Welcome to the School of Biology

This handbook provides you with information about degrees taken either wholly or partly within the School of Biology. It is designed to be used alongside the ‘University Student Handbook’ which you can access at: http://www.st-andrews.ac.uk/studenthandbook/, and which contains all the University regulations relating to undergraduate study at St Andrews.

Where to go with questions in the School of Biology:

• Firstly, please take the time to read through this booklet, as it should answer most of your general questions.

• If you require further information, the Biology Teaching Office (bioteach@st-andrews.ac.uk), found on the first floor of the Biomolecular Sciences building, can deal with most general enquiries.

• If you are having academic difficulties with any particular module, then it is advisable to see the module organiser, or to speak to the lecturer if it is a specific question relating to his or her subject.

• Your Adviser of Studies is the main person and first port of call to contact with general or specific questions not answered in this booklet, relating to your overall performance or progress or your future plans. If you feel more comfortable speaking with another member of staff, you may do so.

• After seeing your Adviser of Studies, questions or difficulties may be brought to me as the Director of Teaching (biodot@st-andrews.ac.uk; 01334 463562); it is also the Director of Teaching who must be notified of any problems that are affecting your studies.

• The School of Biology operates an open door policy (we do not have specific office hours) and you should feel free to approach any one of us at any time with any major issues. Be aware that staff have teaching and research responsibilities that may take us out of our offices for much of the day, and e-mail is sometimes the most convenient means of contacting us to arrange a meeting.

We very much hope that you find your degree course to be stimulating and challenging and that you enjoy your studies within our School.

Dr Gerald Prescott, Director of Teaching

September 2017
# Table of Contents

## Undergraduate Handbook

1

## Welcome to the School of Biology

2

## Semester dates 2017-2018

8

- Semester 1: Martinmas Semester
- Semester 2: Candlemas Semester

## Key University Contacts

9

## School of Biology Contacts

10

- **Main School roles**
- **Pre-Honours Advisers of Studies**
- **Honours Advisers of Studies/Degree Controllers**
- **Advisers of Studies for Degrees taught jointly with other Schools**
- **Useful contacts outwith the School of Biology**

## School of Biology Building Information

12

- **Medical and Biological Sciences Building**
- **Carnegie wing of the Bute**
- **Sir Harold Mitchell Building**
- **Scottish Oceans Institute**
- **Biomolecular Sciences Building**
- **Library & Study Space**
- **The New Technology Centre**
- **Museum**

## Modules

13

- **Enrolment for modules and laboratory/field fees**

## Practical Classes and Tutorials

14

- **1000-level Modules**
- **2000-level Modules**
- **3000-level Modules**
- **4000-level Modules**
- **5000-level Modules**
- **Student Code of Conduct**
- **Expectations of students**

## Recording Devices in Lectures

20
# Communications

Absence from classes  
Absence from Examinations  
*Passing the module*

## Module results reporting codes:

Continuous Assessment  
- Pre-Honours  
- Junior Honours  
- Senior Honours  
- Referencing  
- *Plagiarism Detection Software*

Good Academic Practice  
- *Avoiding Academic misconduct*

Submission of Coursework  
- Extensions  
- Penalties for late submission  
- Word limits  
- Incorrect Submission  
- Printing and Binding  
- Feedback and Return of Coursework

Assessing your Progress

Common Reporting Scale (20-point)

Examinations  
- *Exam format*
  - 1000-level modules  
  - 2000-level modules  
  - 3000-level modules  
  - 4000-level modules  
- *Past Exam Papers*  
- *Illegible Exam Scripts*  
- *Illness during exam time*  
- *Calculators*  
- *Graphs and Diagrams*
Feedback on examinations

Reassessment of failed modules.
- 1000-level
- 2000-level
- 3000-level & 4000-level

Progression
- Progression to 2000-level
- Progression: Pre-Honours to Honours
- Requests for Review of Decision for Entry to Honours
- What if I don’t get in to Honours?
- Progression: Junior Honours to Senior Honours

Degree Regulations

Honours Classification

Deans’ List

Prizes and medals

Practical Work in Biology
- The use of animals in practical classes
- Requirements for practical classes

Healthy and Safety
- Laboratory Code of Practice
- Fieldwork/work outside the University of St Andrews

Ethics (UTREC)

School Seminar Programmes

Staff-student consultative committee

Module Questionnaires

Who can help when things go wrong?
- Module Handbooks
- Advice and Support Centre (ASC)
- Director of Teaching and Deputy Director of Teaching
- Adviser of Studies
- Open door policy
Special circumstances affecting your academic studies – ‘S’ Code
Academic Alert
Termination of Studies on Academic Grounds – Undergraduates
Academic Intervention
Leave of Absence (LOA)
Withdrawal from Studies
Academic appeals, complaints and disciplinary issues
Using the Right Procedure
Further guidance and support
Disability Support
Opportunities outside Semester time
Careers, Internships and work experience
Vacation studentships
Laidlaw Undergraduate Internship Program
Undergraduate Research Assistantship Scheme (URAS)
Advertisements posted in School of Biology buildings
Guidelines for Preparation and Presentation of Essays
Doing your research first
Making a plan of your answer to the question
Using your notes to assemble a coherent essay around the plan
Content
Presentation
Length and Depth of essays
Specific Points to note (arising from previous Honours essays):
References
General rules for citing
PRE-HONOURS MARK DESCRIPTORS 2017-18
HONOURS MARK DESCRIPTORS 2017-18
Treatment of Irrelevant Material at Honours and Pre-Honours
Practical Report assessment criteria
Laboratory Notebook assessment criteria 64
Research Proposal assessment criteria 66
Oral Presentation marking criteria 67
Proposed assessment criteria for Poster Presentation marking 68
Semester dates 2017-2018
https://www.st-andrews.ac.uk/semesterdates/

Semester 1: Martinmas Semester
Monday 18 September 2017 - Friday 22 December 2017

<table>
<thead>
<tr>
<th>Week</th>
<th>Week beginning</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-sessional</td>
<td>Monday 11 September 2017</td>
<td>Orientation week</td>
</tr>
<tr>
<td>Week 1</td>
<td>Monday 18 September 2017</td>
<td>Teaching begins</td>
</tr>
<tr>
<td>Week 2</td>
<td>Monday 25 September 2017</td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>Monday 2 October 2017</td>
<td></td>
</tr>
<tr>
<td>Week 4</td>
<td>Monday 9 October 2017</td>
<td></td>
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<tr>
<td>Week 5</td>
<td>Monday 16 October 2017</td>
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</tr>
<tr>
<td>Week 6</td>
<td>Monday 23 October 2017</td>
<td>Independent Learning</td>
</tr>
<tr>
<td>Week 7</td>
<td>Monday 30 October 2017</td>
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<tr>
<td>Week 8</td>
<td>Monday 6 November 2017</td>
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<td>Week 9</td>
<td>Monday 13 November 2017</td>
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<tr>
<td>Week 10</td>
<td>Monday 20 November 2017</td>
<td></td>
</tr>
<tr>
<td>Week 11</td>
<td>Monday 27 November 2017</td>
<td></td>
</tr>
<tr>
<td>Week 12</td>
<td>Monday 4 December 2017</td>
<td>Revision week</td>
</tr>
<tr>
<td>Week 13</td>
<td>Monday 11 December 2017</td>
<td>Semester 1 examinations</td>
</tr>
<tr>
<td>Week 14</td>
<td>Monday 18 December 2017</td>
<td>Semester 1 examinations</td>
</tr>
<tr>
<td>Vacation</td>
<td>Monday 25 December 2017</td>
<td>Christmas vacation</td>
</tr>
<tr>
<td>Vacation</td>
<td>Monday 1 January 2018</td>
<td>Christmas vacation</td>
</tr>
<tr>
<td>Inter-semester</td>
<td>Monday 8 January 2018</td>
<td></td>
</tr>
<tr>
<td>Inter-semester</td>
<td>Monday 15 January 2018</td>
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Semester 2: Candlemas Semester
Monday 29 January 2018 - Friday 25 May 2018

<table>
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<tr>
<th>Week</th>
<th>Week beginning</th>
<th>Events</th>
</tr>
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<tbody>
<tr>
<td>Inter-semester</td>
<td>Monday 22 January 2018</td>
<td></td>
</tr>
<tr>
<td>Week 1</td>
<td>Monday 29 January 2018</td>
<td>Teaching begins</td>
</tr>
<tr>
<td>Week 2</td>
<td>Monday 5 February 2018</td>
<td></td>
</tr>
<tr>
<td>Week 3</td>
<td>Monday 12 February 2018</td>
<td></td>
</tr>
</tbody>
</table>
Week 4  Monday 19 February 2018
Week 5  Monday 26 February 2018
Week 6  Monday 5 March 2018
Week 7  Monday 12 March 2018
Vacation  Monday 19 March 2018  Spring vacation
Vacation  Monday 26 March 2018  Spring vacation
Week 8  Monday 2 April 2018
Week 9  Monday 9 April 2018
Week 10  Monday 16 April 2018
Week 11  Monday 23 April 2018
Week 12  Monday 30 April 2018  Revision week
Week 13  Monday 7 May 2018  Revision week
      May Day Holiday: Mon 7 May
Week 14  Monday 14 May 2018  May examinations
Week 15  Monday 21 May 2018  May examinations

Graduation
Week beginning Monday 25 June 2018
View Graduation website

Reassessment period
Week beginning Monday 13 August 2018

Orientation Week is an integral part of the University semester and students are expected to
attend in St Andrews. Orientation Week information for new students is available on
https://synergy.st-andrews.ac.uk/biocurrentstudent/new-students/. Students are also
expected to be available for the entire examination period.
Junior Honours students may have field courses or reading parties in the fortnight prior to
Orientation week.

