules to consider submissions made to the committee and makes recommendations to the Board of Examiners on the level of support that should be given in each case. In accordance with the Data Protection Act, no significant details of any submission to the Scrutiny Committee are revealed to the Board of Examiners.

How to report mitigating circumstances to the Scrutiny committee

- Fill in a Scrutiny Committee Form**,** which you can download from the module BSG275 Life Sciences Undergraduate Students: Useful Information on *My Dundee*. or obtain from the Life Sciences School Office reception in Carnelley room C.G.14, giving brief details of how your work was affected, e.g. unable to concentrate for revision etc.
- Provide documentary evidence of the problem giving some indication of the period of time involved, e.g. doctor's note, a statement of support from a third party (e.g. Adviser of Studies, parents) to support your case.
- The Scrutiny Committee Form will have the submission dead-line clearly identified and it is your responsibility to ensure that this form is submitted to the Life Sciences School Office on or before the dead-line provided. It may not be possible to consider late submissions.

Please note that you will not normally receive feedback on your submission from the Scrutiny Committee.

2.2.6. Consequences of absence and/or failure to submit coursework

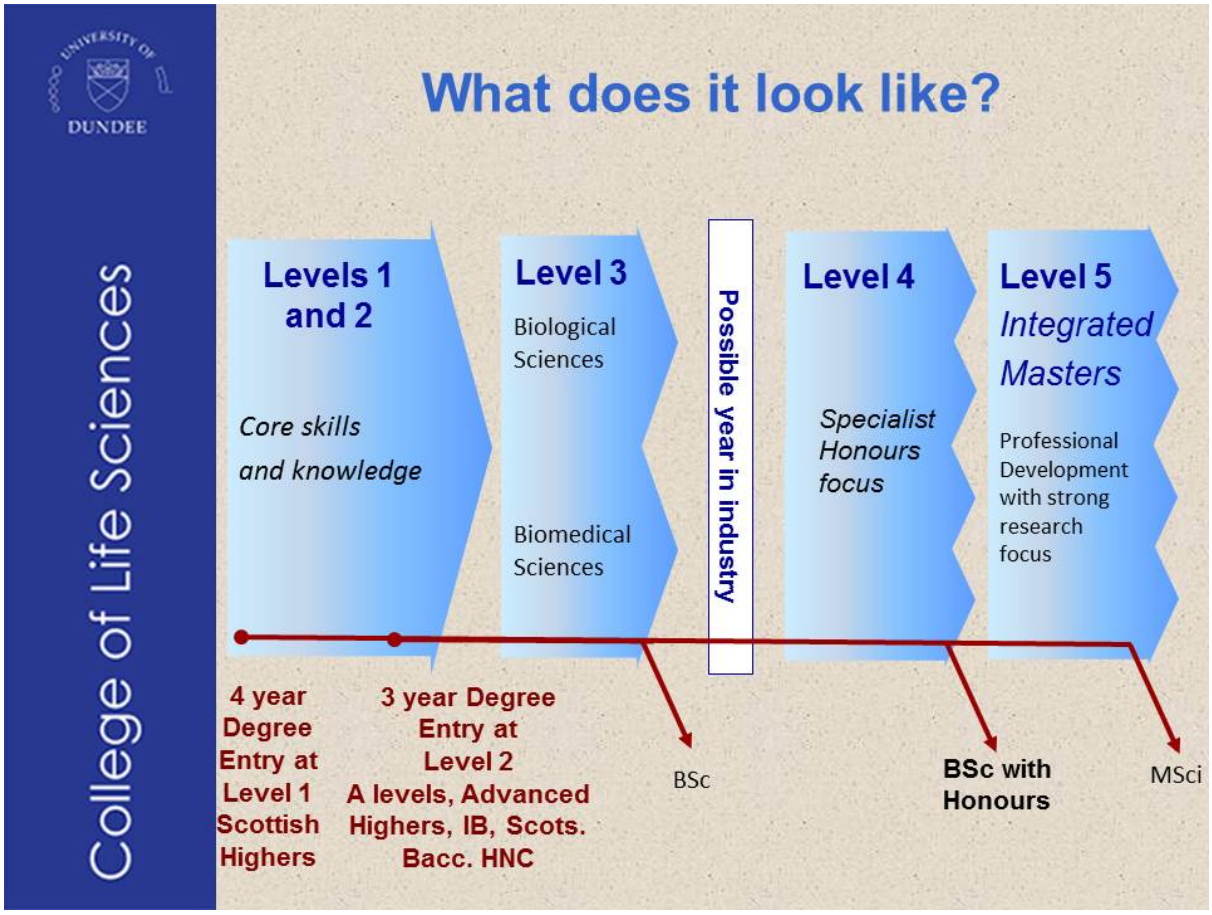
Prolonged absence - In the event of prolonged absence from classes for a period of more than 3 weeks, for any cause including legitimate reasons, you may require the consent of the Academic Senate for you to be allowed to enter the Degree examinations.

Withdrawal of DP – In the event that you have unexplained absences from compulsory scheduled classes for a module and/or have failed to submit compulsory coursework for no good reason, you may have your Duly Performed (DP) certificate removed which debars you from sitting the degree examination.

Discounted year - In the event that you are prevented from engaging with your study for legitimate reasons over a prolonged period, you may apply through the Life Sciences School Office to have the year discounted. An application for a discounted year should be submitted to the Life Sciences School Secretary as soon as possible and in any event not later than the end of semester 2 (before the Easter break). It is possible to retain credits already accrued from modules completed in the discounted year.

SECTION 3: Degrees in Life Sciences and Modular Structure

College of Life Sciences Degree Programme Outline



3.1. Level 1 Life Sciences Core Curriculum

Students are automatically enrolled on modules essential for their degree but you may wish to check which modules these are by referring to the Degree Regulations available on the module BSG275 Life Sciences Undergraduate Students: Useful Information on *My Dundee*.

