

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 2014-2015

Semester 1

Freshers' Week:	8-12 September 2014
Teaching Weeks 1-5 & 7-12:	15 September - 17 October 2014 27 October – 5 December 2014
Catch-up Week:	20-24 October 2014
Semester 1 Exam Weeks 13 & 14:	8-19 December 2014 inclusive
4 weeks Christmas Vacation:	22 December 2014 – 16 January 2015

Semester 2

Teaching Weeks 15-25:	18 January – 3 April 2015
3 weeks Easter Vacation:	6-24 April 2015
Semester 2 Exam Weeks 26-30:	27 April - 22 May 2015 inclusive
Graduation ceremonies:	24-26 June 2015
Single resit diet for Semesters 1 & 2:	6-10 July 2015 inclusive

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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

Associate Dean: Dr Linda Morris

Phone: 01382 384682

Email: l.a.z.morris@dundee.ac.uk

Programme Lead Core Curriculum :

Dr Nick Brewer

Phone: 01382 384706

Email: n.j.brewer@dundee.ac.uk

1.2. Our responsibilities in the provision of teaching

The Module Manager is responsible for:

- o producing a module handbook to explain the teaching aims and learning objectives of the module;
- o explaining the procedures by which you will be taught and examined;
- o providing opportunities for you to judge your progress in the module e.g. in the form of diagnostic or formative assessments;
- o 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 Programme Leader 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

Core Curriculum Teaching Support

Phone: 01382 388360

Email: LSUGCC@dundee.ac.uk

1.4. About

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: Your Adviser of Studies can 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 School Secretary.
- Help from Programme Leaders: You can also seek help from your programme leader or the Associate Dean who is Dr Linda Morris
l.a.z.morris@dundee.ac.uk.

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 in June following the examination board meetings. The resit results will be available via eVision 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.

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 LSUGCC@dundee.ac.uk giving you name , matriculation number and the module code

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 SL&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.

Penalties for late submission of course work

Late submission, for no good reason, may incur penalties of one grade point per day for up to a maximum of 5 working days (i.e. 1 working week) following the published deadline. For example, if your assignment was submitted 5 days late and was rated as an A2 grade, then this would be downgraded to C1 for late submission. All submissions which are more than a working week late will be marked for feedback purposes but you will be awarded a BF grade towards the overall module mark for the associated coursework. Non-submission will be graded as AB. Requests for extensions to deadlines must be made to the module manager.

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 Programme Lead, 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 Mitigating Circumstances 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 Mitigating Circumstances Committee. This 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 Committee are revealed to the Board of Examiners.

How to report mitigating circumstances to the committee

- Fill in a Mitigating Circumstances 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 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 Mitigating Circumstances Committee.

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

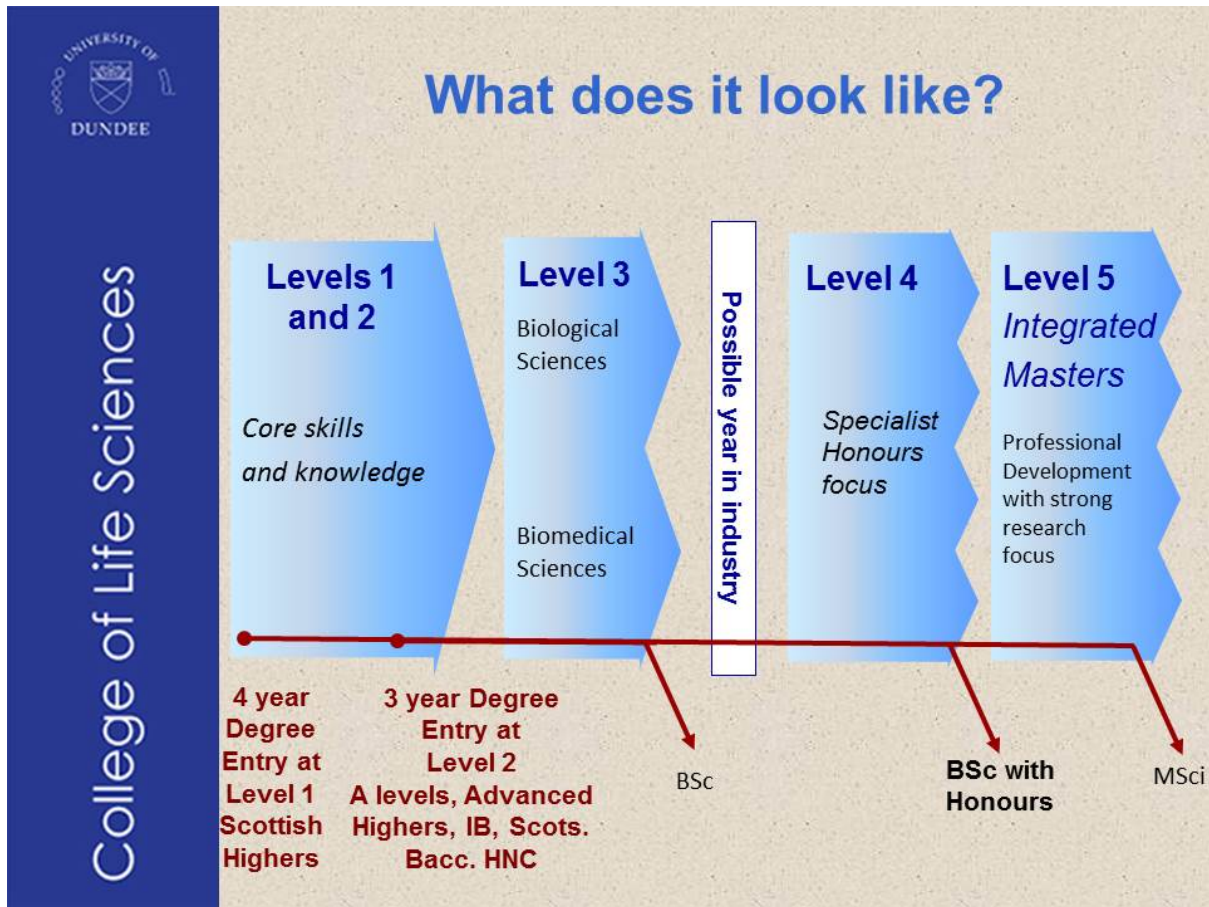
Prolonged absence - In the event of prolonged absence from classes for a period of more than 3 weeks, for any cause including legitimate reasons, you may require the consent of the Academic Senate for you to be allowed to enter the Degree examinations.

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.

Degrees in Life Sciences and Modular Structure

College of Life Sciences Degree Programme Outline



3.1. Level 1 Life Sciences Core Curriculum

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 Sciences 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 except forensic anthropology/anatomical sciences 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 David Booth d.z.booth@dundee.ac.uk

Brief description of module: This is a module that introduces aspects of two major concepts: The Basics of heredity and Evolution. For Basics of heredity, an introduction to genetics, inheritance of traits, and the fidelity of genetic information over generations will be given. 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. Finally the concept of molecular evolution explores how genes and genomes evolve to produce the diversity of life systems observed today.

Teaching: 2 lectures/week (22 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 Art Crossman a.t.crossman@dundee.ac.uk

Brief Description of module: This is a module that introduces aspects of major concepts: For Life as Chemistry, major topics covered will include the origin & 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 introduces the topics of multicellularity and the benefits of being multicellular or clonal. 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 (22 in total) with 5 workshops. You will receive teacher-directed study exercises.

BS11003 Laboratory and Research Skills 1A (10 credits)

Module Manager: Dr Art Crossman a.t.crossman@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 and gram staining. Other set practical classes include: 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 Graham Christie g.r.christie@dundee.ac.uk

Brief description of module: This module will extend and develop the generic skills introduced in BS11003 with specific emphasis on basic laboratory practice, statistics, experimental techniques (including TLC and IR) and experimental design. The ability to work effectively as part of a group on two separate 3-week projects ('Brine shrimps as model species' and 'Terpenes') 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 observations, record keeping and writing will be introduced as a means of effectively communicating the outcome of each research project. Finally, students will also be required to reflect on and evaluate their own learning throughout the semester, through the Personal Development Portfolio, 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; biophysics; organic; 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 or 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 (22 in total) with 5 workshops. You will receive teacher-directed study exercises.

BS12002 Life: the underlying structures (10 credits)

Module Manager: Dr Sheriar Hormuzdi s.g.hormuzdi@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, RNA/DNA structure, transcription, translation, and genetic manipulation.

Teaching: 2 lectures/week (22 in total) with 5 workshops. You will receive teacher-directed study exercises.

BS12003 Laboratory and Research Skills 1C (10 credits)

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

Brief description of module: This module will extend and develop laboratory and research skills introduced in semester 1 of Level 1. In this module there are a series of set practical classes that will cover optical techniques, protein expression and purification, polymerase chain reaction (PCR) and enzyme kinetics. These lab-based practical classes are supplemented and supported by a programme of associated workshops, which also include sessions covering preparation of a published figure, the use of online literature databases and the reference management tool EndNote. At the end of the module there is a summatively assessed lab skills test, and finally a field trip to the Botanic Gardens, Dundee..

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 David Booth d.z.booth@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

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 Sciences 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) ▲	

* *Optional module*

▲ *Modules not available to non-Life Science students except forensic anthropology and anatomical 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: The module will be covering the evolution of life in the Cenozoic era. The first half of which will be a general to specific introduction to statistics for the biosciences, bringing students up to speed on the structure of datasets and how one infers differences. This will also include an introduction to the design of experiments, concepts of randomisation and blocking; regression, anova and principle tests of signal versus noise. The second half of the module 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; evolutionary development of birds and mammals; the evolution of endothermy; the biogeographic distributions of biota; and the adaptive radiation/evolution of the mammals. This will also 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, and disease/population dynamics. Students will be expected to complete a substantial piece of coursework related to a component of the indicative content.

BS21002: The Gene and the Cell (10 credits)

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

Brief description of module: This module builds the foundations for our understanding of genetics and molecular biology. DNA is at the core of explaining who we are and how we are different and this module explores the role of DNA in transmitting information from generation to generation, how that information is copied and used, and how that use is regulated. With that foundation the module explores how we can manipulate the genetic code of an organism to take on new functions and respond to stimuli, and what happens when the regulation of the cell goes wrong.

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

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

Brief description of module: This module will extend and develop laboratory and research skills introduced in Level 1 (direct Level 2 entrant students will have an opportunity to learn skills and techniques at the start of semester 1). There is specific emphasis on the following subject areas: comparison of kinetic and thermodynamic control in protein folding, use of aseptic techniques through the use of bacteria, the broad use and application of antibodies in Life Sciences, introduction of the concepts of osmolarity and tonicity and retrieval and analysis of sequence information (genetic, cDNA and amino acid) from online databases. A significant component of the taught element of this module is devoted to the study and application of statistics, data analysis and representation, using the R-Studio software tool. A summatively assessed lab skills test is set at the end of the module.

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 chemistry 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.

Semester 2 modules

BS22001 – Biomedical Sciences (20 credits)

Module Manager: Prof John Peters j.a.peters@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 your optional modules. 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 optional modules. Your Adviser is the only person authorised to agree changes.