Key University Contacts
University Switchboard 01334 476161
Advice and Support Centre (ASC) 01334 462020
Pro Dean Advising Science Prodeansci-adv@st-andrews.ac.uk
School of Biology Contacts

A full list of the contact details, specific roles and interests of individual staff members are available via the School of Biology’s website (http://biology.st-andrews.ac.uk/).

Main School roles

**Head of School**
Professor Clare Peddie

**Deputy Head of School**
Professor Graeme Ruxton

**Director of Teaching**
Dr Gerald Prescott

**Director of Research**
Professor Frank Gunn-Moore

**Deputy Director of Teaching**
Dr Jacqueline Nairn

**Disability Co-ordinator**
Dr Jacqueline Nairn

**Examination Officer/ Assessment Co-ordinator**
Dr Verena Dietrich-Bischoff

**Admissions Officer (International)**
Prof Christian Rutz

**Admissions Officer (RUK, Home)**
Dr Stuart MacNeill

**Health and Safety Officer**
Donna Pierz-Fennell

**School President**
Miss Erin Phillips

**Director of Teaching**
Dr Gerald Prescott
biodot@st-andrews.ac.uk
01334 463562

**Teaching Administrators**
Mrs Sumit Bains
01334 463566

Mr Andy Cole
01334 463602

**Year Coordinators**

<table>
<thead>
<tr>
<th>Level</th>
<th>Coordinator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000-level</td>
<td>TBC</td>
</tr>
<tr>
<td>2000-level</td>
<td>Dr Verena Dietrich-Bischoff</td>
</tr>
<tr>
<td>3000-level</td>
<td>Dr Gerald Prescott</td>
</tr>
<tr>
<td>4000-level</td>
<td>Dr Anne Smith</td>
</tr>
</tbody>
</table>

**Contact for reporting Special Circumstances and/or advice on S coding**

Dr Gerald Prescott

**School of Biology Teaching Office:**
First floor, Biomolecular Sciences Building
bioteach@st-andrews.ac.uk
01334 46 3602/3566
Open: 9:00 – 13:00 and 14:00 – 17:00
Pre-Honours Advisers of Studies

Dr Andrew Blight
Dr Catherine Adamson
Dr Verena Dietrich-Bischoff
Dr Helder Ferreira
Dr Anne Smith
Dr Ildiko Somorjai
Dr Jens Tilsner

Honours Advisers of Studies/Degree Controllers

Behavioural Biology
Biochemistry
Biology
Cell Biology/Biology
Ecology and Conservation
Evolutionary Biology
Marine Biology
Molecular Biology
Zoology
MBiochem
MBiol Adviser
MMarBiol

Prof Sue Healy
Dr Jacqueline Nairn
Dr David Shuker
Dr Judith Sleeman
Prof Sue Healy
Prof Sue Healy
Dr Lars Boehme
Dr Stuart MacNeill
Prof Sue Healy
Dr Jacqueline Nairn
Dr Iain Matthews
Dr Simon Northridge

Advisers of Studies for Degrees taught jointly with other Schools

Biology with Psychology
Biomolecular Sciences
Biology and Economics
Biology and Psychology
Biology and Logic and Philosophy of Science
Biology with Languages
Environmental Biology & Geography
Biology & Geoscience
Overseas students (Erasmus/Socrates and JSA/JYA)

Dr Michael Webster
Dr Jacqueline Nairn
Dr Michael Webster
Dr Michael Webster
Dr Michael Webster
Dr Michael Webster
Dr Michael Webster
Dr Michael Webster
Dr Iain Matthews

Useful contacts outwith the School of Biology

Library: academic queries about science resources
Careers & employability for science students

Ms Vicki Cormie
Ms Pamela Andrews
School of Biology Building Information

Medical and Biological Sciences Building
The MEDICAL AND BIOLOGICAL SCIENCES BUILDING (MBSB) can be found on the North Haugh. The 1000- and 2000-level Biology teaching laboratories are located on the ground floor of this building.

Carnegie wing of the Bute
The CARNEGIE WING OF THE BUTE BUILDING, situated between South Street and Queens Terrace, is where some Junior Honours teaching is based.

Sir Harold Mitchell Building
The SIR HAROLD MITCHELL BUILDING and DYERS BRAE HOUSE (collectively termed HMB) are in the gardens to the south of Queens Terrace. This building houses the Centre for Biological Diversity.

Scottish Oceans Institute
The SCOTTISH OCEANS INSTITUTE (SOI; formerly the Gatty Marine Laboratory), on the East Sands beside Albany Park, is a marine research institute. Research takes place on the physiology and ecology of a wide variety of marine organisms. The Sea Mammal Research Unit building is also on this site.

Purdie Building
The Junior Honours laboratories for Biochemistry and Molecular Biology practical classes can be found nestled within Chemistry research space on the third floor.

Biomolecular Sciences Building
The BIOMOLECULAR SCIENCES BUILDING (commonly known as the BMS building) on the North Haugh forms the interface of Biochemistry and Chemistry. This houses research in molecular biology, virology, immunology and protein crystallography.

The Biology Teaching Office is located on the first floor of the Biomolecular Sciences Building.
Library & Study Space
A library facility and study space is available in the JF Allen Sciences Library on the first floor of the Physics Building for the use of all students in Biology, Physics and Medicine. Opening times for the library will be posted on the library door at the beginning of semester.
There is a quiet reading area with tables and comfortable chairs in the middle of the Bell-Pettigrew Museum in the Bute Building.
Science textbooks, monographs and journals are also available in the main University Library.
For further information on use of the University Library and Information Services, please see http://www.st-andrews.ac.uk/library/
Both the main University Library and JF Allen Library have their collections fully catalogued on the online SAULCAT reference system.

The New Technology Centre
A student study and social space will be available in the New Technology Centre from approximately October 2017. The space will have a number of working spaces with power supplies and wireless internet access and a social space for more relaxed conversations and working. The study space will be open during normal working hours.

Museum
The Bell-Pettigrew Zoological Museum (http://biology.st-andrews.ac.uk/bellpet/) in the Bute Building contains a wide range of exhibits showing the diversity of the animal kingdom, and is used in several practical classes. The museum has wireless internet access and is available for use as a reading room during working hours.

Modules
Enrolment for modules and laboratory/field fees
All students are required to pre-advice through MySaint, https://mysaint.st-andrews.ac.uk/uPortal/f/welcome/normal/render.uP and will see their Adviser of Studies at the beginning of each semester.
Failure to Complete Academic Advising

The university has a policy, which formalises how the University deals with students who fail to complete the academic advising process. Monday of week 3 is established as the hard deadline for being present in St Andrews and competing academic advising. [https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/FailuretoCompleteAcademicAdvising.pdf](https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/FailuretoCompleteAcademicAdvising.pdf)

All students who wish to study 1000- or 2000-level Biology modules must pay a laboratory fee through the on-line shop [http://onlineshop.st-andrews.ac.uk/](http://onlineshop.st-andrews.ac.uk/).

You should enrol in the Biology Teaching Lab (Room 142) in the MBSB on either Tuesday or Wednesday of orientation week, after you have seen your Adviser of Studies.

At 3000-level, each of the residential courses attracts a fee. At 4000-level, your project studies are heavily supported by the School of Biology. There are also available optional field courses that do attract fees at cost.

Practical Classes and Tutorials

All practical classes and tutorials in the School of Biology are compulsory.

Practical skills are key for understanding the subject you are studying and for developing essential practical skills that underlie the discipline. Information on practical classes for each module will be found in the module handbook.