3.1.1. Life Sciences Level 1 Core Curriculum competencies

After study of all the core theory modules in Level 1 students will acquire and/or demonstrate the following competencies via assessed coursework and examinations from lectures and attendance at associated workshops:

- Be able to describe the events which prepared the earth for the emergence of life.
- Summarise the key concepts of evolution, the increasing complexity of organisms and physiological developments associated with the move from water to land.
- Explain how variation allows for selection at all levels.
- Summarise the differences between, and pathways leading to, prokaryotic and eukaryotic cells.

- Interpret Mendel's genetic rules in terms of the underlying physical processes.
- Summarize the benefits of multicellularity.
- Classify approaches to intercellular signalling.
- Classify the stages of cell division in relation to the need to maintain information from generation to generation.
- Summarise the nature of covalent and non-covalent forces.
- Summarise the roles and mechanisms of enzymes as catalysts.
- Summarise the thermodynamic mechanisms for energy flow and transfer in cells.
- Assess the relationship between structure and function for biological molecules.
- Be able to critically evaluate evidence based analysis (classic papers).
- Be able to make and to defend judgement on work in the biological and biomedical sciences.
- Understand the evolutionary and physiological processes that shape life between the Cambrian era and to the KT mass extinction.

After study of all the core practical modules in Level 1 students will acquire and/or demonstrate the following competencies via assessed coursework from practical sessions and attendance at associated workshops:

- Calibrate and operate standard laboratory equipment and perform analyses on a variety of sample types.
- Competent field trips skills (correct use of GPS and observation skills).
- Design and perform experiments.
- Design and make buffers, and prepare standard solutions.
- Problem solve.
- Use molecular graphics and statistics programmes as appropriate.
- Work in groups.
- Keep an up to date lab book.
- Become proficient in written communication skills (report and poster writing) including citation/referencing and bibliographic skills.
- Self-assess skills and learning.

3.1.2. How will this be assessed?

We use a variety of assessment types as listed below:

Module type	Assessment type	Learning outcomes assessed
Theory and practical	**On-line examination and tests** (using QMP and EOL)	Core knowledge, numerical skills, problem solving and critical thinking.
Practical and theory	**Presentations** (oral and poster)	Communication skills and presentation of data.
Practical	**Laboratory competence evaluation** (lab tests, experimental plans, risk assessments, lab books)	Practical skills, record keeping, organisational and planning skills.
Practical and theory	**Scientific writing** (reports, case studies, literature review,essays)	Written communication, presentation and analysis of data, critical thinking and problem solving.
Practical	**PDP** (skills checklist, reflective writing)	Self-reflection and self-assessment.

3.1.3. Feedback

You will receive feedback on all your coursework submissions which may be provided in a variety of forms e.g. hard copy feedback sheets, electronic feedback sheets, oral feedback (individual or group).

3.1.4. Life Science Modules at Level 1

LEVEL 1 MODULES	
SEMESTER 1	**SEMESTER 2**
BS11001 Introduction to the Life Sciences: the early years *(10 Credits)*	**BS12001 Life: building the organism** *(10 credits)*
BS11002 Introduction to Life Sciences: Why go multicellular? *(10 credits)*	**BS12002 Life: the underlying structures** *(10 credits)*
BS11003 Laboratory and Research Skills 1A *(10 credits)*	**BS12003 Laboratory and Research Skills 1C** *(10 credits)*
BS11004 Laboratory and Research Skills 1B *(10 credits)* ▲	**BS12004 Laboratory and Research Skills 1D** *(10 credits)* ▲
BS11005 Introduction to Maths, Chemistry and Physics *(20 credits)* *	**BS12005 Science and Society** *(20 credits)* **
BS11006 The Poison Pen ** *(20 credits)*	

* *recommended for students who need to strengthen their skill and understanding within these subjects*

** *Optional module*

▲ *Modules not available to non-Life Science students*

3.1.5. Level 1 Module Descriptions

Semester 1 modules

BS10001 Dundee College Co-Curriculum (20 credits)

Module Manager: Dr Nicholas Brewer n.j.brewer@dundee.ac.uk

Brief description of module: This is a module for life sciences students to study chemistry and biology at Dundee College but partake in classes at Dundee University in preparation for entry to level 2 as a full time Dundee University. Students on the module have a personal tutor at Dundee University whom they can see to discuss any issues with chemistry/biology topics

Teaching: to take place at Dundee College, assessments to take place at Dundee College

BS11001 Introduction to the Life Sciences: the early years (10 credits)

Module Manager: Dr Gerhard May G.H.W.May@dundee.ac.uk

Brief description of module: This is a module that introduces aspects of three major concepts: Life as Chemistry, Evolution and the Cell. For Life as Chemistry, major topics covered will include the origin and age of the Earth, the climate of the early Earth and how it has changed, the origins of oceans and continents and the inorganic origins of life. The concept of Evolution will consider Darwin's theory of evolution through natural selection, the nature of variation, the ways in which selection acts upon variation and descent from a single common ancestor. The concept of the Cell will consider the cellular nature of living organisms, the organisation of both prokaryotic and eukaryotic cells, the theory of endosymbiosis and the evolution of photosynthesis.

Teaching: 2 lectures/week plus 3 'research lectures' (25 in total) with 5 workshops. You will receive teacher-directed study exercises.

BS11002 Introduction to the Life Sciences: why go multicellular? (10 credits)

Module Manager: Dr David Booth d.z.booth@dundee.ac.uk

Brief Description of module: This is a module that introduces aspects of three major concepts: The Gene, Evolution and Biological Organisation. The concept of the Gene covers major topics such as DNA, genes, genomes, reproduction and heredity. The concept of Evolution introduces the topics of multicellularity and the benefits of being multicellular. The concept of Biological Organisation introduces the topic of chemical transmission and how characteristics are retained from simple animals such as the coelenterates to more complex animals such as the chordates. The need for a nervous system and the early development of nervous systems including simple nerve nets are explored from an evolutionary perspective.