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 Associate 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				Coursework Stringent % to Grade conversion			
%	GRADE	%	GRADE	%	GRADE	%	GRADE
0	AB	50	C3	0	AB	55	C3
1	BF	51	C3	1	BF	56	C3
2	BF	52	C3	2	BF	57	C3
3	BF	53	C2	3	BF	58	C3
4	BF	54	C2	4	BF	59	C3
5	BF	55	C2	5	BF	60	C2
6	BF	56	C1	6	BF	61	C2
7	BF	57	C1	7	BF	62	C2
8	BF	58	C1	8	BF	63	C2
9	BF	59	C1	9	BF	64	C2
10	BF	60	B3	10	BF	65	C1
11	BF	61	B3	11	BF	66	C1
12	BF	62	B3	12	BF	67	C1
13	BF	63	B2	13	BF	68	C1
14	BF	64	B2	14	BF	69	C1
15	BF	65	B2	15	BF	70	B3
16	BF	66	B1	16	BF	71	B3
17	BF	67	B1	17	BF	72	B3
18	BF	68	B1	18	BF	73	B3
19	BF	69	B1	19	BF	74	B3
20	CF	70	A3	20	CF	75	B2
21	CF	71	A3	21	CF	76	B2
22	CF	72	A3	22	CF	77	B2
23	CF	73	A3	23	CF	78	B2
24	CF	74	A3	24	CF	79	B2
25	CF	75	A3	25	CF	80	B1
26	CF	76	A3	26	CF	81	B1
27	CF	77	A3	27	CF	82	B1
28	CF	78	A3	28	CF	83	B1
29	CF	79	A3	29	CF	84	B1
30	CF	80	A2	30	CF	85	A3
31	CF	81	A2	31	CF	86	A3
32	CF	82	A2	32	CF	87	A3
33	CF	83	A2	33	CF	88	A3
34	CF	84	A2	34	CF	89	A3
35	MF	85	A2	35	MF	90	A2
36	MF	86	A2	36	MF	91	A2
37	MF	87	A2	37	MF	92	A2
38	MF	88	A2	38	MF	93	A2
39	MF	89	A2	39	MF	94	A2
40	D3	90	A1	40	D3	95	A1
41	D3	91	A1	41	D3	96	A1
42	D3	92	A1	42	D3	97	A1
43	D2	93	A1	43	D3	98	A1
44	D2	94	A1	44	D3	99	A1
45	D2	95	A1	45	D2	100	A1
46	D1	96	A1	46	D2		
47	D1	97	A1	47	D2		
48	D1	98	A1	48	D2		
49	D1	99	A1	49	D2		
		100	A1	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 SL&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 2014/15 is xxxxxxxx. 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 spokesperson for their year and represent their student colleagues at Staff/Student Liaison Meetings.
- 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
- Recording your attendance and academic grades for module assessments
- 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/studentsservices/>
- **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.
- **Academic Skills Support:** Any student who feels they would benefit from extra support with studying, numeracy or writing skills can take advantage of extra help from the University Academic Skills Support tutors. There is a base in the main library, adjacent to the InfoZone. Resources and information will be made available here and students will also have the opportunity to meet with ASC tutors. Further information on CASTLE activities is available on the CASTLE website www.dundee.ac.uk/castle
- **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

BS11001 Timetable

Week	Day	Date	Activity	Start	Finish	Location	Staff
1	Tue	16/09/2014	Darwin's theory of evolution	12:00	13:00	Dalhousie 3F01 LT3	Booth, David
1	Tue	16/09/2014	Genetics: Introduction to genetics - the nature of heredity	14:00	15:00	Med Scis Inst LT	Land, Stephen
2	Tue	23/09/2014	Genetics: Darwinian inheritance of traits	12:00	13:00	Dalhousie 3F01 LT3	Land, Stephen
2	Tue	23/09/2014	Genetics: Fidelity of genetic Information over generations	14:00	15:00	Med Scis Inst LT	Land, Stephen
2	Tue	23/09/2014	Workshop 1 G1	09:00	10:30	Carnelley B24 (Life Sci)	Brewer, Nicholas
2	Tue	23/09/2014	Workshop 1 G2	10:30	12:00	Carnelley B24 (Life Sci)	Brewer, Nicholas
2	Tue	23/09/2014	Workshop 1 G3	15:00	16:30	Carnelley B24 (Life Sci)	Brewer, Nicholas
2	Tue	23/09/2014	Workshop 1 G4	16:30	18:00	Carnelley B24 (Life Sci)	Brewer, Nicholas
3	Tue	30/09/2014	Variation & selection	12:00	13:00	Dalhousie 3F01 LT3	Booth, David
3	Tue	30/09/2014	Sex & mechanisms of sex determination	14:00	15:00	Med Scis Inst LT	Booth, David
4	Tue	07/10/2014	L7: Sexual selection	12:00	13:00	Dalhousie 3F01 LT3	Booth, David
4	Tue	07/10/2014	L8: Evidence for evolution I	14:00	15:00	Med Scis Inst LT	Booth, David
4	Tue	07/10/2014	Workshop 2: Lehtonen et al (2012) G1	09:00	10:30	Carnelley B24 (Life Sci)	Booth, David
4	Tue	07/10/2014	Workshop 2: Lehtonen et al (2012) G2	10:30	12:00	Carnelley B24 (Life Sci)	Booth, David
4	Tue	07/10/2014	Workshop 2: Lehtonen et al (2012) G3	15:00	16:30	Carnelley B24 (Life Sci)	Booth, David
4	Tue	07/10/2014	Workshop 2: Lehtonen et al (2012) G4	16:30	18:00	Carnelley B24 (Life Sci)	Booth, David
5	Tue	14/10/2014	L9: Evidence for evolution II	12:00	13:00	Dalhousie 3F01 LT3	Booth, David
5	Tue	14/10/2014	L10: Speciation	14:00	15:00	Med Scis Inst LT	Booth, David
7	Tue	28/10/2014	L11: Modes of speciation	12:00	13:00	Dalhousie 3F01 LT3	Booth, David
7	Tue	28/10/2014	L12: Basis of population genetics	14:00	15:00	Med Scis Inst LT	Booth, David
7	Tue	28/10/2014	Workshop 3: Matute (2010) G1	09:00	10:30	Carnelley B24 (Life Sci)	Booth, David
7	Tue	28/10/2014	Workshop 3: Matute (2010) G2	10:30	12:00	Carnelley B24 (Life Sci)	Booth, David
7	Tue	28/10/2014	Workshop 3: Matute (2010) G3	15:00	16:30	Carnelley B24 (Life Sci)	Booth, David
7	Tue	28/10/2014	Workshop 3: Matute (2010) G4	16:30	18:00	Carnelley B24 (Life Sci)	Booth, David
8	Tue	04/11/2014	Population genetics II	12:00	13:00	Dalhousie 3F01 LT3	Booth, David
8	Tue	04/11/2014	Ecological Genetics I	14:00	15:00	Med Scis Inst LT	Booth, David
8	Tue	04/11/2014	Ecological Genetics II	15:00	16:00	Med Scis Inst LT	Booth, David
9	Tue	11/11/2014	Classification & Macro-evolutionary relationships I	12:00	13:00	Dalhousie 3F01 LT3	Booth, David

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9	Tue	11/11/2014	Classification & Macro-evolutionary relationships II	14:00	15:00	Med Scis Inst LT	Booth, David
9	Tue	11/11/2014	Workshop 4: Population Genetics G1	09:00	10:30	Carnelley B24 (Life Sci)	Booth, David
9	Tue	11/11/2014	Workshop 4: Population Genetics G2	10:30	12:00	Carnelley B24 (Life Sci)	Booth, David
9	Tue	11/11/2014	Workshop 4: Population Genetics G3	15:00	16:30	Carnelley B24 (Life Sci)	Booth, David
9	Tue	11/11/2014	Workshop 4: Population Genetics G4	16:30	18:00	Carnelley B24 (Life Sci)	Booth, David
10	Tue	18/11/2014	Classification & Macro-evolutionary relationships III	12:00	13:00	Dalhousie 3F01 LT3	Booth, David
11	Tue	25/11/2014	Molecular evolution I	12:00	13:00	Dalhousie 3F01 LT3	Booth, David
11	Tue	25/11/2014	Molecular evolution II	14:00	15:00	Med Scis Inst LT	Booth, David
11	Tue	25/11/2014	Workshop 5: Recap G1	09:00	10:30	Carnelley B24 (Life Sci)	Booth, David
11	Tue	25/11/2014	Workshop 5: Recap G2	10:30	12:00	Carnelley B24 (Life Sci)	Booth, David
11	Tue	25/11/2014	Workshop 5: Recap G3	15:00	16:30	Carnelley B24 (Life Sci)	Booth, David
11	Tue	25/11/2014	Workshop 5: Recap G4	16:30	18:00	Carnelley B24 (Life Sci)	Booth, David

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BS11002 Module Timetable

Week	Day	Date	Lecture	Times	Staff	Location	Workshop topic	Group	Times	Staff	Location		
1	Thursday	18.9.14	Origin & age of the earth	2-3pm	LM	MSI LT	No Workshop						
	Thursday	18.9.14	Origins of oceans & continents	3-4pm	LM	MSI LT							
2	Thursday	25.9.14	Inorganic origins of life	2-3pm	NB	MSI LT							
	Thursday	25.9.14	Evolution of cells as the basis of life	3-4pm	SL	MSI LT							
3	Thursday	2.10.14						Workshop I: Miller-Urey Experiment	Group 1	09:00-10:30am	GC	Carnelley B24 (Life Sci)	
	Thursday	2.10.14							Group 2	10:30-12:00am	GC	Carnelley B24 (Life Sci)	
	Thursday	2.10.14	Prokaryotic organisms	2-3pm	SL	MSI LT				Group 3	12:00-1:30pm	SL	Carnelley B24 (Life Sci)
	Thursday	2.10.14	The origins of the nucleus	3-4pm	SL	MSI LT				Group 4	4:00-5:30pm	GC	Carnelley B24 (Life Sci)
4	Thursday	9.10.14	A Brief History of Life I: Ediacaran	2-3pm	DB	MSI LT		No Workshop					
	Thursday	9.10.14	A Brief History of Life II: Cambrian	3-4pm	DB	MSI LT							
5	Thursday	16.10.14							Workshop II: Carl Woese (Origin of Cells)	Group 1	09:00-10:30am	GC	Carnelley B24 (Life Sci)
	Thursday	16.10.14					Group 2			10:30-12:00am	GC	Carnelley B24 (Life Sci)	
	Thursday	16.10.14	Evolution of photosynthesis	2-3pm	DB	MSI LT				Group 3	12:00-1:30pm	SL	Carnelley B24 (Life Sci)
	Thursday	16.10.14	Colonial life to Multicellularity	3-4pm	DB	MSI LT				Group 4	4:00-5:30pm	GC	Carnelley B24 (Life Sci)
6	Reading Week												
7	Thursday	30.10.14					Workshop III: Bonner (Multicellularity)		Group 1	09:00-10:30am	GC	Carnelley B24 (Life Sci)	
	Thursday	30.10.14							Group 2	10:30-12:00am	GC	Carnelley B24 (Life Sci)	
	Thursday	30.10.14	Reproduction I	2-3pm	GC	MSI LT				Group 3	12:00-1:30pm	SL	Carnelley B24 (Life Sci)
	Thursday	30.10.14	Reproduction II	3-4pm	GC	MSI LT				Group 4	4:00-5:30pm	GC	Carnelley B24 (Life Sci)
8	Thursday	6.11.14	Nerves & Senses I	2-3pm	GC	MSI LT	No Workshop						
	Thursday	6.11.14	Nerves & Senses II	3-4pm	GC	MSI LT							
9	Thursday	13.11.14						Workshop IV: Molecular Evidence for Deep Precambrian Divergences	Group 1	09:00-10:30am	GC	Carnelley B24 (Life Sci)	
	Thursday	13.11.14							Group 2	10:30-12:00am	GC	Carnelley B24 (Life Sci)	
	Thursday	13.11.14	Support, Locomotion & Movement I	2-3pm	GC	MSI LT				Group 3	12:00-1:30pm	SL	Carnelley B24 (Life Sci)
	Thursday	13.11.14	Support, Locomotion & Movement II	3-4pm	GC	MSI LT				Group 4	4:00-5:30pm	GC	Carnelley B24 (Life Sci)
10	Thursday	20.11.14	Feeding and Excretion	2-3pm	GC	MSI LT		No Workshop					
	Thursday	20.11.14	The evolution of organ systems I	3-4pm	DB	MSI LT							
11	Thursday	27.11.14							Workshop V: Recap Session	Group 1	09:00-10:30am	GC	Carnelley B24 (Life Sci)
	Thursday	27.11.14								Group 2	10:30-12:00am	GC	Carnelley B24 (Life Sci)
	Thursday	27.11.14	The evolution of organ systems II	2-3pm	DB	MSI LT					Group 3	12:00-1:30pm	SL
	Thursday	27.11.14	Evolution: Post cambrian and beyond	3-4pm	DB	MSI LT				Group 4	4:00-5:30pm	SL	Carnelley B24 (Life Sci)