Tutorials are an important way of developing your skills and knowledge within Biology. At 1st year, tutorials are embedded with the modules. At 2nd and 3rd year, there is a dedicated tutorial programme that sits outside modules. These tutorials develop essential scientific and transferable skills and your tutor will likely act as an important referee when you come to apply for internships and jobs. At 4th year, all modules are taught in small groups and all sessions are compulsory.
1000-level Modules
There are two 1000-level modules in Biology introducing you to the fundamentals of biology. Previous knowledge of biology is not required for these modules but you will be required to draw on your knowledge of the basic sciences. University regulations allow you to enter the University with passes that do not include biology, although you must have done sufficient chemistry, physics and mathematics.

These modules are taught in the following semesters:

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology I BL1101</td>
<td>Biology II BL1102</td>
</tr>
<tr>
<td>Dr Peter Coote</td>
<td>TBC</td>
</tr>
</tbody>
</table>

Passes in BL1101 and BL1102 are required for entry to the 2000-level modules in Biology. All students pursuing a degree programme within the School of Biology must pass both of these modules, thus acquiring 40 credits of 1000-level Biology.

Full details (including credit weighting, class hours, assessment method and description) of all biology (BL) modules can be found in the on-line course catalogue:
https://www.st-andrews.ac.uk/coursecatalogue/ug/

2000-level Modules
There are eleven 2000-level modules in Biology. Science students may take up to any four together in one semester as part of their degree, since the timetables are compatible; Arts students may take only two in any one semester. Students studying for a Biology degree must take BL2300 Research Methods in Biology in Semester 1.

These modules are taught in the following sequence
<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Methods in Biology (BL2300)</strong></td>
<td><strong>Cell Systems (BL2305)</strong></td>
</tr>
<tr>
<td>Dr Verena Dietrich-Bischoff</td>
<td>Dr Gerald Prescott</td>
</tr>
<tr>
<td><strong>Cell Biology (BL2301)</strong></td>
<td><strong>Biochemistry (BL2306)</strong></td>
</tr>
<tr>
<td>Dr Judith Sleeman</td>
<td>Dr Jacqueline Nairn</td>
</tr>
<tr>
<td><strong>Molecular Biology (BL2302)</strong></td>
<td><strong>Ecology (BL2307)</strong></td>
</tr>
<tr>
<td>Dr Helder Ferreira</td>
<td>Prof Oscar Gaggiotti</td>
</tr>
<tr>
<td><strong>Evolutionary Biology (BL2303)</strong></td>
<td><strong>Vertebrate Zoology (BL2308)</strong></td>
</tr>
<tr>
<td>Prof Michael Ritchie</td>
<td>Dr Verena Dietrich-Bischoff</td>
</tr>
<tr>
<td><strong>Invertebrate Zoology (BL2304)</strong></td>
<td><strong>Applied Molecular Biology (BL2309)</strong></td>
</tr>
<tr>
<td>Dr Bill Heitler</td>
<td>Dr Catherine Adamson</td>
</tr>
<tr>
<td></td>
<td><strong>Comparative Physiology (BL2310)</strong></td>
</tr>
<tr>
<td></td>
<td>Prof Sue Healy</td>
</tr>
</tbody>
</table>

**Lecture and Practical times of Biology 2000-level modules**

Lecture and Practical times for Biology 2000-level modules are listed in the Course Catalogue. There will be 3 lectures one week and 2 lectures the following week, or vice versa, for all Biology 2000-level modules, with the exception of Research Methods in Biology (see course catalogue). All Biology 2000-level modules will have 1 practical every two weeks, with the exception of Research Methods in Biology (see course catalogue).

When you select your 2000-level modules, keep in mind the programme prerequisites for specific Honours degrees. The School of Biology offers a variety of Single Honours and a number of Joint Honours degrees combining Honours modules taught by the School of Biology with modules taught in other Schools.

The Degree programmes and their programme prerequisites can be found in the online course catalogue. Candidates for Honours degrees should note that some Honours modules also have specific entrance requirements - see the course catalogue and talk to your Adviser.
3000-level Modules

School of Biology Enrolment for classes and laboratory fees

All students are required to pre-advise through MySaint, https://mysaint.st-andrews.ac.uk/uPortal/f/welcome/normal/render.uP and will see their adviser of studies at the beginning of each semester.

All Junior Honours students must pay a laboratory fee of £10, to cover the whole year. If you have any questions about the laboratory fees or arrangements, please contact Penny Hood, Teaching Technician, who is based in the office next door to the Biology Teaching lab.

All students entering Honours in the School are required to take the BL3320 Practical Statistics in Biology module; please make sure you pre-advise into this module in May along with your other core 3000-level modules for your degree programme.

In addition, all students taking any Honours degree in the School of Biology are required to attend either BL3000 Field Course or BL3321 Advanced Critical Analysis Reading Party or BL3322 Basic Biochemistry Laboratory. **These courses take place during the summer vacation usually just prior to Orientation week; you MUST ensure you are available to take the course if it is required as part of your degree programme.**

Students intending to enter Biochemistry, Molecular Biology or Cell Biology Honours degrees (or taking certain 3000-level modules) should attend compulsory Radiation Protection and Safety courses. These will be run during orientation week and details will be sent out.

For those degree courses in which choice of modules is allowed, your Degree Controller/Adviser must approve your choice.

3000-level Modules

Semester 1

All students take:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BL3320</td>
<td>Statistical and Quantitative Skills for Biologists</td>
<td>10</td>
</tr>
</tbody>
</table>
All students choose one from:

- BL3000 Field Course 10 credits
- BL3321 Advanced Critical Analysis Reading Party 10 credits
- BL3322 Basic Biochemistry Laboratory 10 credits

All Single Honours students choose two (20-credit) modules, depending on degree programme, from:

- BL3301 Protein Structure & Function OR BL3323 Terrestrial Zoology
- BL3302 Gene Regulation & Expression OR BL3308 Aquatic Ecology
- PN3313 Neuroscience OR BL3307 Evolution

**Semester 2**

All Single Honours students choose three, depending on degree programme, from:

- BL3303 Membranes & Cell Communication OR BL3319 Animal Behaviour
- BL3310 Metabolism and Bioenergetics OR BL3318 Biology of Marine Organisms OR BL3316 Animal Plant Interactions
- BL3311 Infection and Disease OR BL3309 Ecosystems and Conservation
- PN3312 Pharmacology OR BL3315 Developmental Biology

**4000-level Modules**

All 4000-level Biology modules (apart from the project modules) are worth 15 credits.

Students must either enrol for BL4201 (Experimental Research Project) and FOUR 15-credit modules, or BL4200 (Literature Project) and SIX 15-credit modules. The selection and allocation of projects is carried out towards the end of semester 2 of your JH year. More details will be given closer to the time, but it is wise to start thinking about areas of interest as you proceed through your JH year.

Where there are choices between modules in the programmes detailed in the course catalogue, some options may have pre-requisites so that the Pre-Honours or JH modules taken may limit choices.

*The availability of 4000-level modules in a given year in the School of Biology will be dependent on sufficient student demand. The School operates a capping process for modules at 4000-level.*
5000-level Modules

Students studying on a BSc Single Honours degree can take up to TWO 15-credit 5000-level modules in their 4th year. Students on the MBiochem, MBiol and MMarBiol degree programmes must take at least 90-credits in 5000-level modules, including those defined as compulsory for the degree programme.

Student Code of Conduct

Expectations of students

- It is expected that you attend all of the lectures given in the module. Lecturers cannot be expected to reteach material taught in lectures. It is clear to School of Biology staff that non-attendance at lectures leads to poor performance in examinations.
- It is expected for students to have all electronic devices set to silent and non-vibrate whilst in class.
- Laptops are permitted in taught classes (lectures, tutorials and practical classes) for taking notes and gaining access to material directly relevant to the lecture ONLY.
- If you are late for a lecture, please enter as quietly as possible (by the rear door if possible). It is respectful to apologise for your lateness at the end of the lecture.
- It is expected that you fully engage with all activities (both assessed and non-assessed) as part of your learning experience.
- It is expected that you will let someone in the School of Biology (Adviser of Studies or Director of Teaching or Module Organiser) know if you are having problems that are affecting your academic studies. The sooner we know about any issues, the sooner we can do something to help. It is difficult to make allowances retrospectively.
- It is expected that, whilst we often encourage open discussion between students about your work, that you do not make available your work or the work of others to fellow students in electronic format, e.g. on a data stick or left on a public/shared desktop. To do so, puts temptation to commit academic misconduct in front of your peers, and can in itself constitute academic misconduct. If you are in any doubt about the appropriateness of your actions, ASK.
Recording Devices in Lectures
If you have a disability or some medical condition which means that you are unable to take
notes in lectures, you may seek permission from Student Services to use a voice recorder or
other computer-based device to record lectures and/or tutorials. If you are not authorised by
Student Services to record lectures then you must request permission from the relevant
academic member of staff prior to the lecture taking place. More information is available at:-
https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/recording-lectures.pdf

Communications
Many module organisers use e-mail to contact you, so please check this regularly.
Students are required by University regulations to check email every 48 hours during the
week as email is recognised as an official means of communication within the University.
There will be regular e-mail updates on general student matters from the Biology Teaching
Office; we will try to keep these to a maximum of once per week.
When emailing a member of staff, please use your University of St Andrews email account
and include your full name and matriculation number.
All modules will have an online module handbook and MMS site where updates on module
arrangements and lecture outlines/handouts will be posted. Check these sites regularly.