Teaching: 2 lectures/week plus 3 'research lectures' (25 in total) with 5 workshops. You will receive teacher-directed study exercises.

BS11003 Laboratory and Research Skills 1A (10 credits)

Module Manager: Dr Sandy Harper a.a.harper@dundee.ac.uk

Brief description of module: This module will start with a mandatory introduction to health and safety and basic lab skills. There will be two field excursions (sandy shore and rocky shore) and a series of practical classes that will cover techniques of isolation and culture of microorganisms, control of growth by heat and chemicals, and the effects of antibiotics on growth of bacteria. Other set practical classes include: chemotaxis in *Paramecium*, arthropod diversity and insect dissection, forensic entomology and the analysis of DNA.

Teaching: 1 practical session and workshop/week plus teacher-directed study exercises.

BS11004 Laboratory and Research Skills 1B (10 credits)

Module Manager: Dr Nicholas Brewer n.j.brewer@dundee.ac.uk

Brief description of module: This module will extend and develop the generic skills introduced in BS11003 with specific emphasis on health and safety and basic laboratory practice. The ability to work effectively as part of a group and the introduction of peer support and peer-assessment will form a significant part of this module. Students will extend their information literacy skills by locating and accessing scientific resources to support their learning. Protocols associated with scientific writing will be introduced as a means of effectively communicating scientific ideas, procedures and discoveries. Students will be encouraged to reflect on and evaluate their own learning throughout the semester, identifying areas for development and consolidation.

Teaching: 1 practical session and workshop/week plus teacher-directed study exercises.

BS11005 Introduction to Maths, Physics & Chemistry (20 credits)

Module Manager: Dr Nicholas Brewer n.j.brewer@dundee.ac.uk

Brief description of module: This module introduces the application of the physical sciences and mathematics to the Life Sciences. The module covers aspects of basic physics, chemistry and mathematics including numeracy and mathematical application; statistics; biophysics; organic, inorganic and physical chemistry and the introduction to and use of numeric and scientific literacy. The use of technology to support and enhance application within the Life Sciences will form a significant part of this module, which will be both theoretical and practical in delivery.

Teaching: 2 lectures/week plus workshops/practicals each week. You will receive teacher-directed study exercises.

BS11006 The Poison Pen (Optional module - 20 credits)

Module Manager: Dr Linda Morris l.a.z.morris@dundee.ac.uk

Brief description of module: This module offers a science based optional module which may be of particular interest to those students who intend to specialise in later years in either pharmacology or drug discovery. The module will look at several classical English texts in which poisonings play a pivotal role in the plot. After examination of the text, the symptoms will then be unpicked and possible poison molecules identified along with their

source. Students will be able to explore the darker side of pharmacology and look at the importance of dosage and how molecules used to cure can also kill.

Teaching: Lectures and a mixture of tutorials and workshops with additional on-line exercises and self-directed study supported by VLE-delivered material.

Semester 2 modules

BS12001 Life: building the organism (10 credits)

Module Manager: Dr Graham Christie g.r.christie@dundee.ac.uk

Brief description of module: This module develops aspects of four major concepts: The Cell, the Gene, Evolution and Biological Organisation. The concept of the Cell covers major topics such as cell division, chromosome structure, sexual reproduction, germ cells, meiosis and fertilisation. The concept of the Gene covers the major topic of genetics, introducing genes and alleles and gives a functional explanation of Mendel's Laws. The concept of Evolution introduces topics such as the Mesozoic ecosystem structure and the transition of life to land, including the dominance of insects, amphibians and reptiles. Consideration will be given to the physiological problems of life on land (reproductive freedom from water, breathing air [especially during the mid-Devonian drop in global oxygen levels], water conservation and the emergence of the mammal-like reptiles). The concept of Biological Organisation covers topics such as changes in posture, heart anatomy, respiratory capacity, temperature regulation and endothermy in terrestrial vertebrates. Fluid balance, homeostasis and the basic principles of endocrinology are introduced, together with the basic concepts of neurophysiology, muscles and movement.

Teaching: 2 lectures/week plus 3 'research lectures' (25 in total) with 5 workshops. You will receive teacher-directed study exercises.

BS12002 Life: the underlying structures (10 credits)

Module Manager: Dr Gerhard May G.H.W.May@dundee.ac.uk

Brief description of module: This module develops aspects of three major concepts: Life as Chemistry, The Cell and the Gene. The concept of Life as Chemistry introduces the major topics of chemical and biological thermodynamics covering enzymes (as biological catalysts, their structure and basic mechanisms), enzyme kinetics; aromatic and alkene chemistry; and the basic principles of metabolism in autotrophic and heterotrophic organisms. The concept of the Cell develops the topic of cell structure, covering compartmentalisation and trafficking; lipids and membranes, with specific emphasis on the biochemical and biophysical properties of membranes. The concept of the Gene covers the major topics of DNA replication, repair and recombination; RNA/DNA structure and synthesis and genetic manipulation.

Teaching: 2 lectures/week plus 3 'research lectures' (25 in total) with 5 workshops. You will receive teacher-directed study exercises.

BS12003 Laboratory and Research Skills 1C (10 credits)

Module Manager: Dr Will Whitfield w.g.f.whitfield@dundee.ac.uk

Brief description of module: This module will start with a mandatory recap of health and safety. There will be a field excursion (woodland environment) and a series of set practical classes that will cover techniques in mitosis and meiosis and the testing of Mendel's Laws; electricity, basic statics, motions and levers as applied to biology; optical techniques and chromatography of small molecules in biology and chemistry; basic spectroscopy; interpretation of UV, the basics of IR, MS and NMR; the motion of fluids and diffusion; enzyme assays and kinetics; estimation of a protein and protein expression in bacteria; gene expression and the basics of DNA manipulation.