Key: Dr Linda Morris [LM]; Dr Nicholas Brewer [NB]; Dr Stephen Land [SL]; Dr David Booth [DB]; Dr Graham Christie [GC]

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BS11003 Module Timetable

Week	Day	Date	Activity	Start	End	Staff	Room
1	Mon	15-Sep-14	Workshop 1: Preparing for the Field Trip, Group 1	09:00	10:30	DM	Carnelley B24 (Life Sci)
1	Mon	15-Sep-14	Practical 1: Introduction to the Lab, Groups 3 & 4	09:00	12:00	NB	Old Med Schl 3.03
1	Mon	15-Sep-14	Workshop 1: Preparing for the Field Trip, Group 2	10:30	12:00	DM	Carnelley B24 (Life Sci)
1	Mon	15-Sep-14	Workshop 1: Preparing for the Field Trip, Group 3	14:00	15:30	AC	Carnelley B24 (Life Sci)
1	Mon	15-Sep-14	Practical 1: Introduction to the Lab, Groups 1 & 2	14:00	17:00	NB, JP	Old Med Schl 3.03
1	Mon	15-Sep-14	Workshop 1: Preparing for the Field Trip, Group 4	15:30	17:00	AC	Carnelley B24 (Life Sci)
2	Mon	22-Sep-14	Field Trip to Tentsmuir	09:30	14:30	DM/JP	
3	Mon	29-Sep-14	Field Trip to Easthaven	09:30	14:30	DM/JP	
4	Mon	06-Oct-14	Workshop 2: Field Trip Follow-ups; Group 1	09:00	10:30	GC	Carnelley B24 (Life Sci)
4	Mon	06-Oct-14	Lab Session: Field Trip Follow-ups; Group 3	09:00	10:30	AC	Old Med Schl 3.03
4	Mon	06-Oct-14	Workshop 2: Field Trip Follow-ups; Group 2	10:30	12:00	GC	Carnelley B24 (Life Sci)
4	Mon	06-Oct-14	Lab Session: Field Trip Follow-ups; Group 4	10:30	12:00	AC	Old Med Schl 3.03
4	Mon	06-Oct-14	Lab Session: Field Trip Follow-ups; Groups 1	14:00	15:30	DB, JP	Old Med Schl 3.03
4	Mon	06-Oct-14	Workshop 2: Field Trip Follow-ups; Group 3	14:00	15:30	DM	Carnelley B24 (Life Sci)
4	Mon	06-Oct-14	Lab Session: Field Trip Follow-ups; Group 2	15:30	17:00	DB, JP	Old Med Schl 2.02B
4	Mon	06-Oct-14	Workshop 2: Field Trip Follow-ups; Group 4	15:30	17:00	DM	Carnelley B24 (Life Sci)
5	Mon	13-Oct-14	Workshop 3: Field Trip Follow-ups; IT Session Group 3	09:00	10:30	LM	Tower Basement ITS C
5	Mon	13-Oct-14	Workshop 3: Field Trip Follow-ups; IT Session Group 4	10:30	12:00	LM	Tower Basement ITS C
5	Mon	13-Oct-14	Workshop 3: Field Trip Follow-ups; IT Session Group 1	14:00	15:30	AB/DM	Tower Basement ITS C
5	Mon	13-Oct-14	Workshop 3: Field Trip Follow-ups; IT Session Group 2	15:30	17:00	AB/AC	Tower Basement ITS C
6			READING WEEK				
7	Mon	27-Oct-14	Workshop 4 Microbiology: Group 2	09:00	10:30	SL	Carnelley B24 (Life Sci)
7	Mon	27-Oct-14	Lab Session Microbiology: Groups 3 & 4	09:00	12:00	DB	Old Med Schl 3.03
7	Mon	27-Oct-14	Workshop 4 Microbiology: Group 1	10:30	12:00	SL	Carnelley B24 (Life Sci)
7	Mon	27-Oct-14	Workshop 4 Microbiology: Group 3	14:00	15:30	SL	Carnelley B24 (Life Sci)
7	Mon	27-Oct-14	Lab Session Microbiology: Groups 1 & 2	14:00	17:00	DB	Old Med Schl 3.03
7	Mon	27-Oct-14	Workshop 4 Microbiology: Group 4	15:30	17:00	GC	Carnelley B24 (Life Sci)

Key: Dr Alan Black [AB]; Dr David Booth [DB]; Dr Nicholas Brewer [NB]; Dr Graham Christie [GC]; Dr David Martin [DM];
Dr John Pokora [JP]; Dr Stephen Land [SL]; Dr Linda Morris [LM]; Dr Janice Coates [JC]; Dr Art Crossman [AC]

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8	Mon	03-Nov-14	Workshop 5 Microbiology: Group 2	09:00	10:30	SL	Carnelley B24 (Life Sci)
8	Mon	03-Nov-14	Lab Session Microbiology: Groups 3 & 4	09:00	12:00	DB/AB	Old Med Schl 3.03
8	Mon	03-Nov-14	Workshop 5 Microbiology: Group 1	10:30	12:00	SL	Carnelley B24 (Life Sci)
8	Mon	03-Nov-14	Workshop 5 Microbiology: Group 3	14:00	15:30	SL	Carnelley B24 (Life Sci)
8	Mon	03-Nov-14	Lab Session Microbiology: Groups 1 & 2	14:00	17:00	DB/AB	Old Med Schl 3.03
8	Mon	03-Nov-14	Workshop 5 Microbiology: Group 4	15:30	17:00	GC	Carnelley B24 (Life Sci)
9	Mon	10-Nov-14	Workshop 6 DNA: Group 1	09:00	10:30	DB	Carnelley B24 (Life Sci)
9	Mon	10-Nov-14	Lab Session DNA: Groups 3 & 4	09:00	12:00	LM	Old Med Schl 3.03
9	Mon	10-Nov-14	Workshop 6 DNA: Group 2	10:30	12:00	DB	Carnelley B24 (Life Sci)
9	Mon	10-Nov-14	Workshop 6 DNA: Group 3	14:00	15:30	DB	Carnelley B24 (Life Sci)
9	Mon	10-Nov-14	Lab Session DNA: Groups 1 & 2	14:00	17:00	GC/AB	Old Med Schl 3.03
9	Mon	10-Nov-14	Workshop 6 DNA: Group 4	15:30	17:00	AC	Carnelley B24 (Life Sci)
10	Mon	17-Nov-14	Workshop 7 DNA: Group 1	09:00	10:30	DB	Old Med Schl 2.02B
10	Mon	17-Nov-14	Lab Session DNA: Groups 3 & 4	09:00	12:00	LM	Old Med Schl 3.03
10	Mon	17-Nov-14	Workshop 7 DNA: Group 2	10:30	12:00	DB	Carnelley B24 (Life Sci)
10	Mon	17-Nov-14	Workshop 7 DNA: Group 3	14:00	15:30	DB	Carnelley B24 (Life Sci)
10	Mon	17-Nov-14	Lab Session DNA: Groups 1 & 2	14:00	17:00	GC/AB	Old Med Schl 3.03
10	Mon	17-Nov-14	Workshop 7 DNA: Group 4	15:30	17:00	AC	Carnelley B24 (Life Sci)
11	Mon	24-Nov-14	Practise Lab Test: Groups 1 & 2	09:00	11:00	AC	Old Med Schl 3.03
11	Mon	24-Nov-14	Practise Lab Test: Groups 3 & 4	14:00	16:00	AC	Old Med Schl 3.03
11	Fri	28-Nov-14	Lab Test: Group 1	09:00	10:30	GC	Old Med Schl 3.03
11	Fri	28-Nov-14	Lab Test: Group 2	10:30	12:00	GC	Old Med Schl 3.03
11	Fri	28-Nov-14	Lab Test: Group 3	14:00	15:30	GC	Old Med Schl 3.03
11	Fri	28-Nov-14	Lab Test: Group 4	15:30	17:00	GC	Old Med Schl 3.03

Key: Dr Alan Black [AB]; Dr David Booth [DB]; Dr Nicholas Brewer [NB]; Dr Graham Christie [GC]; Dr David Martin [DM];
Dr John Pokora [JP]; Dr Stephen Land [SL]; Dr Linda Morris [LM]; Dr Janice Coates [JC]; Dr Art Crossman [AC]

BS11004 Module Timetable

Week	Day	Date	Activity	Title	Group(s)	Start	Finish	Location	Staff
1	Thursday	18-Sep-14	Workshop	Intro to PDP	1 & 2	09:00	10:30	ITS C	GRC
1	Thursday	18-Sep-14	Workshop	Intro to PDP	3 & 4	10:30	12:00	ITS C	GRC
1	Friday	19-Sep-14	Workshop	Introduction to module and project work	1	09:00	10:30	C.B.24B	NJB
1	Friday	19-Sep-14	Practical	Practical 1: Introduction to the microscope	3 & 4	09:00	12:00	OMS 3.03	JBC,DMAM
1	Friday	19-Sep-14	Workshop	Introduction to module and project work	2	10:30	12:00	C.B.24B	NJB
1	Friday	19-Sep-14	Workshop	Introduction to module and project work	3	14:00	15:30	C.B.24B	NJB
1	Friday	19-Sep-14	Practical	Practical 1: Introduction to the microscope	1 & 2	14:00	17:00	OMS 3.03	JBC,DMAM
1	Friday	19-Sep-14	Workshop	Introduction to module and project work	4	15:30	17:00	C.B.24B	NJB
2	Friday	26-Sep-14	Workshop	Experimental design: Observations/record keeping	1	09:00	10:30	C.B.24B	LM
2	Friday	26-Sep-14	Practical	Project 1: Brine shrimps as a model species	3 & 4	09:00	12:00	OMS 3.03	JBC,DB
2	Friday	26-Sep-14	Workshop	Experimental design: Observations/record keeping	2	10:30	12:00	C.B.24B	LM
2	Friday	26-Sep-14	Workshop	Experimental design: Observations/record keeping	3	14:00	15:30	C.B.24B	LM
2	Friday	26-Sep-14	Practical	Project 1: Brine shrimps as a model species	1 & 2	14:00	17:00	OMS 3.03	JBC,DB
2	Friday	26-Sep-14	Workshop	Experimental design: Observations/record keeping	4	15:30	17:00	C.B.24B	LM
3	Friday	03-Oct-14	Workshop	Single factor experiments + scientific method	1	09:00	10:30	C.B.24B	DMAM
3	Friday	03-Oct-14	Practical	Project 1: Brine shrimps as a model species	3 & 4	09:00	12:00	OMS 3.03	JBC,DB
3	Friday	03-Oct-14	Workshop	Single factor experiments + scientific method	2	10:30	12:00	C.B.24B	DMAM
3	Friday	03-Oct-14	Practical	Project 1: Brine shrimps as a model species	1 & 2	14:00	17:00	OMS 3.03	JBC,DB
3	Friday	03-Oct-14	Workshop	Single factor experiments + scientific method	3	15:00	16:30	C.B.24B	DMAM
3	Friday	03-Oct-14	Workshop	Single factor experiments + scientific method	4	16:30	18:00	C.B.24B	DMAM
4	Friday	10-Oct-14	Workshop	Result Interpretation and report writing	1	09:00	10:30	C.B.24B	DMAM
4	Friday	10-Oct-14	Practical	Project 1: Brine shrimps as a model species	3 & 4	09:00	12:00	OMS 3.03	Snr D
4	Friday	10-Oct-14	Workshop	Result Interpretation and report writing	2	10:30	12:00	C.B.24B	DMAM
4	Friday	10-Oct-14	Workshop	Result Interpretation and report writing	3	14:00	15:30	C.B.24B	ATC