Absence from classes
Attendance is a basic assessment requirement for credit award, and failure to attend classes or
meetings with academic staff may result in your losing the right to be assessed in that module.
Please ensure that you are familiar with the 'Academic Alert' policy as stated elsewhere in this
handbook. If you have missed timetabled classes/events or any other compulsory elements of
the module due to illness or an unavoidable pre-arranged event or appointment, you must
complete a Self Certificate of Absence form as soon as possible. Please go to http://mysaint.st-
andrews.ac.uk/, the relevant section can be found under ‘My Details’.
Under certain circumstances, Schools may request further documentation in addition to the
Self Certificate. In this case, students should contact Student Services in order to organise the
appropriate documentation. If you submit more than three Self Certificates in a single
semester, or if the period of absence extends to more than two weeks, you may be contacted
by Student Services, the relevant Pro Dean, or by an appropriate member of staff in your School.

Completion of a Self Certificate is not an acceptable substitute for contacting your tutors well in advance if you have to be absent. Advance notice of absence is acceptable only for good reason (for example, a hospital appointment or job interview). It is your responsibility to contact the appropriate member of staff to complete any remedial work necessary.

If you are an international student (non-EEA nationals only), you will be affected by recent changes introduced by the UK in relation to immigration rules and visas. The University is now legally bound to report to the UKVI any student who fails to enrol on a module or programme of study, or who fails to attend, or who discontinues their studies.

Absence from Examinations

Absence from Examinations due to illness or any other unavoidable reason should be reported by submitting a Self Certificate of Absence form as soon as you are able to do so, preferably before the examination is due to take place and in any case no later than three days after the examination. You must contact the School responsible for the module being examined in order to request alternative arrangements, which are at the discretion of the School. You are only required to notify the University Examinations Officer if there is a problem submitting the self-certificate.

Contact:
Examinations Officer
The Old Burgh School, Abbey Walk
Telephone: 01334 464100
Email: examoff@st-andrews.ac.uk

Assessment

Passing the module

At 1000 and 2000 level, you are required to achieve ≥ Grade 7.0 in the continuous assessment, ≥ Grade 7.0 in the degree examination and ≥ Grade 7.0 overall to pass the module.

At Honours (3000, 4000 and 5000-level), you are required to achieve ≥ Grade 7.0 overall to pass the module.
Module results reporting codes:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0X</td>
<td>No permission to proceed</td>
</tr>
<tr>
<td>0D</td>
<td>Deferred assessment</td>
</tr>
<tr>
<td>0Z</td>
<td>Result undecided: the result may be unresolved due to mitigating circumstances, or for some other valid reason. This is a temporary code and will be changed to one of the other definitive codes on the list as soon as the matter is resolved.</td>
</tr>
<tr>
<td>7.0 - 20.0</td>
<td>Pass</td>
</tr>
<tr>
<td>4.0 - 6.9</td>
<td>Fail (with right to reassessment)</td>
</tr>
<tr>
<td>0 - 3.9</td>
<td>Fail (with no right to reassessment)</td>
</tr>
<tr>
<td>E</td>
<td>Identification that modules taken were studied and assessed abroad and the final mark converted to the St Andrews reporting scale.</td>
</tr>
</tbody>
</table>

Continuous Assessment

All continuous assessment work should be submitted bearing only your matriculation number, not your name.

Pre-Honours

At Pre-Honours, the continuous assessment component of the module will consist of no more than FOUR items. All items of continuous assessment must be submitted, to an appropriate standard (submitting an assignment containing just a title is not sufficient for example), in order to fulfil the requirements of the module.

At Pre-Honours, the marks for each item of continuous assessment (CA) are recorded as grades on the 20-grade point common reporting scale. Each student’s marks are averaged to generate their final continuous assessment mark for the module. Any items of work for which an appropriate self-certificate has been presented may be excused, up to a total maximum of 20% of the continuous assessment, but this can only happen at the discretion of the module organiser.
Note, however, that the module organiser has the right to ask for the completion of an alternative assessment to make up for the missed work. See also penalties for late submission later in this handbook.

All grades can be subject to final mapping at the Module Board should the External Examiner request it, and students should be aware that whilst the reported grade is a good indication of performance it may still be subject to modification.

**Junior Honours**

At Junior Honours level, a maximum of **TWO** Continuous Assessment marks should be generated on the 20-grade point scale. The final CA mark is the weighted mean of these grades. The marks for each item of work will be recorded as a whole grade point whilst the mean CA mark is recorded to one decimal grade point. All items must be submitted in order to fulfil the requirements of the module. You cannot be excused any piece of continuous assessment work at Honours level; if you are ill or absent from class then you must complete an alternative assessment set by the module organiser, or appropriate member of staff.

The final module grade is 34% Continuous Assessment and 66% from the examination and this final grade is reported to the University to one decimal grade point.

**NB.** Because practical work will also have to be handed in, you should prepare your formal practical write-ups in loose leaf form and only use bound laboratory books for day-to-day working, so that you do not have to do without them while your practical classes are being marked.  

Please note that attendance at **practical classes** is **essential and compulsory**. This includes all field visits and outings arranged as part of the module. You may lose credit for the module for non-attendance, even if a visit or outing is not formally assessed.

**Senior Honours**

There is no set format for the assessment of Senior Honours modules. Some SH module grades will be determined by CA only, whilst other modules may include an exam. As in JH, you cannot be excused any piece of assessment work at SH level; if you are ill or absent from class,
then you must complete an alternative assessment set by the module organiser, or appropriate member of staff.

**Referencing**

The reference style you should use for all pieces of work completed for the School of Biology is the **Harvard Referencing system**. If you are unsure of what the nuances of this system are, then there are very good guides available online.

The library produces a referencing style guide, see [http://libguides.st-andrews.ac.uk/Referencing_styles](http://libguides.st-andrews.ac.uk/Referencing_styles)

**Plagiarism Detection Software**

All components of the CA submitted electronically will be screened by the University’s electronic plagiarism detection system through electronic submission on MMS.

**Good Academic Practice**

Academic integrity is fundamental to the values promoted by the University. It is important that all students are judged on their ability, and no student will be allowed unfairly to take an advantage over others, to affect the security and integrity of the assessment process, or to diminish the reliability and quality of a University of St Andrews degree. All work submitted by students is expected to represent good academic practice.

You should be aware that the University takes academic misconduct offences extremely seriously and penalties for academic misconduct can be severe.

The University’s Good Academic Practice policy covers the behaviour of both undergraduate and postgraduate students. The full University policy and procedure, as well as a helpful guide for students is available from:


Students who are unsure about the correct presentation of academic material should approach their tutors, and may also contact CAPOD for training.
Avoiding Academic misconduct

In addition to the advice given online, the School of Biology would like to highlight that:

1. In the process of writing, NEVER EVER be tempted to cut and paste information or text from other documents or webpages into your work – even if the intention is to rewrite it in your own words later. There is a real risk that you forget to do so or forget which bits of the document are your own words or those of another writer.

2. NEVER share your work (data analysis, Excel spreadsheets, or Word documents) electronically with a fellow student. A student giving work in this way is just as guilty of academic misconduct as a student using the work. Protect your work, never leave it on desktops of shared computers and guard data sticks with extreme care.

Submission of Coursework

All coursework that requires assessment must be deposited in the location stated by the module organiser (e.g. either via MMS or the appropriately labelled section of the post boxes by the Teaching Office in the Biomolecular Sciences Building). Students must also submit the work in the correct format (if an e-copy is required, a paper copy will not be acceptable). Make sure you know the deadline for each piece of work. In addition, make sure all work handed in is clearly labelled with your matriculation number, module code, assignment title and the name of the person setting the work. Clear deadlines for the submission date and time will be given in the relevant course literature and on MMS. All late submissions of coursework that does not require electronic submission should be made via the late submissions box in the Biomolecular Science Building (beside the Teaching Office).

Extensions

Extensions can ONLY be granted on the grounds of ill health or special circumstances (and in all cases should be requested before the deadline, not after) and with appropriate supporting evidence. If granted, there is no grade point penalty. You must contact the Module Organiser or the Director of Teaching stating the reason for the request for an extension. If you are in any doubt, contact the Director of Teaching regarding the delay to your studies as soon as you can.
**Penalties for late submission**

If work is submitted late, there will be a strict penalty applied of 1 grade point per day, or part thereof.

At Pre-Honours and at Honours level, the late penalty is 1 mark per day (or part thereof).