Teaching: 1 practical session and workshop/week plus teacher-directed study exercises.

BS12004 Laboratory and Research Skills 1D (10 credits)

Module Manager: Dr Nicholas Brewer n.j.brewer@dundee.ac.uk

Brief description of module: This module will extend and develop the generic skills introduced in BS12003 with specific emphasis on data presentation, interpretation and analysis. The ability to work effectively as part of a group and the application of peer support and peer-assessment will form a significant part of this module. Students will extend their information literacy and scientific writing skills by researching and presenting an area of current research in poster format, giving due attention to scientific writing protocols. Students will be encouraged to reflect on and evaluate their own learning throughout the semester, identifying areas for development and consolidation and setting appropriate targets.

Teaching: 1 practical session and workshop/week plus teacher-directed study exercises.

BS12005 Science in Society (Optional module - 20 credits)

Module Manager: Dr Linda Morris l.a.z.morris@dundee.ac.uk

Brief description of module: This module outlines the historic development of the Life Sciences from alchemy with its origins in ancient Egypt to the present day. It covers key milestone events such as identifying the structure of DNA and cloning of Dolly the sheep and includes pivotal figures such as da Vinci, Darwin and Watson and Crick. The module explores the relationship between art and science through botany, anatomy and forensic art and reviews modern popular science writers such as Stephen Jay Gould, Richard Dawkins and Nick Lane. The module goes on to examine the significance of the philosophical framework within which science is developed and how this has impacted upon the direction of scientific thought. The moral and ethical implications of scientific research and development are analysed within traditional and contemporary contexts such as body snatchers, stem cell research, use of animals and humans in research and the nature/nurture debate. The role of the media in shaping society's opinion and interpretation of science is discussed in relation to the public understanding of science.

Teaching: 3 hour workshop/week.

3.2. Level 2 Life Sciences Core Curriculum

Students are automatically enrolled on modules essential for their degree but you may wish to check which modules these are by referring to the Degree Regulations available on the module BSG275 Life Sciences Undergraduate Students: Useful Information on *My Dundee*.

3.2.1 Life Sciences Level 2 Core Curriculum competencies

After study of all the core theory modules in Level 2 students will acquire and/or demonstrate the following competencies via assessed coursework and examinations from lectures and attendance at associated workshops:

- Students will develop knowledge and understanding of the patterns and themes of the diversification of modern life on Earth; should be able to summarise the key events and physical components that resulted in the contemporary world; and should be able to apply fundamental theories and knowledge of evolution, genetics, physiology and population biology.

- Students will have a knowledge and understanding of molecular biology through the context of 'the gene through to the cell' with prokaryotes and eukaryotes as example pathways and should understand post modification and the principles of regulation of metabolism.

- Describe the health benefits of physical activity and the health risks associated with physical inactivity, and how to monitor and evaluate levels of physical activity.

- Should be able to explain the physical and biochemical principles that underlie: electrical signals and neuromuscular communication; the biochemistry and physiology of skeletal muscle contraction; heart structure and function; cardiovascular responses to exercise; action of drugs on neuromuscular and heart function.

- Should develop a knowledge and understanding of the main metabolic pathways, how they interlink in the cell and the mechanisms of their molecular processes; and will be introduced to microbiology and immunology to gain preparatory knowledge for later years.

- To assess and use a range of defined and self-selected learning materials, and evaluate their own learning, identifying strengths and weakness within the context of modules and the wider degree programme.

- Be able to effectively participate in oral presentations, written work, planning and time management and problem solving; reflecting on, and self-assessment of their skills and employability; discuss ethical and controversial issues; researching and understanding scientific literature.

After study of all the core practical modules in Level 2 students will acquire and/or demonstrate the following competencies via assessed coursework from practical sessions and attendance at associated workshops:

- Be able to effectively participate in oral presentations, written work, planning and time management and problem solving; reflecting on, and self-assessment of their skills and employability; discuss ethical and controversial issues; researching and understanding scientific literature.

- Students will acquire and/or demonstrate via assessed coursework from practicals and attendance at associated workshops.

- Demonstrate in the lab how kinetic or thermodynamic control during a biochemical reaction can determine how a protein unfolds; demonstrate which conditions (pH, temperature, concentration) affect the pathway in which a protein will unfold.

- Perform basic aseptic laboratory techniques, explain the different steps involved in a bacterial mating experiment and analyse quantitative data on plasmid transfer by conjugation.

- Explain how antibodies are used to measure the amount and location of specific proteins and other antigens in biological samples; demonstrate how red blood cells can be used to investigate osmolarity and tonicity.

- Use basic descriptive statistical analyses and graphical representation to interpret experimental data; perform basic sequence analyses on DNA and protein sequence data retrieved from databases.

- Students will apply and extend the lab skills and techniques from level 1, extend their knowledge of health and safety procedures and be able to apply these in preparing risk assessments for their own and others' practical work.

- Have a knowledge and understanding of analytical and synthetic techniques in life sciences, and gain lab skills relating in particular to Biomedical sciences.

- Students will be able to critically assess both their own written work and that of others; Prepare and deliver oral and written presentation; plan experiments and practise time management; Careers and employability workshop.

3.2.2. How will this be assessed?

We use a variety of assessment types as listed below:

Module type	Assessment type	Learning outcomes assessed
Theory and practical	**On-line examination and tests** (using QMP and EOL)	Core knowledge, numerical skills, problem solving and critical thinking.
Practical and theory	**Presentations** (oral and poster)	Communication skills and presentation of data.
Practical	**Laboratory competence evaluation** (lab tests, experimental plans, risk assessments, lab books)	Practical skills, record keeping, organisational and planning skills.
Practical and theory	**Scientific writing** (reports, case studies, literature review,essays)	Written communication, presentation and analysis of data, critical thinking and problem solving.
Practical	**PDP** (skills checklist, reflective writing)	Self-reflection and self-assessment.