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4	Friday	10-Oct-14	Practical	Project 1: Brine shrimps as a model species	1 & 2	14:00	17:00	OMS 3.03	JBC,DMAM
4	Friday	10-Oct-14	Workshop	Result Interpretation and report writing	4	15:30	17:00	C.B.24B	ATC
5	Friday	17-Oct-14	Workshop	Statistics	1	09:00	10:30	ITS C	DMAM
5	Friday	17-Oct-14	Workshop	Statistics	2	10:30	12:00	ITS C	DMAM
5	Friday	17-Oct-14	Workshop	Statistics	3	14:00	15:30	ITS C	DMAM
5	Friday	17-Oct-14	Workshop	Statistics	4	15:30	17:00	ITS C	ATC
6	READING WEEK								
7	Friday	31-Oct-14	Workshop	Experimental Techniques (TLC)	1	09:00	10:30	C.B.24B	NJB
7	Friday	31-Oct-14	Practical	Project 2: Terpenes	3 & 4	09:00	12:00	OMS 3.03	Snr D
7	Friday	31-Oct-14	Workshop	Experimental Techniques (TLC)	2	10:30	12:00	C.B.24B	NJB
7	Friday	31-Oct-14	Workshop	Experimental Techniques (TLC)	3	14:00	15:30	C.B.24B	ATC
7	Friday	31-Oct-14	Practical	Project 2: Terpenes	1 & 2	14:00	17:00	OMS 3.03	AJB,NJB
7	Friday	31-Oct-14	Workshop	Experimental Techniques (TLC)	4	15:30	17:00	C.B.24B	ATC
8	Friday	07-Nov-14	Workshop	Experimental Techniques (IR)	1	09:00	10:30	C.B.24B	NJB
8	Friday	07-Nov-14	Practical	Project 2: Terpenes	3 & 4	09:00	12:00	OMS 3.03	Snr D
8	Friday	07-Nov-14	Workshop	Experimental Techniques (IR)	2	10:30	12:00	C.B.24B	NJB
8	Friday	07-Nov-14	Workshop	Experimental Techniques (IR)	3	14:00	15:30	C.B.24B	ATC
8	Friday	07-Nov-14	Practical	Project 2: Terpenes	1 & 2	14:00	17:00	OMS 3.03	AJB,NJB
8	Friday	07-Nov-14	Workshop	Experimental Techniques (IR)	4	15:30	17:00	C.B.24B	ATC
9	Friday	14-Nov-14	Workshop	Project 2: Bringing it all together*	1	09:00	10:30	C.B.24B	NJB
9	Friday	14-Nov-14	Practical	Project 2: Terpenes	3 & 4	09:00	12:00	OMS 3.03	Snr D
9	Friday	14-Nov-14	Workshop	Project 2: Bringing it all together*	2	10:30	12:00	C.B.24B	NJB
9	Friday	14-Nov-14	Workshop	Project 2: Bringing it all together*	3	14:00	15:30	C.B.24B	ATC
9	Friday	14-Nov-14	Practical	Project 2: Terpenes	1 & 2	14:00	17:00	OMS 3.03	AJB,NJB
9	Friday	14-Nov-14	Workshop	Project 2: Bringing it all together*	4	15:30	17:00	C.B.24B	ATC
10	Friday	21-Nov-14	Workshop	Project 2: Bringing it all together*	1	09:00	10:30	C.B.24B	NJB
10	Friday	21-Nov-14	Workshop	Project 2: Bringing it all together*	2	10:30	12:00	C.B.24B	NJB
10	Friday	21-Nov-14	Workshop	Project 2: Bringing it all together*	3	14:00	15:30	C.B.24B	NJB
10	Friday	21-Nov-14	Workshop	Project 2: Bringing it all together*	4	15:30	17:00	C.B.24B	NJB

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Staff:

DB	Dr David Booth	AJB	Mr Alan Black	NJB	Dr Nick Brewer
GRC	Dr Graham Christie	JBC	Dr Janice Coates	ATC	Dr Art Crossman
DMAM	Dr David Martin	LM	Dr Linda Morris	Snr D	Senior demonstrators

BS12001 Module Timetable

Week	Day	Date	Activity	Title	Group	Start	Finish	Location	Staff
15	Tuesday	20-Jan-15	Lecture	Cell division/Chromosome structure		14:00	16:00	MSI LLT	SGH
16	Tuesday	27-Jan-15	Workshop	Workshop 1: Flylab I	2	09:00	10:30	C.B.24B	DB
16	Tuesday	27-Jan-15	Workshop	Workshop 1: Flylab I	1	10:30	12:00	C.B.24B	DB
16	Tuesday	27-Jan-15	Lecture	Intermolecular forces and bonding		14:00	15:00	MSI LLT	NJB
16	Tuesday	27-Jan-15	Lecture	Sex and meiosis		15:00	16:00	MSI LLT	SGH
16	Tuesday	27-Jan-15	Workshop	Workshop 1: Flylab I	4	16:00	17:30	C.B.24B	DB
16	Thursday	29-Jan-15	Workshop	Workshop 1: Flylab I	3	15:30	17:00	C.B.24B	DB
17	Tuesday	03-Feb-15	Lecture	Meiosis and Mendel/Sex determination and linkage		14:00	16:00	MSI LLT	SGH
18	Tuesday	10-Feb-15	Workshop	Workshop 2: Flylab II	2	09:00	10:30	C.B.24B	DB
18	Tuesday	10-Feb-15	Workshop	Workshop 2: Flylab II	1	10:30	12:00	C.B.24B	DB
18	Tuesday	10-Feb-15	Lecture	Genes and pathways		14:00	15:00	MSI LLT	SGH
18	Tuesday	10-Feb-15	Lecture	Mesozoic ecosystems		15:00	16:00	MSI LLT	DB
18	Tuesday	10-Feb-15	Workshop	Workshop 2: Flylab II	4	16:00	17:30	C.B.24B	DB
18	Thursday	12-Feb-15	Workshop	Workshop 2: Flylab II	3	15:30	17:00	C.B.24B	DB
19	Tuesday	17-Feb-15	Lecture	Transition to land/Ectothermy		14:00	16:00	MSI LLT	DB
20	Tuesday	24-Feb-15	Workshop	Workshop 3: Paper analysis	2	09:00	10:30	C.B.24B	DB
20	Tuesday	24-Feb-15	Workshop	Workshop 3: Paper analysis	1	10:30	12:00	C.B.24B	DB
20	Tuesday	24-Feb-15	Lecture	Early terrestrial plants		14:00	15:00	MSI LLT	DB
20	Tuesday	24-Feb-15	Workshop	Workshop 3: Paper analysis	4	16:00	17:30	C.B.24B	DB
20	Thursday	26-Feb-15	Workshop	Workshop 3: Paper analysis	3	15:30	17:00	C.B.24B	DB
21	Tuesday	03-Mar-15	Lecture	Amniotes, synapids and early mammals/Archosaurs to birds		14:00	16:00	MSI LLT	DB
22	Tuesday	10-Mar-15	Workshop	Workshop 4: Paper analysis	2	09:00	10:30	C.B.24B	DB
22	Tuesday	10-Mar-15	Workshop	Workshop 4: Paper analysis	1	10:30	12:00	C.B.24B	DB
22	Tuesday	10-Mar-15	Lecture	Control of homeostasis		14:00	15:00	MSI LLT	SCL
22	Tuesday	10-Mar-15	Lecture	Osmoregulation and excretion in animals		15:00	16:00	MSI LLT	SCL

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22	Tuesday	10-Mar-15	Workshop	Workshop 4: Paper analysis	4	16:00	17:30	C.B.24B	DB
22	Thursday	12-Mar-15	Workshop	Workshop 4: Paper analysis	3	15:30	17:00	C.B.24B	DB
23	Tuesday	17-Mar-15	Lecture	Animal respiratory strategies		14:00	15:00	MSI LLT	GRC
23	Tuesday	17-Mar-15	Lecture	Nerves and neurophysiology		15:00	16:00	MSI LLT	SGH
24	Tuesday	24-Mar-15	Workshop	Workshop 5: Paper analysis	2	09:00	10:30	C.B.24B	DB
24	Tuesday	24-Mar-15	Workshop	Workshop 5: Paper analysis	1	10:30	12:00	C.B.24B	DB
24	Tuesday	24-Mar-15	Lecture	Nerve circuits, sensory receptors and chemoreception		14:00	15:00	MSI LLT	GRC
24	Tuesday	24-Mar-15	Lecture	Cardiovascular principles		15:00	16:00	MSI LLT	GRC
24	Tuesday	24-Mar-15	Workshop	Workshop 5: Paper analysis	4	16:00	17:30	C.B.24B	DB
24	Thursday	26-Mar-15	Workshop	Workshop 5: Paper analysis	3	15:30	17:00	C.B.24B	DB

Staff:

DB Dr David Booth
 NJB Dr Nick Brewer
 GRC Dr Graham Christie
 SGH Dr Sheriar Hormuzdi
 SCL Dr Steve Land

Locations:

MSI LLT Medical Sciences Institute large lecture theatre
 C.B.24B Carnelley Building basement, room 24B

BS12002 Module Timetable

Weeks	Day	Date	Session	Start	End	Room	Staff
15	Thu	22-Jan-15	L01: Energy and life 1	10:00	11:00	Dal 3F01 LT3	Dr. Nick Brewer
			L01: Energy and life 2	11:00	12:00	Dal 3F01 LT3	Dr. Nick Brewer
16	Thu	29-Jan-15	L03: Energy and life 3	10:00	11:00	Dal 3F01 LT3	Dr. Nick Brewer
			L04: Enzymes 1	11:00	12:00	Dal 3F01 LT3	Dr. Nick Brewer
17	Tue	03-Feb-15	Workshop1: Chemical kinetics Group 3	09:00	10:30	OMS 2.02B	Dr. Nick Brewer
			Workshop1: Chemical kinetics Group 4	10:30	12:00	OMS 2.02B	Dr. Nick Brewer
17	Thu	05-Feb-15	L05: Enzymes 2	10:00	11:00	Dal 3F01 LT3	Dr. Nick Brewer
			L06: Enzymes 3	11:00	12:00	Dal 3F01 LT3	Dr. Nick Brewer
			Workshop1: Chemical kinetics Group 1	14:00	15:30	Carnelley B24	Dr. Nick Brewer
			Workshop1: Chemical kinetics Group 2	15:30	17:00	Carnelley B24	Dr. Nick Brewer
18	Thursday	12-Feb-15	L07: Cell structure and function 1	10:00	11:00	Dal 3F01 LT3	Dr. S Hormuzdi
			L08: Cell structure and function 2	11:00	12:00	Dal 3F01 LT3	Dr. S Hormuzdi
19	Thursday	19-Feb-15	L09: Membranes 1	10:00	11:00	Dal 3F01 LT3	Dr. Graham Christie
			L10: Membranes 2	11:00	12:00	Dal 3F01 LT3	Dr. Graham Christie
			Workshop 2: Cells and membranes Group 1	14:00	15:30	Carnelley B24	Dr. Graham Christie
			Workshop 2: Cells and membranes Group 2	15:30	17:00	Carnelley B24	Dr. Graham Christie
19	Friday	20-Feb-15	Workshop 2: Cells and membranes Group 3	12:30	14:00	OMS 2.02B	Dr. Graham Christie
			Workshop 2: Cells and membranes Group 4	14:00	15:30	OMS 2.02B	Dr. Graham Christie
20	Thursday	26-Feb-15	L11: Biomolecules 1	10:00	11:00	Dal 3F01 LT3	Dr. Linda Morris
			L12: Biomolecules 2	11:00	12:00	Dal 3F01 LT3	Dr. Linda Morris
21	Tuesday	03-Mar-15	Workshop 3: Protein structure Group 3	09:00	10:30	Carnelley B24	Dr. David Norman
			Workshop 3: Protein structure Group 4	10:30	12:00	Carnelley B24	Dr. David Norman