Every day of the week will be considered as counting towards a late penalty. This rule will apply to all holidays (public and University) and includes weekends, with Saturday and Sunday each counting as one day. Work submitted up to 14 days late will be marked and will receive the appropriate late penalty. Work submitted later than 14 days from the agreed submission date will be graded 0, you will however be able to receive feedback on the work.

You must endeavour to contact the module organiser before the submission deadline to explain the reason for lateness. The School Teaching Office will keep a record of all self-certificates, and more than two late submissions may be followed up by the Director of Teaching or Student Services. You may be asked to provide more formal certification if you have a record of frequent self-certification - so please do not abuse the system.

**Word limits**

A written coursework assignment may have a specified length in number of words, either as an indicative guideline, or as a requirement enforced by penalty. Failure to adhere to a required word length is penalised according to a scheme specified for the assignment. The penalty scheme is chosen according to the nature of the module and the particular assignment.

In the School of Biology students are permitted to submit work that is 10% over the word limit ascribed to a piece of work, without incurring a penalty, unless expressly prohibited in the relevant module literature (module handbook). Thereafter, the marker may deduct 1 grade point for each additional 10% over the word limit.

See [https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/penalties.pdf](https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/penalties.pdf) for the university policy on penalties for late work and/or work of incorrect length.
Incorrect Submission

After you upload an item of coursework to the MMS you will immediately be sent an email containing an electronic receipt, and this will include a link to the submitted work. You are STRONGLY recommended to re-open your file using this link to check that you have submitted the correct file and that it opens as expected.

If you inadvertently submit the wrong file and you realize this before the deadline has passed, then the MMS allows you to withdraw your incorrect file and re-submit the correct one up until the time of the deadline. To do this, click the box all the way to the right of your coursework row (in the column that says “Select”) and then click “Delete Selected Files”. You can then upload a new file.

If you realize that you have submitted the wrong file after the deadline has passed, then you should immediately e-mail the correct file to the Module Organizer, who will upload that file to the MMS on your behalf to replace the original. However, be aware that in this situation late penalties WILL accrue, with the time of submission being regarded as the time of arrival of the e-mail with the correct file attached.

Language Correction

If you have received any help with your coursework (e.g. proofreading or language correction) you are now required to explicitly acknowledge that help in the following signed declaration at the front of the submitted work:

‘I, [INSERT MATRICULATION NUMBER], received particular assistance in the writing of this work in respect of matters of grammar, style, vocabulary, spelling or punctuation.

The assistance was provided by (delete as appropriate):

• A member of the Academic Staff
• A non-academic member of Staff
• A fellow Student

(If you have a registered disability with an allowance for a proofreader, then please check with Student Services as to how the above policy applies to you).

Suspected use of non-permissible types of adjustment will be treated as plagiarism

(See Policy on Language Correction online for more details).
**Printing and Binding**

The University’s Print & Design Unit is ideally set up to print and/or bind your dissertation or thesis. You can send your material in PDF format (with a note of pages to be printed in colour) to: printanddesign@st-andrews.ac.uk and then they will be in touch when your job is ready. Price lists and further information: www.st-andrews.ac.uk/printanddesign/

**Feedback and Return of Coursework**

Staff in the School of Biology are asked to return all marks and feedback to students within 15 working days of coursework submission.

Students will receive feedback on any work that they have submitted. Feedback will give you advice that will guide you in improving your learning and future performance. Feedback opportunities vary from school to school but can include individual face-to-face discussion, written commentaries on work or electronic feedback, for example through Moodle or MMS.

Staff in the School of Biology aim to provide feedback and provisional grades in a timely manner for all assessments. It should be noted that, as part of our quality assurance processes, all grades reported on MMS are provisional until they are approved at Module Exam Boards.

**Assessing your Progress**

As well as giving you written comments on your work, staff assess each piece of coursework in terms of the University’s 20-point grading system. This gives you some idea of your standard, but be careful to interpret the marks cautiously. It is easier to do well in coursework than in exams; a string of good coursework marks does not necessarily mean that you are heading for an equally good module grade. Please make sure that you download or collect your graded work once you have been prompted to do so as it is important to read the feedback on your work so that you can then find out where you went wrong, and what you did well. You can then build on that knowledge as you continue through the module, and the School. You will normally be assessed by written examinations at the end of EACH SEMESTER (see below). This will provide you with further feedback on your progress.
You must see your Adviser of Studies at the start of each academic year to discuss your work in the previous year, any problems that have arisen, and your plans for after you graduate. In particular, your Adviser of Studies at Honours (the Degree Controller) is your main point of contact with the staff in Honours and it is important that he or she gets to know you and your work well, to be able to write references for you when you apply for jobs or other postgraduate positions.

**Common Reporting Scale (20-point)**

The University uses a 20-point Common Reporting Scale for grades (i.e. a 20-point basic scale reported to one decimal point for final module grades). Details of the Common Reporting Scale can be found at [https://www.st-andrews.ac.uk/staff/teaching/examinations/scale/](https://www.st-andrews.ac.uk/staff/teaching/examinations/scale/)

**Examinations**

Each of the modules that you take will be assessed by continuous assessment and a degree examination at the end of the semester in which the module is taught, the exception being some 4000-level modules. If you satisfactorily complete the work of the module, you will receive the credits, which will accumulate towards your degree. You will also receive a classification of the quality of the work that you have achieved on the module, which will be in the form of the 20-point grade system.

**Exam format**

**1000-level modules**

At 1000 level, the examinations take the format of TEN one-page questions (2 hours) of which the student should answer NINE. Each question is equally weighted.

**2000-level modules**

At 2000 level, papers (2-hours) consist of three sections:

Section A asks the student to complete ONE essay questions from a choice of three (40 minutes, accounting for one-third of the overall mark).

Section B will contain TWENTY Multiple Choice Questions (MCQs) or FOUR short answer questions that are compulsory (40 minutes, accounting for one-third of the overall mark).
Section C will contain ONE compulsory problem-solving/analytical question (40 minutes, accounting for one-third of the overall mark).

3000-level modules
The paper (3 hours) will consist of three sections: Sections A and B will each contain two essay questions from which the students must answer one in each in section. Section C will contain two numerical/deductive questions from which the students must answer one. Each question carries equal weight.

4000-level modules
The wide variety of assessment methods demands flexibility in exam format. These formats will be reviewed by the School of Biology Teaching Committee.

Past Exam Papers
Past exam papers are available through MySaint, see:
www.st-andrews.ac.uk/students/academic/Examinations/pastpapers/

Illegible Exam Scripts
It is your responsibility to ensure that your handwritten answers provided in examination scripts are legible and can be read by the markers. If a script cannot be read by the marker then this could result in a delay in confirming your module grade. You may be charged for a transcription service and could be required to return to the School(s) concerned in order to transcribe the script. If you have already left St Andrews then you will have to bear the costs of any return travel to the University. More information is available at: https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/illegiblescripts.pdf

Illness during exam time
It is quite normal to feel nervous before exams, and this can lead to symptoms such as headache, queasy stomach, poor sleep etc. It is best not to worry too much about this – remember that many of your classmates will have the same problem, and it is very unlikely to affect your performance. If things are more serious than that, then contact Student Services who run support sessions for students experiencing significant exam anxiety.
If you are genuinely too ill to sit the exam on the set date, or if a non-medical but serious incident prevents this, then you can apply to have your exam deferred. However, deferral is a serious issue; it is NOT automatically granted, and might only be allowed if you can produce medical or other external documentation to support your case. Deferred exams are sat either at the end of the current exam diet, or in the August re-assessment diet, depending on the time scale of the cause of the deferral.

You should always take action BEFORE you sit the exam, since deferral is not intended as a remedy for simply poor exam performance. If you notify the School of an issue after the event, it is VERY unlikely that it will be taken into account without exceptional justification. You can, of course, at any time seek advice from Student Services or a member of the School staff.

The procedure if you expect to miss an exam and wish to defer is 1) contact the School Teaching Office by phone ((01334) 463602) or e-mail (bioteach@st-andrews.ac.uk), 2) complete and submit a Self Certificate, 3) organise the production of the necessary external documentation to support your case.

Please note, you may be required to pay a fee, typically around £30, to obtain medical documentation from your GP. The University’s policy on Deferred Assessment can be found within the following document https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/APP.pdf

**Calculators**

You are expected to provide your own calculator for any exam in which it might be needed (or even useful). Your calculator should have the standard scientific functions (and, of course, you should know how to use these). The University does not allow programmable or graphical calculators, so if you have any doubt about whether yours is suitable, please check with the Teaching Office in advance.

**Graphs and Diagrams**

You are advised to take a pencil and ruler and a small set of coloured pens/pencils with you to each exam in case you need to draw a graph or diagram. If a graph or diagram is specifically
required by the question, then you should assume that marks will be given for neatness and clarity. However, even if not specifically required, many (arguably most) answers can be improved by including one or more appropriate diagrams.