3.2.3. Feedback

You will receive feedback on all your coursework submissions which may be provided in a variety of forms e.g. hard copy feedback sheets, electronic feedback sheets, oral feedback (individual or group).

3.2.4. Life Science Modules at Level 2

LEVEL 2 MODULES	
SEMESTER 1	**SEMESTER 2**
BS21001 The Evolution of Modern Life *(10 credits)*	**BS22001 Biomedical Sciences** *(20 credits)*
BS21002 The Gene and the Cell *(10 credits)*	**BS22002 Biological Sciences** *(20 credits)*
BS21003 Laboratory and Research Skills 2A *(10 credits)*	**BS22003 Laboratory and Research Skills 2C** *(20 credits)* ▲
BS21004 Laboratory and Research Skills 2B *(10 credits)* ▲	
BS21005 Active Living *(20 credits)* *	
BS21006 Skills for Life Sciences *(20 credits)* *	
BS21007 Introductory Anatomy *(20 credits)* *	

** Optional module*
▲ Modules not available to non-Life Science students

3.2.5. Level 2 Module Descriptions

Semester 1 modules

BS21001: The Evolution of Modern Life (10 credits)

Module Manager: Dr David Booth d.z.booth@dundee.ac.uk

Brief description of module: This module will be covering the evolution of life in the Cenozoic era. The first half will address the geological, climatic and biological changes that have led to the modern disposition of the continents. This will cover major climatic themes that have shaped modern life including sea level change and glaciation; grasslands and seed eaters; evolutionary development of birds and mammals; trophic structures in nature; the evolution of endothermy; the biogeographic distributions of biota; and the adaptive radiation/evolution of the mammals.

The second half will include a comprehensive introduction to human origins and the impact this species has on nature. Topics including the evolution of the hominid lineage; predation/parasitism, disease and population dynamics; global climate change and the post GM world; contemporary biogeography and the Earth's biomes.

BS21002: The Gene and the Cell (10 credits)

Module Manager: Dr Gerhard May G.H.W.May@dundee.ac.uk

Brief description of module: The first half of the module will be a comprehensive development of the 'gene to protein' theme, focussing initially on prokaryotes. This will include gene structure, genome structure, the basics of transcription, and a look at mRNA, tRNA and rRNA and the ribosome. The same approach of 'gene to protein' will then be used to consider eukaryotes. Topics covered will include eukaryotic RNA polymerases, promoters, enhancers and mRNA splicing and processing and a brief introduction to miRNAs. This section will also highlight the differences between prokaryotic and eukaryotic ribosomes and translation. The second half of the module will introduce students to post-translational modification and the principles and regulation of cellular metabolism using the *lac* and *trp* operons (bacterial) and the insulin signalling pathway (eukaryotes) as key examples.

BS21003: Laboratory and Research Skills 2A (10 credits)

Module Manager: Dr Graham Christie g.r.christie@dundee.ac.uk

Brief description of module: Basic comparative anatomy through the production of a series of biological drawings illustrating an appreciation of scale and dimension, taken from prepared and dissected specimens. Comparison of kinetic and thermodynamic control in protein folding and application of the concept to a series of problems during a workshop session. Use of aseptic techniques through the use of bacteria in a series of practicals. The broad use of antibodies in Biological Sciences. Introduction of the concepts of osmolarity and tonicity. Interpretation of class results through use of basic descriptive statistical analyses and graphical representation (using Excel). Retrieval of sequence information (genetic, cDNA and amino acid) from internet databases and to use this information to perform basic sequence alignments.

BS21004: Laboratory and Research Skills 2B (10 credits)

Module Manager: Dr David Martin d.m.a.martin@dundee.ac.uk

Brief description of module: Students will carry out two laboratory projects which will allow them to gain experience in the use of laboratory equipment and techniques. The projects will cover basic organic synthesis of biological molecules and also a forensic investigation. These projects will allow them to improve their experimental planning, risk assessment, report writing and data analysis skills. Group work will involve oral and written presentation skills and provide team building experience.

BS21005 Active Living (Optional module - 20 credits)

Module Manager: Miss Helen Weavers H.M.Weavers@dundee.ac.uk

Brief description of module: To increase the awareness of the research evidence of the health benefits of physical activity and the risks of physical inactivity and provide students with the knowledge and skills to lead more active and healthy lives. Focusing on an introduction to Active Living its health benefits and epidemiology and Physical Activity looking at current guidelines and monitoring tools.

BS21006 Skills for Life Sciences (Optional module - 20 credits)

Module Manager: Dr Nicholas Brewer n.j.brewer@dundee.ac.uk

Brief description of the module: For life science students to broaden their knowledge base and to develop the skills that are required for employment within the life science sector. The module covers topics of health and safety, quality standards such as GLP and GMP and an overview of operational systems. Customer care, effective communication and project management will also be included. Students will work in teams on a specified project. The project will include research, planning, development and evaluation components.

BS21007 Introductory Anatomy (Optional module - 20 credits)

Module Manager: Dr Paul Felts p.felts@dundee.ac.uk

Brief description of the module: For SLSL&T students to broaden their knowledge base in anatomy and develop an understanding of the terminology used in this field.

Semester 2 modules

BS22001 – Biomedical Sciences (20 credits)

Module Manager: Dr Sandy Harper a.a.harper@dundee.ac.uk

Brief description of module: The aim of this module is to introduce students to specific topics within the Biomedical Sciences. Topics will include: Nerve and muscle: the neuromuscular junction (NMJ), muscle contraction and body movements; Cardiovascular system: heart function and integrated control of blood pressure; Pharmacology of NMJ and heart muscle; Effects of exercise on cardiovascular system**.** Skills - Students will develop and apply skills in problem solving, teamwork and IT and be encouraged to develop self-reliance and independent study skills.