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21	Thursday	05-Mar-15	L13: Amino acids and polypeptides	10:00	11:00	Dal 3F01 LT3	Dr. David Norman
			L14: Protein structure and function	11:00	12:00	Dal 3F01 LT3	Dr. David Norman
			Workshop 3: Protein structure Group 1	14:00	15:30	OMS 2.02B	Dr. David Norman
			Workshop 3: Protein structure Group 2	15:30	17:00	OMS 2.02B	Dr. David Norman
22	Thursday	12-Mar-15	L15: Genomes	10:00	11:00	Dal 3F01 LT3	Dr. S Hormuzdi
			L16: Transcription	11:00	12:00	Dal 3F01 LT3	Dr. S Hormuzdi
23	Tuesday	17-Mar-15	Workshop 4: Translation Group 3	09:00	10:30	Carnelley B24	Dr. S Hormuzdi
			Workshop 4: Translation Group 4	10:30	12:00	Carnelley B24	Dr. S Hormuzdi
23	Thursday	19-Mar-15	L17: Translation	10:00	11:00	Dal 3F01 LT3	Dr. S Hormuzdi
			L18: DNA replication	11:00	12:00	Dal 3F01 LT3	Dr. S Hormuzdi
			Workshop 4: Translation Group 1	14:00	15:30	Carnelley B24	Dr. S Hormuzdi
			Workshop 4: Translation Group 2	15:30	17:00	Carnelley B24	Dr. S Hormuzdi
24	Thursday	26-Mar-15	L19: Working with genes	10:00	11:00	Dal 3F01 LT3	Dr. S Hormuzdi
			L20: Metabolism 1	11:00	12:00	Dal 3F01 LT3	Dr. S Hormuzdi
25	Tuesday	31-Mar-15	Workshop 5: Metabolism presentations Group 3	09:00	10:30	Carnelley B24	Dr. S Hormuzdi
			Workshop 5: Metabolism presentations Group 4	10:30	12:00	Carnelley B24	Dr. S Hormuzdi
25	Thursday	02-Apr-15	L21: Metabolism 2	10:00	11:00	Dal 3F01 LT3	Dr. S Hormuzdi
			L22: Metabolism 3	11:00	12:00	Dal 3F01 LT3	Dr. S Hormuzdi
			Workshop 5: Metabolism presentations Group 1	14:00	15:30	Carnelley B24	Dr. Graham Christie
			Workshop 5: Metabolism presentations Group 2	15:30	17:00	Carnelley B24	Dr. Graham Christie

BS12003 Module Timetable

Week	Day	Date	Activity	Title	Group(s)	Start	Finish	Location	Staff
15	Monday	19-Jan-15	Workshop	Optical techniques	1	09:00	10:30	C.B.24B	ATC,JMP
15	Monday	19-Jan-15	Workshop	Preparing a figure	2 & 3	09:00	10:30	ITS C	GRC
15	Monday	19-Jan-15	Workshop	Preparing a figure	1 & 4	10:30	12:00	ITS C	GRC
15	Monday	19-Jan-15	Workshop	Optical techniques	2	10:30	12:00	C.B.24B	ATC,JMP
15	Monday	19-Jan-15	Workshop	Optical techniques	3	14:00	15:30	C.B.24B	ATC,JMP
15	Monday	19-Jan-15	Workshop	Optical techniques	4	15:30	17:00	C.B.24B	ATC,JMP
16	Monday	26-Jan-15	Workshop	Protein purification	1	09:00	10:30	C.B.24B	SCL
16	Monday	26-Jan-15	Practical	Optical techniques	3 & 4	09:00	12:00	OMS 3.03	JMP
16	Monday	26-Jan-15	Workshop	Protein purification	2	10:30	12:00	C.B.24B	SCL
16	Monday	26-Jan-15	Workshop	Protein purification	3	14:00	15:30	C.B.24B	JAP
16	Monday	26-Jan-15	Practical	Optical techniques	1 & 2	14:00	17:00	OMS 3.03	DMAM,JMP
16	Monday	26-Jan-15	Workshop	Protein purification	4	15:30	17:00	C.B.24B	SCL
17	Monday	02-Feb-15	Workshop	PCR	1	09:00	10:30	C.B.24B	DB
17	Monday	02-Feb-15	Practical	Protein purification	3 & 4	09:00	12:00	OMS 3.03	DGN,JMP
17	Monday	02-Feb-15	Workshop	PCR	2	10:30	12:00	C.B.24B	DB
17	Monday	02-Feb-15	Workshop	PCR	3	14:00	15:30	C.B.24B	DB
17	Monday	02-Feb-15	Practical	Protein purification	1 & 2	14:00	17:00	OMS 3.03	DGN,JMP
17	Monday	02-Feb-15	Workshop	PCR	4	15:30	17:00	C.B.24B	DB
18	Monday	09-Feb-15	Workshop	Enzyme kinetics	1	09:00	10:30	C.B.24B	NJB,JMP
18	Monday	09-Feb-15	Practical	PCR	3 & 4	09:00	12:00	OMS 3.03	AJB
18	Monday	09-Feb-15	Workshop	Enzyme kinetics	2	10:30	12:00	C.B.24B	NJB,JMP
18	Monday	09-Feb-15	Workshop	Enzyme kinetics	3	14:00	15:30	C.B.24B	NJB,JMP
18	Monday	09-Feb-15	Practical	PCR	1 & 2	14:00	17:00	OMS 3.03	AJB,GRC
18	Monday	09-Feb-15	Workshop	Enzyme kinetics	4	15:30	17:00	C.B.24B	NJB,JMP
19	Monday	16-Feb-15	Workshop	Protein expression	1	09:00	10:30	C.B.24B	DMAM

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19	Monday	16-Feb-15	Practical	Enzyme kinetics	3 & 4	09:00	12:00	OMS 3.03	GRC,JMP
19	Monday	16-Feb-15	Workshop	Protein expression	2	10:30	12:00	C.B.24B	DMAM
19	Monday	16-Feb-15	Workshop	Protein expression	3	14:00	15:30	C.B.24B	DMAM
19	Monday	16-Feb-15	Practical	Enzyme kinetics	1 & 2	14:00	17:00	OMS 3.03	GRC,JMP
19	Monday	16-Feb-15	Workshop	Protein expression	4	15:30	17:00	C.B.24B	DMAM
20	Monday	23-Feb-15	Workshop	Use of literature databases	1	09:00	10:30	ITS C	MA
20	Monday	23-Feb-15	Practical	Protein expression 1	3 & 4	09:00	12:00	OMS 3.03	JBC,GRC
20	Monday	23-Feb-15	Workshop	Use of literature databases	2	10:30	12:00	ITS C	MA
20	Monday	23-Feb-15	Workshop	Use of literature databases	3	14:00	15:30	ITS E	MA
20	Monday	23-Feb-15	Practical	Protein expression 1	1 & 2	14:00	17:00	OMS 3.03	JBC,GRC
20	Monday	23-Feb-15	Workshop	Use of literature databases	4	15:30	17:00	ITS E	MA
21	Monday	02-Mar-15	Workshop	Use of Endnote	1	09:00	10:30	ITS C	MA
21	Monday	02-Mar-15	Practical	Protein expression 2	3 & 4	09:00	12:00	OMS 3.03	JBC,NJB
21	Monday	02-Mar-15	Workshop	Use of Endnote	2	10:30	12:00	ITS C	MA
21	Monday	02-Mar-15	Workshop	Use of Endnote	3	14:00	15:30	ITS E	MA
21	Monday	02-Mar-15	Practical	Protein expression 2	1 & 2	14:00	17:00	OMS 3.03	JBC,GRC
21	Monday	02-Mar-15	Workshop	Use of Endnote	4	15:30	17:00	ITS E	MA
22	Monday	09-Mar-15	Practical	Protein expression 3	3 & 4	09:00	12:00	OMS 3.03	JBC,NJB
22	Monday	09-Mar-15	Practical	Protein expression 3	1 & 2	14:00	17:00	OMS 3.03	JBC,GRC
23	Monday	16-Mar-15	Workshop	Protein expression follow-up	1	09:00	10:30	C.B.24B	GRC
23	Monday	16-Mar-15	Workshop	Protein expression follow-up	2	10:30	12:00	C.B.24B	GRC
23	Monday	16-Mar-15	Workshop	Protein expression follow-up	3	14:00	15:30	C.B.24B	GRC
23	Monday	16-Mar-15	Workshop	Protein expression follow-up	4	15:30	17:00	C.B.24B	GRC
24	Monday	23-Mar-15	Practical	Lab skills test	3 & 4	11:00	12:00	OMS 3.03	JBC,GRC
24	Monday	23-Mar-15	Practical	Lab skills test	1 & 2	14:00	15:00	OMS 3.03	JBC,GRC
25	Monday	30-Mar-15	Field Trip	Botanic gardens field trip	All groups	09:30	14:30	Botanic gardens	DB,JMP

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Staff:

AJB	Mr Alan Black	ATC	Dr Art Crossman	DB	Dr David Booth
DGN	Dr David Norman	DMAM	Dr David Martin	GRC	Dr Graham Christie
JAP	Prof John Peters	JBC	Dr Janice Coates	JMP	Dr John Pokora
MA	Ms Margaret Adamson	NJB	Dr Nicholas Brewer	SCL	Dr Steve Land

BS12004 Module Timetable

BS12004 Timetable	Day	Date	Activity	Group	Start	End	Duration	Staff	Room
	Weeks								
15	Friday	23/01/2015	Investigating enzymes	2A + 2B	900	1200	3 hr	JP	OMS 3.03
15	Friday	23/01/2015	Experimental design workshop	1A	900	1030	90 min.	LAM	CB24
15	Friday	23/01/2015	Experimental design workshop	1B	1030	1200	90 min.	LAM	CB24
15	Friday	23/01/2015	Investigating enzymes	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03
15	Friday	23/01/2015	Experimental design workshop	2A	1400	1530	90 min.	LAM	CB24
15	Friday	23/01/2015	Experimental design workshop	2B	1530	1700	90 min.	GRC	CB24
16	Friday	30/01/2015	Group project	2A + 2B	900	1200	3 hr	JP	OMS 3.03
16	Friday	30/01/2015	Buffers workshop	1A	900	1030	90 min.	NJB	CB24
16	Friday	30/01/2015	Buffers workshop	1B	1030	1200	90 min.	NJB	CB24
16	Friday	30/01/2015	Group Project	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03
16	Friday	30/01/2015	Buffers workshop	2A	1400	1530	90 min.	LAM	CB24
16	Friday	30/01/2015	Buffers workshop	2B	1530	1700	90 min.	LAM	CB24
17	Friday	06/02/2015	Group project	2A + 2B	900	1200	3 hr	JP	OMS 3.03
17	Friday	06/02/2015	Statistics workshop	1A	900	1030	90 min.	DB	CB24
17	Friday	06/02/2015	Statistics workshop	1B	1030	1200	90 min.	DB	CB24
17	Friday	06/02/2015	Group Project	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03
17	Friday	06/02/2015	Statistics workshop	2A	1400	1530	90 min.	DMAM	CB24
17	Friday	06/02/2015	Statistics workshop	2B	1530	1700	90 min.	DMAM	CB24
18	Friday	13/02/2015	Group project	2A + 2B	900	1200	3 hr	JP	OMS 3.03