**The Usual Stuff**

The usual exam advice applies. Always read the question carefully and make sure that you answer all aspects of it. If you have an hour to answer a question, it is sensible to spend a few minutes thinking and planning, before you actually start writing the answer. Organisation and structure are amongst the criteria for which marks are awarded, so planning time is definitely not wasted time. ALWAYS attempt every question that you are required to answer; a sure-fire way to receive zero is to write nothing. Even very brief and incomplete answers will usually gain you a few marks, which will be better for your average than a zero. If you answer more than the required number of questions, we will mark them all and give you the highest marks compatible with any question paper sectioning – but this is not a recommended strategy.

**Feedback on examinations**

Feedback on examination performance is typically provided as detailed feedback from a member of academic staff, who will discuss your examination scripts with you. No fee is charged for this type of feedback. Students are however also entitled to request a hard copy of any of their own completed examination scripts. If a photocopy of the script is required for personal reference, please contact your School and, on payment of a fee of £10 per examination script, a photocopy will be provided for you within five working days. Such requests should be made by the end of Week 3 of the semester that follows the examination diet.

**Reassessment of failed modules.**

Reassessment of a failed module is permitted if the module grade awarded is between 4.0 and 6.9 (inclusive). Grades reported as less than 4.0 do not allow you to take a resit and the module (or a substitute module) must be retaken in its entirety the following year.
1000-level
Reassessment of 1000-level modules is by examination in the resit diet. The Continuous Assessment grade is included as 50% of the module grade. Exceptionally, the Continuous Assessment grade may be discounted at the discretion of the Director of Teaching and in consultation with the External Examiner.

2000-level
Reassessment of 2000-level modules follows the following scheme:

- 2-Hour Written Examination = 50%, Existing Coursework = 50% (if Exam failed)
- Existing Examination = 50%, New Coursework = 50% (if Coursework failed)
- 2-hour Written Examination = 100% (if coursework and exam failed)
- 2-hour Written Examination = 100% (for Qualified Honours Entry)

3000-level & 4000-level
Reassessment of Honours-level modules is by arrangement with the Director of Teaching and at the discretion of the Module Board. Where examinations are involved, reassessment normally involves a resit of the examination. Reassessed modules at Honours level are capped at grade 7.0.

Progression

Progression to 2000-level
Progression from 1000-level to 2000-level Biology is dependent on passing both BL1101 and BL1102 and gaining 80 credits in the year.

Progression: Pre-Honours to Honours
Entry to the BSc Honours programmes in the School of Biology is automatically granted for students gaining an average of grade 11 or better in the FOUR PRE-REQUISITE 2000-level modules for the degree programme. Entry to the Integrated Master’s in Biochemistry (MBiochem), Biology (MBiol) and Marine Biology (MMarBiol) degree is automatically granted for students gaining an average grade of 15 across their requisite 2000-level Biology modules. Students permitted automatic entry to Honours will only be permitted to trail a maximum of 30 Pre-Honours credits and one module into Honours.
To find out which modules are prerequisite for a specific degree programme, please consult the Course Catalogue. An average of grade 11 in any four 2000-level Biology modules grants entry to the Biology degree programme.

Students who do not achieve automatic Honours entry in the School of Biology as outlined above may still enter Honours within the School of Biology through the Qualified Entry to Honours route. Students applying for Qualified Entry to Honours in the School of Biology must:

a) Be eligible for reassessment with a grade between 4.0 and 10.9; and  
b) Take the requisite entrance examinations and achieve a grade of 13.5 for Honours Entry in the module(s) retaken.

Students are not permitted to trail any credits on a Qualified Entry route.

The Honours entrance exam for the School of Biology will comprise the re-assessment examination paper for modules to be retaken and will take place in the August re-assessment diet.

The University’s Honours entry policy can be found at:  
https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/honsentry.pdf

The School of Biology has no discretion on student applications for Entry to Honours. If you have any concerns regarding Entry to Honours, please contact your Adviser of Studies or the Director of Teaching as soon as possible.

Requests for Review of Decision for Entry to Honours

Students who fail to meet the requirements for Entry to Honours and are consequently refused entry to their chosen degree programme may be eligible to request a review of the decision. For additional information and a list of admissible grounds for requesting a review please see https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/HonsReview.pdf
What if I don’t get in to Honours?
Hopefully you will be successful in securing a place in Honours in the School of your choice. If you are unsuccessful in obtaining a place in Honours in the School of your choice, you will be registered as a General degree student.
As with all academic matters, the students’ right to appeal Entry to Honours decisions remains.

Progression: Junior Honours to Senior Honours
Your performance during the Junior Honours year will be monitored, and in order to progress to the Senior Honours year you must achieve full credits on all of the modules that you take and pass the modules at a sufficient standard to proceed to the Senior Honours year. If, for any reason, we are concerned about your progress during your Honours years, it is possible that we will ask you to attend a review meeting with the Director of Teaching.

Degree Regulations
A regulatory structure determined by Senate and Court governs the award of all degrees. Undergraduate and Postgraduate Resolutions and Regulations are available at
https://www.st-andrews.ac.uk/students/rules/ugsenateregulations/ and
https://www.st-andrews.ac.uk/pgstudents/rules/pgsenateregulations/.

Honours Classification
The University applies a common formula for the calculation of the award of Honours classifications. Degrees are classified using a credit-weighted calculation of grades achieved for Honours-level modules (3000 level and above) taken during an approved Honours programme. Full details of the University’s Honours Classification algorithm can be found at:
https://www.st-andrews.ac.uk/staff/teaching/examinations/honours/

There are no discretionary classification border zones and only one decimal point is used in calculations of means and medians. There is an opportunity for Schools to present cases to the University’s Special Classification Board where the final classification has been affected by S-coding of modules for personal or medical reasons.
**Deans’ List**

This is an annual award for academic excellence, promoted by the Deans of the University. Undergraduate and Postgraduate Taught students who achieve an outstanding overall result in the course of an academic year have their names inscribed on the Deans’ List, an honour which will also appear on your University transcript. The criteria for the award are strict. Only students taking no fewer than 120 credits counting towards an approved degree programme over the course of an academic year will be eligible and all credits have to be taken within the four Faculties of the University of St Andrews. Any student who meets all the criteria and who obtains a credit-weighted mean grade of 16.5 or above for the year will be recorded on the Deans’ List. The rules will be adapted for part-time students, who must achieve the minimum credit-weighted mean of 16.5 in the pro rata equivalent of 120 credits over the course of an academic year. Full details of all the criteria and conditions for the Deans’ List are available at:


**Prizes and medals**

As well as the Deans’ List (described in the University Student Handbook) and Class Medals (awarded to the best student in each year if considered worthy of the award), the following special medals and prizes are awarded to Honours students:

*Dr John J. Durward Prize* - Awarded to the student in the Senior Honours Biochemistry class who has the best consistent record in that subject

*Margaret Laing Bell Prize* - Awarded to an outstanding Junior Honours student in Environmental Biology

*Margaret Laing Bell Prize* - Awarded to an outstanding Senior Honours student in Plant and Environmental Biology

*Margaret Lang Prizes in Marine Biology* - Awarded (a) to an outstanding student in Marine Biology; and (b) to the student who produces the best Honours project thesis in this subject area
D’Arcy Thompson Medal and Prize in Natural History - Awarded to the best First Class Honours student in Animal Biology or a related subject area, if considered worthy of the award

Andrew Oliver Memorial Prize - Awarded for Field Studies in Environmental Biology

The Physiological Society Undergraduate Prize for Physiology - Awarded to the best Honours student in Physiology, if considered worthy of the award

The Biochemical Society - Awarded to the best Honours student in Biochemistry, if considered worthy of the award

The Royal Society of Biology - Awarded to the best Honours student in Biology, if considered worthy of the award

Practical Work in Biology

There are two aims to the practical classes. The first, of course, is to reinforce concepts and ideas from the lecture course. The second aim, which is equally important, is to begin to train you in some of the general skills that all scientists require.

In first year, your practical classes will include use of the light microscope, PCR, genetics, a wide range of plant and animal material and visits to St Andrews Botanic Gardens and the rocky shores at Kinkell Braes. During the year, we shall also concentrate on teaching you to write up and illustrate reports, use elementary statistics, give presentations, and organise and improve the style of your writing. You will be asked to do small tasks in groups. You will be assigned a demonstrator whom you will keep for the duration of each module. All the skills that we are trying to teach you will be assessed.

In second year, practical classes are more specifically tailored to the modules, and we will expect a bit more initiative from you. The approaches taken will be very varied, and you will be asked to think more deeply about the biological principles and to take a role in designing some experiments yourself. Skills acquired in first year are reinforced, and new ones gradually introduced.