BS22002 – Biological Sciences (20 credits)

Module Manager: Dr David Martin d.m.a.martin@dundee.ac.uk

Brief description of module: The aim of this module is to give students a sound foundation in biomolecular mechanisms and processes.
This module will study the main mammalian metabolic pathways and their control including the molecular processes involved. The module will also look at current topics in microbiology including disease and resistance and introduce immunology and virology.

BS22003 – Laboratory and Research Skills 2C (20 credits)

Module Manager: Dr David Booth d.z.booth@dundee.ac.uk

Brief description of module: The aim of this module is to broaden and strengthen both the practical and generic skills of students by building on experience gained at level 1 and semester 1 of level 2.
The module will expand on techniques and skills introduced in earlier practical modules. Practicals will be accompanied by data handling and manipulation workshops. Basic concepts in ethics in the Biosciences will be introduced in a workshop. Careers and employability exercises will help students to decide on their future career paths. Generic skills will be reinforced by updating students' PDP.

SECTION 4: Important regulatory information

4.1. The SCQF Credit Scheme and the student workload

The SCQF scheme envisages 1200 hours of work by you each year, based upon 40 hours a week for 30 weeks, successful completion of which will give you a total of 120 credits. The module credit rating indicates the total number of hours of effort that is required of you in that module e.g. a 20 credit module requires 200 hours of effort. Such a module could contain 30 hours of lectures, 25 hours of laboratory practicals and 5 hours of tutorials. The balance of the 200 hours (in this example 140 hours) must be spent by you on independent learning including background reading, getting your notes into shape, completing coursework, revision etc. If you obtain an overall pass grade for that module, you will be awarded 20 credits. If you fail, no credits will be awarded.

If you are a full-time student, you are expected to pass modules totalling 120 credits each year. Failure to do so may impact on the type of degree you achieve and the number of years it will take you to gain a degree.

4.2. Advisers of Studies – choosing your programme of study

You will meet your Adviser of Studies when you first matriculate. They will help you to select modules to ensure that you gain the modules necessary to proceed to the next year of study or to gain your intended degree. Your Adviser of Studies can also act as a Personal Tutor. This means that you are welcome to meet with your Adviser to discuss any matter giving rise for concern.

4.2.1. Changing modules and/or your programme of study

You must seek the permission of your Adviser of Studies if you wish to make any changes to your programme of study. Your Adviser is the only person authorised to agree changes. This could include substituting one module for another, simply dropping one or more modules (provided that you understand and accept the consequences of a reduced workload) or changing your degree in view.

You must make any changes to your module selection within 2 weeks of the start of Semester 1 or Semester 2.

4.3. Studying abroad and eligibility criteria

You may wish to spend a period of study overseas (a semester or year) as part of a University of Dundee degree and so should check out the information on one or other of the following at http://www.dundee.ac.uk/undergraduate/studying_abroad/

- **ERASMUS Life Long Learning Programme** - study and work placement in Europe 2nd or 3rd year for one or two semesters.
- **Transatlantic student exchange** - spend your 2nd year of study in either the USA or Canada.
- **Australasia student exchange** - spend one or two semesters of your 3rd year of study in Australia, New Zealand or Hong Kong.

4.3.1. Eligibility criteria

You must ensure that the programme of study you intend to take, at the host institution, is appropriate grounding for continuing with your chosen degree when you return to Dundee. Please note that to have your application authorised by the Dean of the School of Life Sciences Learning & Teaching, you MUST satisfy the following criteria:

- ✓ You must have passes in all modules and a minimum of a **B3** grade average for the year of study prior to that during which you wish to go on the exchange.
- ✓ You must also have a good record of attendance and submission of in-course work for all years of study to date.

4.4. Prizes and Life Sciences award ceremony

- ***Core Curriculum Prizes for Level 1 and 2*** – This prize goes to the top student(s) with the highest academic achievement and sustained attendance to all level 1 modules.
- ***Other Prizes*** – There are various other prizes and bursaries awarded by the School and College each year.
- ***Awards Ceremony*** – Students who have won module, School and College prizes are presented with certificates and prizes at a special Awards Ceremony which normally takes place in November of the new session.

4.5. Assessment and examinations

4.5.1. MC (medical certificate) and/or CA (certified absence) grades

Adjustments for MC/CA grades depend upon the element of assessment as follows:

- For assessed certified absence or non-submission of coursework, suitable adjustment will be made to the overall module grade to take these into account. Where this adjustment results in an upgrading, your overall module grade will be duly amended following the examiners meeting for the module.
- For certified absence from Degree examinations, your overall module grade will be amended to reflect 0 MC such that your coursework marks will go forward to the next diet of examinations, for which your result will be recorded as a first attempt and not a resit on your official transcript.

4.5.2. Grade conversion tables used in summative assessment

Dependent upon the complexity and stakes of the assessment task a standard or stringent grade conversion is applied:

Examinations
Standard % to Grade conversion

%	GRADE	%	GRADE
0	AB	50	C3
1	BF	51	C3
2	BF	52	C3
3	BF	53	C2
4	BF	54	C2
5	BF	55	C2
6	BF	56	C1
7	BF	57	C1
8	BF	58	C1
9	BF	59	C1
10	BF	60	B3
11	BF	61	B3
12	BF	62	B3
13	BF	63	B2
14	BF	64	B2
15	BF	65	B2
16	BF	66	B1
17	BF	67	B1
18	BF	68	B1
19	BF	69	B1
20	CF	70	A3
21	CF	71	A3
22	CF	72	A3
23	CF	73	A3
24	CF	74	A3
25	CF	75	A3
26	CF	76	A3
27	CF	77	A3
28	CF	78	A3
29	CF	79	A3
30	CF	80	A2
31	CF	81	A2
32	CF	82	A2
33	CF	83	A2
34	CF	84	A2
35	MF	85	A2
36	MF	86	A2
37	MF	87	A2
38	MF	88	A2
39	MF	89	A2
40	D3	90	A1
41	D3	91	A1
42	D3	92	A1
43	D2	93	A1
44	D2	94	A1
45	D2	95	A1
46	D1	96	A1
47	D1	97	A1
48	D1	98	A1
49	D1	99	A1
		100	A1