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18	Friday	13/02/2015	Activation Energy workshop	1A	900	1030	90 min.	NJB	CB24
18	Friday	13/02/2015	Activation Energy workshop	1B	1030	1200	90 min.	NJB	CB24
18	Friday	13/02/2015	Group project	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03
18	Friday	13/02/2015	Activation Energy workshop	2A	1400	1530	90 min	LAM	CB24
18	Friday	13/02/2015	Activation Energy workshop	2B	1530	1700	90 min	LAM	CB24
19	Friday	20/02/2015	Group project	2A + 2B	900	1200	3 hr	JP	OMS 3.03
19	Friday	20/02/2015	Protein structure workshop	1A	900	1030	90 min.	DGN	IT Suite C
19	Friday	20/02/2015	Protein structure workshop	1B	1030	1200	90 min	DGN	IT Suite C
19	Friday	20/02/2015	Group project	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03
19	Friday	20/02/2015	Protein structure workshop	2A	1400	1530	90 min	DGN	IT Suite C
19	Friday	20/02/2015	Protein structure workshop	2B	1530	1700	90 min	DGN	IT Suite E
20	Friday	27/02/2015	Group Project	2A + 2B	900	1200	3 hr	JP	OMS 3.03
20	Friday	27/02/2015	#Project work	1A	900	1030	90 min.	NJB	CB24
20	Friday	27/02/2015	#Project work	1B	1030	1200	90 min.	NJB	CB24
20	Friday	27/02/2015	Group Project	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03
20	Friday	27/02/2015	#Project work	2A	1400	1530	90 min	LAM	CB24
20	Friday	27/02/2015	#Project work	2B	1530	1700	90 min	LAM	CB24
21	Friday	06/03/2015	Group project	2A + 2B	900	1200	3 hr	JP	OMS 3.03
21	Friday	06/03/2015	#Project work	1A	900	1030	90 min.	NJB	CB24
21	Friday	06/03/2015	#Project work	1B	1030	1200	90 min	NJB	CB24
21	Friday	06/03/2015	Group project	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03

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21	Friday	06/03/2015	#Project work	2A	1400	1530	90 min	LAM	CB24
21	Friday	06/03/2015	#Project work	2B	1530	1700	90 min	LAM	CB24
22	Friday	13/03/2015	Group Project	2A + 2B	900	1200	3 hr	JP	OMS 3.03
22	Friday	13/03/2015	#Project work	1A	900	1030	90 min.	NJB	CB24
22	Friday	13/03/2015	#Project work	1B	1030	1200	90 min.	NJB	CB24
22	Friday	13/03/2015	Group Project	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03
22	Friday	13/03/2015	#Project work	2A	1400	1530	90 min	LAM	CB24
22	Friday	13/03/2015	#Project work	2B	1530	1700	90 min	LAM	CB24
23	Friday	20/03/2015	Group project	2A + 2B	900	1200	3 hr	JP	OMS 3.03
23	Friday	20/03/2015	#Poster preparation	1A	900	1030	90 min.	NJB	CB24
23	Friday	20/03/2015	#Poster preparation	1B	1030	1200	90 min	NJB	CB24
23	Friday	20/03/2015	Group project	1A + 1B	1400	1700	3 hr	NJB/JP	OMS 3.03
23	Friday	20/03/2015	#Poster preparation	2A	1400	1530	90 min	LAM	CB24
23	Friday	20/03/2015	#Poster preparation	2B	1530	1700	90 min	LAM	CB24
24	Friday	27/03/2015	#Report preparation	1A	900	1030	90 min.	NJB	CB24
24	Friday	27/03/2015	#Report preparation	1B	1030	1200	90 min.	NJB	CB24
24	Friday	27/03/2015	#Report preparation	2A	1400	1530	90 min.	NJB	CB24
24	Friday	27/03/2015	#Report preparation	2B	1530	1700	90 min.	NJB	CB24
25	Friday	03/04/2015	Poster presentation	1A +1B +2A +2B	09:00	1700	6 hr	NJB/DB/GRC/LAM	OMS 2.02b

NJB = Dr Nick Brewer LAM = Dr Linda Morris DGN = Dr David Norman DB = Dr David Booth DMAM = Dr David Martin GRC = Dr Graham Christie
 JP = Dr John Pokora # = non-compulsory session: Drs Brewer/Morris will be available to give guidance and some help/hints/tips

BS21001 Module Timetable

Week	Day	Date	Activity	Start	Finish	Location	Staff
1	Mon	15/09/2014	Statistics: Hypotheses and experimentation	17:00	18:00	Med Scis Inst LT	Booth, David
1	Thu	18/09/2014	Statistics: Data	13:00	14:00	Med Scis Inst LT	Booth, David
2	Mon	22/09/2014	Statistics: Distributions	17:00	18:00	Med Scis Inst LT	Booth, David
2	Thu	25/09/2014	Statistics: Populations and sampling	13:00	14:00	Med Scis Inst LT	Booth, David
3	Mon	29/09/2014	Statistics: Estimating variance and errors	17:00	18:00	Med Scis Inst LT	Booth, David
3	Mon	29/09/2014	Workshop I G1	09:00	10:30	Old Med Schl 2.02B (Life Sci)	Booth, David
3	Mon	29/09/2014	Workshop I G2	10:30	12:00	Old Med Schl 2.02B (Life Sci)	Booth, David
3	Thu	02/10/2014	Statistics: Correlation & regression	13:00	14:00	Med Scis Inst LT	Booth, David
4	Mon	06/10/2014	Statistics: Multiple regression	17:00	18:00	Med Scis Inst LT	Booth, David
4	Thu	09/10/2014	Statistics: Statistical modelling I	13:00	14:00	Med Scis Inst LT	Booth, David
5	Mon	13/10/2014	Statistic: Statistical modelling II	17:00	18:00	Med Scis Inst LT	Booth, David
5	Mon	13/10/2014	Statistical analysis with R drop in session G1	09:00	10:30	Tower Basement ITS E	Martin, David
5	Mon	13/10/2014	Statistical analysis with R drop in session G2	10:30	12:00	Tower Basement ITS E	Martin, David
5	Mon	13/10/2014	Workshop 2 G1	15:30	17:00	Old Med Schl 2.02B (Life Sci)	Martin, David
5	Thu	16/10/2014	Statistics: Statistical modelling III	13:00	14:00	Med Scis Inst LT	Booth, David
5	Fri	17/10/2014	Workshop 2 G2	15:30	17:00	Old Med Schl 2.02B (Life Sci)	Martin, David
7	Mon	27/10/2014	Population dynamics I	17:00	18:00	Med Scis Inst LT	Booth, David
7	Mon	27/10/2014	Group project IT drop in session G1A	09:00	10:30	Tower Basement ITS E	Martin, David
7	Mon	27/10/2014	Group project IT drop in session G1B	10:30	12:00	Tower Basement ITS E	Martin, David
7	Mon	27/10/2014	Group project IT drop in session G2A	15:30	17:00	Old Med Schl 2.02B (Life Sci)	Martin, David
7	Thu	30/10/2014	Population dynamics II	13:00	14:00	Med Scis Inst LT	Booth, David
7	Fri	31/10/2014	Group project IT drop in session G2B	15:30	17:00	Old Med Schl 2.02B (Life Sci)	Martin, David
8	Mon	03/11/2014	Spatial analysis	17:00	18:00	Med Scis Inst LT	Booth, David

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8	Thu	06/11/2014	Trophism, Niches, Predation & Competition	13:00	14:00	Med Scis Inst LT	Booth, David
9	Mon	10/11/2014	Epidemiology	17:00	18:00	Med Scis Inst LT	Booth, David
9	Mon	10/11/2014	Group project IT drop in session G1A	09:00	10:30	Tower Basement ITS E	Martin, David
9	Mon	10/11/2014	Group project IT drop in session G1B	10:30	12:00	Tower Basement ITS E	Martin, David
9	Mon	10/11/2014	Workshop 3: Group project discussion G1	15:30	17:00	Old Med Schl 2.02B (Life Sci)	Martin, David
9	Thu	13/11/2014	Parasites & Disease	13:00	14:00	Med Scis Inst LT	Booth, David
9	Fri	14/11/2014	Workshop 3: Group project discussion G2	15:30	17:00	Old Med Schl 2.02B (Life Sci)	Martin, David
10	Mon	17/11/2014	Origin and diversification of Class Aves	17:00	18:00	Med Scis Inst LT	Booth, David
10	Thu	20/11/2014	Primate and Human origins and diversification	13:00	14:00	Med Scis Inst LT	Booth, David
11	Mon	24/11/2014	Genetics of Human evolution	17:00	18:00	Med Scis Inst LT	Booth, David
11	Mon	24/11/2014	Group project IT drop in session G2A	09:00	10:30	Tower Basement ITS E	Martin, David
11	Mon	24/11/2014	Group project IT drop in session G2B	10:30	12:00	Tower Basement ITS E	Martin, David
11	Mon	24/11/2014	Workshop 4: Interpreting group project analysis G1	15:30	17:00	Old Med Schl 2.02B (Life Sci)	Martin, David
11	Thu	27/11/2014	Anthropogenic effects	13:00	14:00	Med Scis Inst LT	Booth, David
11	Fri	28/11/2014	Workshop 4: Interpreting group project analysis G2	15:30	17:00	Old Med Schl 2.02B (Life Sci)	Martin, David

BS21002 Module Timetable

Week	Day	Date	Activity	Start	Finish	Location	Staff
1	Fri	19-Sep-14	Lecture 1: The cell cycle and cell division 1	13:00	14:00	Med Scis Inst LT	MJRS
1	Fri	19-Sep-14	Lecture 2: The cell cycle and cell division 1	14:00	15:00	Med Scis Inst LT	MJRS
1	Fri	19-Sep-14	Lecture 3: Problems of the week	16:00	17:00	Med Scis Inst LT	DMAM
2	Mon	22-Sep-14	Workshop I: Problem-solving and numeracy	09:00	10:30	Old Med Schl 2.02B (Life Sci)	DGN
2	Mon	22-Sep-14	Workshop I: Problem-solving and numeracy	10:30	12:00	Old Med Schl 2.02B (Life Sci)	DGN
2	Fri	26-Sep-14	Lecture 4: Genes, Inheritance and Meiosis 1	13:00	14:00	Med Scis Inst LT	MJRS
2	Fri	26-Sep-14	Lecture 5: Genes, Inheritance and Meiosis 2	14:00	15:00	Med Scis Inst LT	MJRS
3	Fri	03-Oct-14	Lecture 6: Transcription 1	13:00	14:00	Med Scis Inst LT	JZ
3	Fri	03-Oct-14	Lecture 7: Transcription 2	14:00	15:00	Med Scis Inst LT	JZ
4	Mon	06-Oct-14	Workshop II: Measuring Meiosis	09:00	10:30	Old Med Schl 2.02B (Life Sci)	MJRS
4	Mon	06-Oct-14	Workshop II: Measuring Meiosis	10:30	12:00	Old Med Schl 2.02B (Life Sci)	MJRS
4	Fri	10-Oct-14	Lecture 8: DNA Replication 1	13:00	14:00	Med Scis Inst LT	MJRS
4	Fri	10-Oct-14	Lecture 9: DNA Replication 2	14:00	15:00	Med Scis Inst LT	MJRS
4	Fri	10-Oct-14	Problems of the week - session 2	16:00	17:00	Med Scis Inst LT	DMAM
5	Fri	17-Oct-14	Lecture 10: Transcriptional Regulation 1	13:00	14:00	Med Scis Inst LT	JZ
5	Fri	17-Oct-14	Lecture 11: Transcriptional Regulation 2	14:00	15:00	Med Scis Inst LT	JZ
7	Mon	27-Oct-14	Class test 1	12:00	13:00	Tower Basement ITS C	DMAM
7	Thu	30-Oct-14	Lecture 13: Transcriptional regulation 3	12:00	13:00	Med Scis Inst LT	JZ
7	Fri	31-Oct-14	Class test 1	10:00	11:00	Tower Basement ITS C	DMAM
7	Fri	31-Oct-14	Lecture 14: Viruses and gene regulation	14:00	15:00	Med Scis Inst LT	MJRS
8	Mon	03-Nov-14	Workshop III: Transcription mechanisms	09:00	10:30	Old Med Schl 2.02B (Life Sci)	DMAM
8	Mon	03-Nov-14	Workshop III: Transcription mechanisms	10:30	12:00	Old Med Schl 2.02B (Life Sci)	DMAM
8	Fri	07-Nov-14	Lecture 15: Translation 1	13:00	14:00	Med Scis Inst LT	DGN