At Honours level, practical classes are more specialised and offer you greater freedom in terms of experimental design and investigation.
The use of animals in practical classes
The School of Biology understands that some students may be concerned or apprehensive about dissection or the use of animals. Students who take modules in Biology must realise that these modules do involve looking at prepared animal material and in some cases preparing it for themselves. We believe that it is part of our job to teach you to have a responsible attitude towards the use of animal material and it is right and proper for all of us to think seriously about this issue.

We feel it is reasonable in the first year for you to be given the chance to think your attitude through carefully and with our help. The 1000-level modules ask you to dissect material which we feel is essential; but we shall not insist that you carry out these practicals or penalise you for not doing so. We shall expect you to make an effort to acquire the knowledge and skills in other ways, as this material will be examinable. Please approach this question, therefore, with as open a mind as possible and remember that all staff take this question very seriously and you can discuss it with them.

When students move into the 2000-level biology programme and certainly into Honours modules, then a thorough biological training requires experience with both living and dead animal material. Not all modules require this, but many do and if you have any questions or doubts about the modules you would like to take in Biology, then please discuss them with us so that we can provide you with accurate and hopefully useful information which will help you to make up your own mind. You might wish to discuss this with your Adviser of Studies at the outset if you feel it may be a significant problem.

Requirements for practical classes
You will need to have the following items for your practical class work in Biology:

a. Your A4 practical workbook, HB and B pencils with sharpener, eraser and ruler.

b. A set of dissecting instruments, which may be purchased from the on-line shop and collected from the technical staff when you enrol in the Biology Teaching Lab in first year (and you must buy these unless you already have a complete kit with fine forceps).

c. A scientific pocket calculator with simple statistical functionality.

d. A white lab coat, worn during practical classes to protect your clothing.
**Healthy and Safety**

The School of Biology takes Health and Safety within practical classes extremely seriously. However, you should always remain cognisant of hazards within the laboratory.

A booklet, containing the Health and Safety Policy of the School of Biology, is available in each laboratory of the School. It is the duty of the Academic Supervisor/Module Organiser/Laboratory Demonstrator, as well as your own, to ensure that you are aware of its contents, especially in so far as they affect your work activities, and that you work safely at all times. You may obtain a copy of this Policy from the Building Safety Coordinator or from the Academic Supervisor/Module Organiser/Laboratory Demonstrator. Appropriate training will be provided in specific areas as required, e.g. radiation hazards or microbiological hazards. The ‘Code of Practice for Undergraduate Work in the Laboratory’ can be found below and it is your duty to ensure that you adhere to it at all times.

MAKE SURE THAT YOU FOLLOW ALL SAFETY INSTRUCTIONS. ALWAYS ASK IF YOU ARE IN ANY DOUBT ABOUT THE HEALTH AND SAFETY POLICY OF THE SCHOOL.

THE SCHOOL OF BIOLOGY RESERVES THE RIGHT TO ASK A STUDENT TO LEAVE A PRACTICAL CLASS/LABORATORY WITH IMMEDIATE EFFECT SHOULD THEY FAIL TO FOLLOW HEALTH AND SAFETY ADVICE/INFORMATION. PLEASE NOTE, THIS MAY AFFECT YOUR ACADEMIC GRADES.

**Laboratory Code of Practice**

1. It is your duty to make sure that you follow the Health and Safety Policy of the School and any Health and Safety instructions given to you by your Academic Supervisor/Laboratory Manager/Laboratory Demonstrator.

2. You must work safely at all times.

3. You must not commence any work activity until the risks, if any, associated with the work activity have been explained to you.
4. You should be familiar with the contents of the School Health and Safety Policy, especially in so far as they affect your work activity. A copy of the Policy is available in each laboratory of the School.

5. An appropriate risk assessment must have been performed, using the electronic risk assessment management system, for each laboratory procedure in which chemicals or biological agents with a COSHH rating of 3 or more are involved. This will normally be prepared by your Academic Supervisor/Laboratory Manager/Laboratory Demonstrator. You must be aware of the content of the risk assessment, know what type of personal protective equipment to use, and know what to do in the case of an accident.

6. Laboratory coats, of an appropriate type, must be worn at all times.

7. Eating, chewing, drinking, smoking, storage of food, the application of cosmetics and horse-play are forbidden in the laboratory.

8. Mouth pipetting is forbidden.

9. All procedures must be performed so as to keep the production of aerosols to a minimum. Any procedures likely to produce aerosols should be performed in the fume hood.

10. The laboratory must be kept as clean and tidy as is conducive to good working practice.

11. Special arrangements are in place for the use of radio-isotopes and genetically-modified organisms and your Academic Supervisor will discuss these with you before the work activity commences.

12. Waste must be disposed of as described in the School Health and Safety Policy or as instructed by the Laboratory Demonstrator.

13. Accidents, and near accidents that could lead to injury or infection, should be reported immediately to your Academic Supervisor/Laboratory Manager/Laboratory Demonstrator.

14. First Aid Boxes are available in all laboratories in the School of Biology and you should familiarise yourself with their position prior to conducting any practical work.

Always ask if you are in any doubt about the Health and Safety policy of the School.
Fieldwork/work outside the University of St Andrews

All students attending field courses, or whose Honours projects involve fieldwork, or any work taking you outside the University of St Andrews must have an assessment of the risk associated with the activity carried out before the activity commences. This assessment will be carried out by your Academic Supervisor/Module Organiser in consultation with the School Field Safety Officer on the School ‘Risk Assessment of Fieldwork Activities’ Form. This risk assessment will be discussed with you before the activity commences.

Ethics (UTREC)

All research in all Schools of the University that involves data collection from (questionnaires etc.), interviews of, interactive investigation of, experimentation upon or demonstrations involving living human subjects, tissues and / or other samples requires formal approval from the University Teaching and Research Ethics Committee (UTREC).

It is University policy that any research involving children under 18 should be reviewed by the UTREC Child Panel and that the researcher should hold an ‘Enhanced Disclosure Scotland’ (EDS) certificate. The principal supervisor is responsible for ensuring that the student has received the appropriate ethical clearance from UTREC and the Child Panel prior to research commencing.

It is a requirement that any undergraduate Honours or Masters dissertation or PhD thesis that requires ethical approval from UTREC has the letter or email of ethical approval bound into the appendix before submission.

School Seminar Programmes

The School runs regular seminar programmes, often with distinguished speakers from other universities, research institutes and industry. Subjects cover a wide spectrum of interests, ranging from topics of social concern such as matters of conservation, pollution, biotechnology, bioethics, medical genetics, and population control, to the more specialist interests including up to the minute biological and medical research developments.

All Honours students are expected to attend the seminar series relevant to their degree programme. Pre-Honours students are also encouraged to attend. Details of the seminar
series for each semester will be circulated by e-mail, and posted on the noticeboards. Seminars are a very important means of widening your appreciation and understanding of Biology and of the nature of scientific research.

**Staff-student consultative committee**

The School President (Erin Phillips, biologypresident@st-andrews.ac.uk) convenes and chairs the Student-Staff Consultative Committee (SSCC), which gives you a chance to give feedback on your Modules and Degree programmes.

Early in the year, there will be an opportunity to elect your representatives to the SSCC. Please inform your representatives of any problems that arise or suggestions that you would like to make. The representatives are also required to proactively solicit opinions from a wide range of classmates (not simply their friends), and to present a summary of those views (with numbers attached as appropriate) at the SSCC meetings. There is normally one SSCC meeting per semester. Please contact your School President for information on dates and representation.

**Module Questionnaires**

As well as feedback through the SSCC, electronic module evaluation questionnaires (MEQs) will be available via MMS at the end of all your modules. Feedback provided by these helps us to make changes from year to year and so improve the course as much as we can.

We would therefore be grateful (as will students in future years) if you would take the time and trouble necessary to fill these in *constructively* and return them. Matters that arise in the MEQs will be discussed at the subsequent SSCC meeting.

**Who can help when things go wrong?**

It is much better to let us know about problems as soon as they occur, so that we can give assistance and also take any problems into account when assessing your performance. Problems that are reported after a module is completed are much more difficult to deal with! Please talk to us - we are only too glad to help.
Feel free to talk to any member of staff whom you feel you can approach. But the following avenues are there for you:

**Module Handbooks**

All module handbooks contain a helpful table providing the contact details of relevant staff who you may approach regarding any matter in relation to your studies.

**Advice and Support Centre (ASC)**

For advice and support on any issue, including academic, financial, international, personal or health matters, or if you are unsure of whom to go to for help, please contact the Advice and Support Centre, 79 North Street, 01334 462020, theasc@st-and.ac.uk, https://www.st-andrews.ac.uk/ask-a-question/.