Coursework
Stringent % to Grade conversion

%	GRADE	%	GRADE
0	AB	55	C3
1	BF	56	C3
2	BF	57	C3
3	BF	58	C3
4	BF	59	C3
5	BF	60	C2
6	BF	61	C2
7	BF	62	C2
8	BF	63	C2
9	BF	64	C2
10	BF	65	C1
11	BF	66	C1
12	BF	67	C1
13	BF	68	C1
14	BF	69	C1
15	BF	70	B3
16	BF	71	B3
17	BF	72	B3
18	BF	73	B3
19	BF	74	B3
20	CF	75	B2
21	CF	76	B2
22	CF	77	B2
23	CF	78	B2
24	CF	79	B2
25	CF	80	B1
26	CF	81	B1
27	CF	82	B1
28	CF	83	B1
29	CF	84	B1
30	CF	85	A3
31	CF	86	A3
32	CF	87	A3
33	CF	88	A3
34	CF	89	A3
35	MF	90	A2
36	MF	91	A2
37	MF	92	A2
38	MF	93	A2
39	MF	94	A2
40	D3	95	A1
41	D3	96	A1
42	D3	97	A1
43	D3	98	A1
44	D3	99	A1
45	D2	100	A1
46	D2		
47	D2		
48	D2		
49	D2		
50	D1		
51	D1		
52	D1		
53	D1		
54	D1		

4.5.3 Use of English translation dictionaries in examinations

If you are a student whose first language is not English and you wish to use an English translation dictionary during exams, then you must apply, through the SLSL&T School Office, for a letter giving you permission to use a paper-based dictionary. You must take the letter to ALL examinations for checking, along with the dictionary, by the senior invigilator. **Electronic dictionaries are not allowed in exams.**

4.5.4. What can happen if you fail to pass module(s)?

Under normal circumstances you will have the opportunity to remediate a failed status within a module after a first sitting of the assessment, either by a second attempt at the examination in the resit diet, or submission of appropriate work or task if your module is continually assessed. Failure to pass a resit examination or reassessment task always has consequences for your Degree Programme. In the extreme event that you did not gain the prescribed minimum number of credits (80 credits per academic session for full time students), you would be subject to the Termination of Studies Regulations, in which case you will be informed of the procedures to be followed by letter, following publication of the results of the resit examinations.

- **Requirements for avoiding termination of studies**: if you are a full time student, you are required to acquire a minimum 80 credits for each academic year of attendance. If, by the end of the re-sit diet of exams, you have failed to acquire 80 credits for the year, you would be invited to submit an appeal, and your case would be considered by the College Termination of Studies Committee, which would decide, following inspection of your academic record and consideration of any mitigating circumstances you present, whether to allow you to return or whether to require you to discontinue your studies. If the College requires you to discontinue your studies, you have the right to appeal to the equivalent Senate Committee.
- **Failing even one module**, although not necessarily leading to Termination of Studies, has an impact on your future because you have to gain enough credits for a Degree. A failed module may have to be taken again the following year, possibly on an “extended DP”, which allows you to sit the examinations without attending classes. However, for students entering in 2006 and later, EDPs will be permitted to enable progression from Levels 1 to 2 ONLY. If you fail a level 2 or 3 module, you may be required to repeat the module in attendance.
- **If you fail more than 2 modules**, you may have to remain at the same level of study for another year and not be allowed to progress to the next level until you have gained the necessary credits.
- If you are carrying a failed module(s) at the start of the new academic session you will have an appointment made to meet with the School Secretary and Head of Year to discuss the terms of your progression.

To summarise, failure to pass modules inevitably leads either to additional pressure at the next Level of Study, delayed progression to the next Level of Study (with consequent lengthening of the time and expense to achieve your Degree) or even exclusion from your chosen programme of study. You should note also that fail grades appear on University Academic Transcripts which may be requested to support job applications.

4.6. Plagiarism and academic dishonesty

The University of Dundee's Code of Practice on Plagiarism and Academic Dishonesty may be viewed in full at http://www.dundee.ac.uk/academic/plagiarism.htm.

Plagiarism and other forms of academic dishonesty are particularly unpleasant forms of intellectual deceit. There are greater temptations for students to engage in these activities in assessed coursework, whether that be essays, computer programmes, laboratory or practical work or undergraduate and postgraduate dissertations and theses. Therefore prevention is particularly important and, where possible, plagiarism detection software is used. Also, teaching staff are experienced in identifying possible cases of academic dishonesty. The University regards academic dishonesty as an extremely serious offence of equal import to cheating in written examinations, and it is dealt with accordingly.

4.6.1. Examples of academic dishonesty include

- **Collusion** - the representation of a piece of unauthorised group work as the work of a single candidate.
- **Commissioning** - submitting an assignment done by another person as the student's own work.
- **Duplication** - the inclusion in coursework of material identical or substantially similar to material which has already been submitted for any other assessment within the University.
- **False declaration** - making a false declaration in order to receive special consideration by an Examination Board or to obtain extensions to deadlines or exemption from work.
- **Falsification of data** - presentation of data in laboratory reports, projects, etc based on work purported to have been carried out by the student, which have been invented, altered or copied by the student.
- **Plagiarism** - the unacknowledged use of another's work as if it were one's own. Examples are:
  - inclusion of more than a single phrase from another's work without the use of quotation marks and acknowledgement of source;
  - summarising another's work by changing a few words or altering the order of presentation without acknowledgement;
  - copying another's work;
  - use of another's ideas without acknowledgement or the presentation of work as if it were one's own which is substantially the ideas of another.