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8	Fri	07-Nov-14	Lecture 16: Translation 2	14:00	15:00	Med Scis Inst LT	DGN
9	Fri	14-Nov-14	Lecture 17: Manipulating bacterial genetics	13:00	14:00	Med Scis Inst LT	DGN
9	Fri	14-Nov-14	Lecture 18: Manipulating bacterial genetics	14:00	15:00	Med Scis Inst LT	DGN
10	Mon	17-Nov-14	Workshop IV: Genetic code	09:00	10:30	Old Med Schl 2.02B (Life Sci)	DMAM
10	Mon	17-Nov-14	Workshop IV: Genetic code	10:30	12:00	Old Med Schl 2.02B (Life Sci)	DMAM
10	Fri	21-Nov-14	Lecture 19: Manipulating DNA in plants & animals	13:00	14:00	Med Scis Inst LT	DGN
10	Fri	21-Nov-14	Lecture 20: Manipulating DNA in plants & animals	14:00	15:00	Med Scis Inst LT	DGN
10	Fri	21-Nov-14	Lecture 21: Problems of the week session 3	16:00	17:00	Med Scis Inst LT	DMAM
11	Fri	28-Nov-14	Lecture 22: What happens when it goes wrong 1	13:00	14:00	Med Scis Inst LT	JZ
11	Fri	28-Nov-14	Lecture 23: What happens when it goes wrong 2	14:00	15:00	Med Scis Inst LT	MJRS
12	Mon	01-Dec-14	Workshop V: Synthetic Biology	09:00	10:30	Old Med Schl 2.02B (Life Sci)	DMAM/DGN/MJRS/JZ
12	Mon	01-Dec-14	Workshop V: Synthetic Biology	10:30	12:00	Old Med Schl 2.02B (Life Sci)	DMAM/DGN/MJRS/JZ

DMAM Dr David Martin
DGN Dr David Norman
MJRS Professor Mike Stark
JZ Dr Joost Zomerdijk

BS21003 Module Timetable

Week	Day	Date	Type	Activity	Group (s)	Start	End	Duration	Staff	Room
1	Tue	16-Sep-14	Workshop	Stats 1	1	09:00	10:30	01:30	DMAM	ITS C
1	Tue	16-Sep-14	Workshop	Stats 1	2	10:30	12:00	01:30	DMAM	ITS C
1	Tue	16-Sep-14	Practical	Lab skills revision	1 & 2	14:00	17:00	03:00	NJB	OMS 3.03 & C.1.01
2	Tue	23-Sep-14	Workshop	Stats 2	1	09:00	10:30	01:30	DMAM	ITS C
2	Tue	23-Sep-14	Workshop	Stats 2	2	10:30	12:00	01:30	DMAM	ITS C
3	Tue	30-Sep-14	Workshop	Stats 3	1	09:00	10:30	01:30	DMAM	ITS C
3	Tue	30-Sep-14	Workshop	Stats 3	2	10:30	12:00	01:30	DMAM	ITS C
4	Tue	07-Oct-14	Workshop	Kinetic v thermodynamic ctrl	1	09:00	10:30	01:30	NJB	OMS 2.02B
4	Tue	07-Oct-14	Workshop	Kinetic v thermodynamic ctrl	2	10:30	12:00	01:30	NJB	OMS 2.02B
4	Tue	07-Oct-14	Practical	Kinetic v thermodynamic ctrl	1 & 2	14:00	17:00	03:00	ATC	OMS 3.03 & C.1.01
5	Tue	14-Oct-14	Workshop	Bioinformatics 1	1	09:00	10:30	01:30	GRC	ITS C
5	Tue	14-Oct-14	Workshop	Bioinformatics 1	2	10:30	12:00	01:30	GRC	ITS C
5	Tue	14-Oct-14	Practical	Red blood cell permeability	1 & 2	14:00	17:00	03:00	GRC	OMS 3.03 & C.1.01
6	READING WEEK									
7										
8	Tue	04-Nov-14	Workshop	Use of antibodies	1	09:00	10:30	01:30	GRC	OMS 2.02B
8	Tue	04-Nov-14	Workshop	Bioinformatics 2	2	09:00	10:30	01:30	DMAM	ITS C
8	Tue	04-Nov-14	Workshop	Use of antibodies	2	10:30	12:00	01:30	GRC	OMS 2.02B
8	Tue	04-Nov-14	Workshop	Bioinformatics 2	1	10:30	12:00	01:30	DMAM	ITS C
9	Tue	11-Nov-14	Workshop	Stats 4	1	09:00	10:30	01:30	DMAM	ITS C
9	Tue	11-Nov-14	Workshop	Stats 4	2	10:30	12:00	01:30	DMAM	ITS C
9	Tue	11-Nov-14	Practical	Use of antibodies	1 & 2	14:00	17:00	03:00	GRC	OMS 3.03 & C.1.01
10	Tue	18-Nov-14	Workshop	Stats 5	1	09:00	10:30	01:30	DMAM	ITS C
10	Tue	18-Nov-14	Workshop	Stats 5	2	10:30	12:00	01:30	DMAM	ITS C
10	Tue	18-Nov-14	Practical	Bacterial Genetics	1 & 2	14:00	17:00	03:00	DB	OMS 3.03 & C.1.01
11	Tue	25-Nov-14	Workshop	Bacterial Genetics	1	09:00	10:30	01:30	GRC	C.1.01
11	Tue	25-Nov-14	Workshop	Bacterial Genetics	2	10:30	12:00	01:30	GRC	C.1.01
11	Tue	25-Nov-14	Practical	Lab test	1	14:00	15:30	01:30	GRC	OMS 3.03

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11	Tue	25-Nov-14	Practical	Lab test	2	15:30	17:00	01:30	GRC	OMS 3.03
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Staff:

ATC Dr Art Crossman
DB Dr David Booth
DMAM Dr David Martin
GRC Dr Graham Christie
NJB Dr Nick Brewer

Rooms:

C.1.01 Lab 1.01, 1st floor, Carnelley Building
ITS C Tower basement IT suite C
OMS 2.02B Room 2.02B, 2nd floor, Old Medical School
OMS 3.03 Lab 3.03, 3rd floor, Old Medical School

BS21004 Module Timetable

Week	Day	Date	Activity	Start	Finish	Location	Staff
1	Thu	18-Sep-14	Workshop 1 gr01	09:00	10:30	Old Med Schl 2.02B	Brewer, Nicholas
1	Thu	18-Sep-14	Workshop 1 gr02	10:30	12:00	Old Med Schl 2.02B	Brewer, Nicholas
1	Thu	18-Sep-14	PDP Workshop *	15:30	17:00	Tower Basement ITS C	Christie, Graham
2	Thu	25-Sep-14	Workshop2 gr01	09:00	10:30	Old Med Schl 2.02B	Morris, Linda, Brewer, Nicholas
2	Thu	25-Sep-14	Workshop2 gr02	10:30	12:00	Old Med Schl 2.02B	Morris, Linda, Brewer, Nicholas
2	Thu	25-Sep-14	Lab	14:00	17:00	Old Med Schl 3.03 ,Carnelley 1.01	Black, Alan, Coates, Janice, Brewer, Nicholas, Crossman, Arthur, Pokora, John
3	Thu	02-Oct-14	Workshop 3 gr01	09:00	10:30	Old Med Schl 2.02B	Morris, Linda, Brewer, Nicholas
3	Thu	02-Oct-14	Workshop 3 gr02	10:30	12:00	Old Med Schl 2.02B	Morris, Linda, Brewer, Nicholas
3	Thu	02-Oct-14	Lab	14:00	17:00	Old Med Schl 3.03 ,Carnelley 1.01	Black, Alan, Coates, Janice, Brewer, Nicholas, Crossman, Arthur, Pokora, John
4	Thu	09-Oct-14	Workshop 4 gr01	09:00	10:30	Old Med Schl 2.02B	Crossman, Arthur
4	Thu	09-Oct-14	Workshop 4 gr02	10:30	12:00	Old Med Schl 2.02B	Crossman, Arthur
4	Thu	09-Oct-14	Lab	14:00	17:00	Old Med Schl 3.03 ,Carnelley 1.01	Black, Alan, Coates, Janice, Brewer, Nicholas, Crossman, Arthur, Pokora, John
5	Thu	16-Oct-14	Workshop 5 gr01	09:00	10:30	Old Med Schl 2.02B	Crossman, Arthur
5	Thu	16-Oct-14	Workshop 5 gr02	10:30	12:00	Old Med Schl 2.02B	Crossman, Arthur
5	Thu	16-Oct-14	Lab	14:00	17:00	Old Med Schl 3.03 ,Carnelley 1.01	Black, Alan, Coates, Janice, Brewer, Nicholas, Crossman, Arthur, Pokora, John
7	Thu	30-Oct-14	Workshop 6 gr01	09:00	10:30	Old Med Schl 2.02B	Morris, Linda, Crossman, Arthur
7	Thu	30-Oct-14	Workshop 6 gr02	10:30	12:00	Old Med Schl 2.02B	Morris, Linda, Crossman, Arthur
7	Thu	30-Oct-14	Lab	14:00	17:00	Old Med Schl 3.03 ,Carnelley 1.01	Black, Alan, Coates, Janice, Brewer, Nicholas, Crossman, Arthur, Pokora, John
8	Thu	06-Nov-14	Workshop 7 gr01	09:00	10:30	Old Med Schl 2.02B	Morris, Linda, Crossman, Arthur
8	Thu	06-Nov-14	Workshop 7 gr02	10:30	12:00	Old Med Schl 2.02B	Morris, Linda, Crossman, Arthur
8	Thu	06-Nov-14	Lab	14:00	17:00	Old Med Schl 3.03 ,Carnelley 1.01	Black, Alan, Coates, Janice, Brewer, Nicholas, Crossman, Arthur, Pokora, John
9	Thu	13-Nov-14	Workshop 8 gr01	09:00	10:30	Old Med Schl 2.02B	Morris, Linda, Crossman, Arthur
9	Thu	13-Nov-14	Workshop 8 gr02	10:30	12:00	Old Med Schl 2.02B	Morris, Linda, Crossman, Arthur
9	Thu	13-Nov-14	Lab	14:00	17:00	Old Med Schl 3.03 ,Carnelley 1.01	Black, Alan, Coates, Janice, Brewer, Nicholas, Crossman, Arthur, Pokora, John
10	Thu	20-Nov-14	Lab	14:00	17:00	Old Med Schl 3.03 ,Carnelley 1.01	Black, Alan, Coates, Janice, Brewer, Nicholas, Crossman, Arthur, Pokora, John