Further explanation and guidance on how to avoid infringing them can be found on the Advance@Dundee at: http://www.dundee.ac.uk/advancedundee/D/d018p.htm.

Particularly useful information on how (and how not) to paraphrase the work of others can be viewed at: http://www.wisc.edu/writing/Handbook/QPA_paraphrase.html.

4.7. Academic standards and student representation

The University has a responsibility to assure the standards of its academic awards and the quality of teaching. All students are given an opportunity to give us their individual views of the modules by completing electronic module evaluation questionnaires via *my Dundee.* Any constructive comments you make about modules are fed back and used in course monitoring and contribute to the future development of modules. This is a feature of the University Academic Standards procedure and is fully supported by DUSA. The results of the questionnaires will also be available to you via the *My Dundee* module.

- **School President and student representation –** For information on student representation within the University, check out the URL below: http://www.dusa.co.uk/content/431393/about_us/
- The elected School President for Life Sciences for session 2013/14 will be confirmed in September 2013. It is the job of the School President to work with class representatives and other students to ensure issues and comments are picked up and brought to the attention of the appropriate committees such as the School Board of Life Sciences Learning & Teaching or the DUSA Student Representative Council meetings.
- **Class representatives and staff student liaison** – At the beginning of Level 1 we will ask for eight volunteers to take the role of Student Reps; to act as a spokespeople for their year and represent their student colleagues at Staff/Student Liaison Meetings. This appointment may be extended to Level 2 upon the agreement between the individual reps and Head of Level 1 & 2.
- Help with University regulations, teaching and learning

SLSL&T office staff can help with

- Absence forms and medical certificates
- Applications for a discounted year, temporary withdrawal from studies or deferred year of study
- Applying to graduate with Cert HE, Dip HE, Ordinary and Honours degrees
- Permanent withdrawal from study and/or transfers to other Colleges and institutions
- Authorise official documents (Please note that a minimum of 48 HOURS notice is required in order to produce or authorise official documents so, please allow for this delay when you request such services)

Administration by SLSL&T office staff includes

- Processing submitted coursework and the return of marked paper-based coursework
- Assignment to practical groups
- Recording your attendance and academic grades for module assessments
- Handbooks and teaching handouts
- Timetables
- Helping make appointments with teaching staff

4.8. Campus services and facilities

http://www.dundee.ac.uk/main/currstud.htm

There are a variety of services and facilities which provide information, support and advice for students including how to use the services and facilities on offer as well as providing self-help and/or information leaflets. Some of the most useful web links are listed below.

- **Student Services:** *http://www.dundee.ac.uk/studentservices/*
- **Student Advisory Service:** *http://www.dundee.ac.uk/adviceguidance/ourservice.html*
- **Counselling Service:** *http://www.dundee.ac.uk/counselling/students.htm*
- **Health Service:** *http://www.dundee.ac.uk/healthservice*
- **The Registry:** *http://www.somis.dundee.ac.uk/registry/.* The Registry is responsible for matriculation, examinations and graduation and maintains the Student Record. In addition, the Registry produces student ID cards and provides certification of student status for Council Tax purposes, funding bodies, etc.
- **University Chaplaincy:** *http://www.dundee.ac.uk/chaplaincy/*. Fiona Douglas (University Chaplain) has appointed David Robertson (Honorary Chaplain to the University and to Dundee FC) to work alongside her within the College of Life Sciences. Fiona and David have indicated that they wish to be considered as an additional resource for the College. They will not be coming around knocking on doors, but they will be available for any student or member of staff (of any faith or none) who wishes to discuss any ethical or moral dilemmas, the relationship between science and religion or indeed any issue that you may wish to raise with them. Please feel free to contact Fiona f.c.douglas@dundee.ac.uk or David darobertson@blueyonder.co.uk.
- **Life Sciences Disability Officers**: *http://www.dundee.ac.uk/disabilityservices*

Disability Services is based in the Ewing Annexe on the main University campus and offers a range of confidential services dedicated to the support and empowerment of disabled students. All disabled students are advised to register with Disability Services as soon as possible in order for recommendations to be made for day to day teaching and examination support.

Disability Officers for Life Sciences

Mrs Brenda Murphy:
Phone: 01382 386438
Email: b.m.murphy@dundee.ac.uk

Mrs Monica Lacey:
Phone: 01382 384790
Email: m.lacey@dundee.ac.uk

- **Life Sciences Careers Officer Information** *http://www.dundee.ac.uk/careers*

The Careers Service is located at 166 Nethergate and you can just drop in to use the Information room which contains a wealth of literature regarding employment, further study, gap year, volunteering, funding and much more.

What is Offered? Help includes: Work experience: Vacation/Semester Employment; Career Choice, Finding a Job; Application Form; CV;s; Graduate Selection Tests; Further Study; Changing Course; Funding; Interview Preparation; Mock Interviews.

Careers Officers for Life Sciences

Lynsay Pickering:

Email: l.pickering@dundee.ac.uk

Opening Times
Monday – Friday
(0900 to 1700 hrs)

- **Library Services** *http://www.dundee.ac.uk/library/*

Provides a wide variety of services including how to find books, journals and electronic resources and life sciences students can request the help of the specific Librarians.

Library Liaison Staff for Life Sciences

Margaret Adamson:
Phone: 01382 384317
Email: m.adamson@dundee.ac.uk

Rona Carstairs
Phone: 01382 385552
Email: r.m.carstairs@dundee.ac.uk

Helen Olafsson
Phone: 01382 385182
Email: h.a.olafsson@dundee.ac.uk