Module Timetable BS22001

Week	Day	Date	Activity	Start		Title	Staff	Room
15	Monday	19-Jan-15	Lecture	17:00	18:00	Structure of the Neuromuscular Junction	Felts, Paul	Med Scis Inst LT
15	Friday	23-Jan-15	Lecture	14:00	15:00	Signal transmission at NMJ: pre-junctional events	Lambert, Jeremy	Med Scis Inst LT
15	Friday	23-Jan-15	Lecture	17:00	18:00	Signal transmission at NMJ: post-junctional events	Lambert, Jeremy	Med Scis Inst LT
16	Monday	26-Jan-15	Lecture	17:00	18:00	NMJ Pharmacology	Lambert, Jeremy	Med Scis Inst LT
16	Friday	30-Jan-15	Lecture	14:00	15:00	Excitation-contraction coupling	Christie, Graham?	Med Scis Inst LT
16	Friday	30-Jan-15	Lecture	17:00	18:00	Muscle contraction	Christie, Graham?	Med Scis Inst LT
17	Monday	02-Feb-15	Workshop gr01	09:00	10:30	The skeletal NMJ, Physiology and Pharmacology	Peters, John	Old Med Schl 2.02B
17	Monday	02-Feb-15	Workshop gr02	10:30	12:00	The skeletal NMJ, Physiology and Pharmacology	Peters, John	Old Med Schl 2.02B
17	Monday	02-Feb-15	Lecture	17:00	18:00	The appendicular skeleton ; muscles and bones	Wilkinson, Tracy?	Med Scis Inst LT
17	Friday	06-Feb-15	Lecture	14:00	15:00	Introduction to the Autonomic Nervous System	Peters, John	Med Scis Inst LT
17	Friday	06-Feb-15	Lecture	17:00	18:00	The appendicular skeleton ; tendons and ligaments	Wilkinson, Tracy?	Med Scis Inst LT
18	Monday	09-Feb-15	Lecture	17:00	18:00	Muscles as levers	Christie, Graham?	Med Scis Inst LT
18	Friday	13-Feb-15	Lecture	14:00	15:00	Motor units and movement	Peters, John	Med Scis Inst LT
18	Friday	13-Feb-15	Lecture	17:00	18:00	Neuromuscular reflexes	Peters, John	Med Scis Inst LT
19	Monday	16-Feb-15	Workshop gr01	09:00	10:30	Spinal reflexes	Hormuzdi, Sheriar	Old Med Schl 2.02B
19	Monday	16-Feb-15	Workshop gr02	10:30	12:00	Spinal reflexes	Hormuzdi, Sheriar	Old Med Schl 2.02B
19	Monday	16-Feb-15	Lecture	17:00	18:00	Exercise and neuromuscular function	Duncan, Audrey	Med Scis Inst LT
19	Friday	20-Feb-15	Lecture	14:00	15:00	Smooth muscle	Peters, John	Med Scis Inst LT
19	Friday	20-Feb-15	Lecture	17:00	18:00	Smooth muscle pharmacology	Peters, John	Med Scis Inst LT
20	Monday	23-Feb-15	Lecture	17:00	18:00	Structure of the cardiovascular system	Wilkinson, Tracy?	Med Scis Inst LT
20	Friday	27-Feb-15	Lecture	14:00	15:00	Pressure gradients and blood flow	Christie, Graham	Med Scis Inst LT
20	Friday	27-Feb-15	Lecture	17:00	18:00	The cardiac action potential	Christie, Graham	Med Scis Inst LT
21	Monday	02-Mar-15	Workshop Gr01	09:00	10:30	Human Physiology, paper analysis	Christie, Graham	Old Med Schl 2.02B
21	Monday	02-Mar-15	Workshop Gr02	10:30	12:00	Human Physiology, paper analysis	Christie, Graham	Old Med Schl 2.02B
21	Monday	02-Mar-15	Lecture	17:00	18:00	Control of heart rate, physiology	Christie, Graham	Med Scis Inst LT
21	Friday	06-Mar-15	Lecture	17:00	18:00	Cardiac Output-Starling's Law	Christie, Graham	Med Scis Inst LT
22	Monday	09-Mar-15	Lecture	17:00	18:00	The Electrocardiogram	Christie, Graham	Med Scis Inst LT
22	Friday	13-Mar-15	Lecture	14:00	15:00	Control of heart rate, pharmacology	Peters, John	Med Scis Inst LT

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23	Monday	16-Mar-15	Lecture	17:00	18:00	Monitoring of blood pressure (baroreceptors)	Peters, John	Med Scis Inst LT
23	Friday	20-Mar-15	Lecture	14:00	15:00	Control of blood pressure, role of the kidney	Peters, John	Med Scis Inst LT
23	Friday	20-Mar-15	Lecture	17:00	18:00	Control of blood pressure-peripheral resistance	Peters, John	Med Scis Inst LT
24	Monday	23-Mar-15	Lecture	17:00	18:00	The cardiac cycle	Christie, Graham	Med Scis Inst LT
24	Friday	27-Mar-15	Lecture	14:00	15:00	Disorders of the cardiovascular system	Peters, John	Med Scis Inst LT
24	Friday	27-Mar-15	Lecture	17:00	18:00	Exercise and the cardiovascular system	Weavers, Helen	Med Scis Inst LT
25	Monday	30-Mar-15	Workshop gr01	09:00	10:30	Drugs and cardiovascular function	Khan, Faisal	Old Med Schl 2.02B
25	Monday	30-Mar-15	Workshop gr02	10:30	12:00	Drugs and cardiovascular function	Khan, Faisal	Old Med Schl 2.02B
25	Friday	03-Apr-15	Lecture	14:00	15:00	Revision	Peters, John	Med Scis Inst LT
25	Friday	03-Apr-15	Lecture	17:00	18:00	Revision	Peters, John	Med Scis Inst LT

BS22002 Module Timetable

Week	Day	Date	Activity	Start	Finish	Location	Staff
15	Tue	20-Jan-15	Lecture 1	13:00	14:00	Med Scis Inst LT	Martin, David
15	Fri	23-Jan-15	Lecture 2	13:00	14:00	Med Scis Inst LT	Martin, David
15	Fri	23-Jan-15	Lecture 3	16:00	17:00	Med Scis Inst LT	Martin, David
16	Mon	26-Jan-15	Workshop 1 group A	09:00	10:30	Old Med Schl 2.02B	Martin, David
16	Mon	26-Jan-15	Workshop 1 group B	10:30	12:00	Old Med Schl 2.02B	Martin, David
16	Tue	27-Jan-15	Lecture 4	13:00	14:00	Med Scis Inst LT	TBC
16	Fri	30-Jan-15	Lecture 5	13:00	14:00	Med Scis Inst LT	TBC
16	Fri	30-Jan-15	Lecture 6	16:00	17:00	Med Scis Inst LT	TBC
17	Tue	03-Feb-15	Lecture 7	13:00	14:00	Med Scis Inst LT	TBC
17	Fri	06-Feb-15	Lecture 8	13:00	14:00	Med Scis Inst LT	TBC
17	Fri	06-Feb-15	Lecture 9	16:00	17:00	Med Scis Inst LT	TBC
18	Mon	09-Feb-15	Workshop 2 group A	09:00	10:30	Old Med Schl 2.02B	Morris, Linda
18	Mon	09-Feb-15	Workshop 2 group B	10:30	12:00	Old Med Schl 2.02B	Morris, Linda
18	Tue	10-Feb-15	Lecture 10	13:00	14:00	Med Scis Inst LT	Morris, Linda
18	Fri	13-Feb-15	Lecture 11	13:00	14:00	Med Scis Inst LT	Morris, Linda
18	Fri	13-Feb-15	Lecture 12	16:00	17:00	Med Scis Inst LT	Morris, Linda
19	Tue	17-Feb-15	Lecture 13	13:00	14:00	Med Scis Inst LT	Furrie, Elizabeth
19	Fri	20-Feb-15	Lecture 14	13:00	14:00	Med Scis Inst LT	Furrie, Elizabeth
19	Fri	20-Feb-15	Lecture 15	16:00	17:00	Med Scis Inst LT	Woof, Jennifer
20	Mon	23-Feb-15	SAQ practice grp B1	09:00	10:30	Tower Basement ITS E	TBC
20	Mon	23-Feb-15	Workshop 3 group A	09:00	11:00	Old Med Schl 2.02B	Woof, Jennifer,Furrie, Elizabeth
20	Mon	23-Feb-15	Workshop 3 group B	11:00	13:00	Old Med Schl 2.02B	Woof, Jennifer,Furrie, Elizabeth
20	Tue	24-Feb-15	Lecture 16	13:00	14:00	Med Scis Inst LT	Woof, Jennifer
20	Thu	26-Feb-15	SAQ practice grp B2	15:30	17:00	Tower Basement ITS E	TBC
20	Fri	27-Feb-15	Lecture 17	13:00	14:00	Med Scis Inst LT	Woof, Jennifer
20	Fri	27-Feb-15	Lecture 18	16:00	17:00	Med Scis Inst LT	Furrie, Elizabeth
21	Tue	03-Mar-15	Lecture 19	13:00	14:00	Med Scis Inst LT	TBC
21	Fri	06-Mar-15	Lecture 20	13:00	14:00	Med Scis Inst LT	TBC
21	Fri	06-Mar-15	Lecture 21	16:00	17:00	Med Scis Inst LT	TBC
22	Mon	09-Mar-15	Workshop 4 group A	09:00	11:00	Old Med Schl 2.02B	Woof, Jennifer,Furrie, Elizabeth
22	Mon	09-Mar-15	Workshop 4 group B	11:00	13:00	Old Med Schl 2.02B	Woof, Jennifer,Furrie, Elizabeth
22	Tue	10-Mar-15	Lecture 22	13:00	14:00	Med Scis Inst LT	Macfarlane, George

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22	Wed	11-Mar-15	SAQ practice grp A1	09:00	10:30	Tower Basement ITS E	TBC
22	Wed	11-Mar-15	SAQ practice grp A2	10:30	12:00	Tower Basement ITS E	TBC
22	Fri	13-Mar-15	Lecture 23	13:00	14:00	Med Scis Inst LT	Macfarlane, George
22	Fri	13-Mar-15	Lecture 24	16:00	17:00	Med Scis Inst LT	Macfarlane, George
23	Tue	17-Mar-15	Lecture 25	13:00	14:00	Med Scis Inst LT	Hay, Ronald
23	Fri	20-Mar-15	Lecture 26	13:00	14:00	Med Scis Inst LT	Hay, Ronald
23	Fri	20-Mar-15	Lecture 27	16:00	17:00	Med Scis Inst LT	Hay, Ronald
24	Mon	23-Mar-15	Workshop 5 group A	09:00	10:30	Old Med Schl 2.02B	Martin, David
24	Mon	23-Mar-15	Workshop 5 group B	10:30	12:00	Old Med Schl 2.02B	Martin, David
24	Tue	24-Mar-15	Lecture 28	13:00	14:00	Med Scis Inst LT	Birch, Paul
24	Fri	27-Mar-15	Lecture 29	13:00	14:00	Med Scis Inst LT	Birch, Paul
24	Fri	27-Mar-15	Lecture 30	16:00	17:00	Med Scis Inst LT	Birch, Paul