**Director of Teaching and Deputy Director of Teaching**

Dr Gerald Prescott, Director of Teaching, has overall responsibility for matters affecting your academic performance in the School of Biology and is available to talk about any area of concern that may be affecting your academic studies. Initial 1st/2nd year concerns should be directed to Dr Jacqueline Nairn (Deputy Director of Teaching), whereas 3rd/4th year issues should be directed to Dr Gerald Prescott.

**Adviser of Studies**

All students have an Adviser of Studies, whom you will meet at the beginning of each academic year and to whom any learning-related problems may be taken; but you should also feel free to talk to the Module Organiser about any issues affecting your performance on particular modules.

**Open door policy**

The School of Biology operates an open door policy (we do not have specific office hours) and you should feel free to approach any member of staff with whom you feel comfortable speaking to at any time. Please be aware however that confidentiality remains at the level of the University and not an individual staff member. Staff may raise any matter to the appropriate level of authority should they feel the need to do so.
Faculty
You can also take problems significantly affecting your studies, such that Leave of Absence might be required, to the Faculty, and Dr Graham Kirby, Pro-Dean Advising Science, (e-mail prodeansci-adv@st-andrews.ac.uk) will be able to direct you.

CAPOD
CAPOD is the University’s central point for assistance with teaching and learning. It aims to encourage excellence and innovation in learning and teaching by providing support and guidance for students and staff. It houses a Mathematics and Statistics Support Centre and many Biology students have used it when they have had difficulties with general numeracy, chemical calculations and statistics.

Special circumstances affecting your academic studies – ‘S’ Code

‘S’ Coding is the method the University uses to recognise that special circumstances have affected performance in the modules concerned. ‘S’ coding may only be applied to Honours or taught postgraduate modules, except for taught postgraduate project or dissertation modules which are excluded. ‘S’ coding may only be applied with the explicit consent of the student and with the approval of the School. The final decision to ‘S’ code a module grade rests with the School. You should be aware that a maximum of 25% of the overall Honours credits required or 50% of the taught element of a postgraduate award may be ‘S’ coded.

If you feel that most or all of the work of a module has been adversely affected by personal circumstances during your Honours years or during the taught modules of a taught postgraduate programme you should contact your School in the first instance indicating the circumstances of the difficulty experienced. This may relate to ongoing illness, close family bereavement or other significant personal difficulties.

You must bring this information to the attention of the School as soon as possible as there are a number of ways to deal with such situations, ‘S’ coding being the final option. It may be possible (and it is viewed as preferable) to arrange deferred assessments or extended submission dates rather than applying ‘S’ to the entire module. However, it should be noted
that if such arrangements are made (extensions or deferred assessments etc.) it is unlikely that you will be entitled to have the module ‘S’ coded as well.

**Academic Alert**

Academic Alerts are a way of helping students who are having trouble coping with their studies, such as missing deadlines for handing in work, or missing compulsory tutorials. The aim of the Alert system is to help students by flagging up problems before they seriously affect students’ grades. Academic Alerts will be issued by email from a member of staff within the School and will tell students what is wrong and what they are required to do (e.g. attend classes in future). The Alerts will also tell students what support the University can offer. If students do not take the action required they will get another Alert, and eventually will automatically get a grade of zero and will fail that module. The system is designed to help and support students in order to remedy any problems or issues before these lead to failing a module. Alerts will never appear on a student’s permanent transcript. For more information on Academic Alerts and details on how the categories work, see [https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/AcademicAlerts.pdf](https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/AcademicAlerts.pdf). Guidance for students is available at [http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/AlertsStudentGuide.pdf](http://www.st-andrews.ac.uk/media/teaching-and-learning/policies/AlertsStudentGuide.pdf).

*To clarify, within the School of Biology:*

Absence, without good reason, from compulsory components of the class (all practical classes, all tutorials and any other scheduled classes noted as compulsory in the Module Handbook) will result in the issuing of an Academic Alert. Further, all coursework associated with a class must be completed and submitted by its due date. Late submission, without good reason, will incur a fixed mark/grade penalty, which will increase each day that the work remains overdue. Non-submission of coursework (coursework overdue by more than 14 working days), or submission of coursework of unacceptable standard, will also be considered to be grounds for issuing an Academic Alert. Within the School of Biology, **three** such absences will result in an Academic Alert FINAL being issued.
Termination of Studies on Academic Grounds – Undergraduates

If your academic performance is unsatisfactory, i.e. you have gained insufficient credits to progress to the next stage of your degree programme or breached conditions of your probation, your studies may be terminated. You will then be notified by the Pro Dean (Advising) that your studies are terminated and you will have five working days to appeal this decision using the appropriate form. This should be supported by documentary evidence specifying the reasons for your unsatisfactory performance. If you do not submit an appeal, you will have your studies automatically terminated in accordance with Senate Regulations. Your full student record is taken into account in any review, including any instances of non-academic misconduct, during the Termination of Studies Cross-Faculty Board; however, in first instance, only your credits attained in a relevant number of semesters are taken into account. For more information, please see: https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/UGRegs2016-17updated%20March17.pdf – termination of studies is covered by items 44 and 45 and: https://www.st-andrews.ac.uk/students/academic/intervention/termination-of-studies/

If the appeal is successful, the Dean will contact you with conditions for your return to studies. If you do not meet these conditions (e.g. you do not pass the specified amount of credits within the time period given by the Dean) your studies may be terminated again.

If your appeal is unsuccessful, you may have a further right of appeal to the Senate of the University. Appeals to Senate are admissible only on limited grounds and the process cannot be used to challenge matters of academic judgment. To make a Senate submission, you must complete and submit to the Senate Office a Stage 2 appeal form within 10 working days of the date stated on your termination letter. Late submissions may not be considered further by the University. For further information, see the University’s Policy on Student Academic Appeals at https://www.st-andrews.ac.uk/students/rules/appeals/policy/

International students here at St Andrews on a Tier 4 visa should be aware that any terminations will be reported to the UKVI and their visa curtailed.

Contact
Academic Intervention
The University operates an academic intervention process at an overall degree programme level. The principle is to help students recognise when their academic progress may be at risk, at a sufficiently early stage that they have opportunities to take action to address any underlying problems. Risks to studies include module results below those consistent with satisfactory academic progress; failure to progress on a student’s degree programme of choice, and in the most severe cases, termination of studies.
The academic intervention process involves issuing a student at risk with a series of warnings of increasing severity (see https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/EarlyAcademicIntervention.pdf).

Leave of Absence (LOA)
Occasionally it becomes necessary for students to take a period of absence from their studies before returning to continue their studies. This may be due to personal circumstances, medical requirements or other reasons. The University’s policy on LOA can be found at; https://www.st-andrews.ac.uk/media/teaching-and-learning/policies/leave-of-absence.pdf

Withdrawal from Studies
If you are considering withdrawing from your studies at the University you should discuss the matter with Student Services in the first instance. You should arrange to do this as early as possible as there are often alternative options open to you that would not require the final step of permanent withdrawal from the University. If you do decide you wish to withdraw from your studies you must contact your Registry Support Officer who will be able to offer guidance on your options and who will ensure that the process is completed correctly. You should be aware that there are fee implications, as well as implications to your leave to remain in the UK if you are an overseas student, when you withdraw from your studies part of the way through an academic year. You should therefore ensure you contact the Money Adviser and the International Adviser in Student Services to obtain early advice on the final
implications of your decision before you complete your withdrawal. Further information available at: https://www.st-andrews.ac.uk/students/academic/academic-advising/glossary/withdrawal/

**Academic appeals, complaints and disciplinary issues**

The University is committed to ensuring as high a quality student experience as possible while studying at St Andrews. Occasionally things may go wrong and if you are experiencing a difficulty, or are dissatisfied with your academic experience, you should raise concerns as soon as possible. This allows effective resolutions to be worked out quickly.

Such issues normally fall into one of three categories:

- **An appeal requesting a formal review of an academic decision** - where, for example, the University has made a judgement about your assessed work or progression within a course of study which you have grounds to query (see the relevant Policy on Student Academic Appeals);

- **Complaints** - where you are dissatisfied with the quality or standard of service that you have received from any part of the University, either academic or non-academic (see the University’s Complaints Handling Procedure);

- **Disciplinary cases** - where the University has grounds to believe that you have conducted yourself in an unacceptable manner in either an academic or non-academic context. Academic Misconduct is dealt with under the Good Academic Practice Policy; Non-Academic Misconduct is dealt with under separate procedures.

If there are extenuating personal circumstances that may affect your academic performance or impact on your progression you must bring these to the attention of an appropriate member of staff (for example your Academic Adviser, module coordinator or the appropriate Pro Dean) as soon as possible and normally prior to completing any assessment. If you base a subsequent academic appeal on such extenuating personal circumstances, you will be required to provide valid reasons to explain why you failed to notify the examiners or other relevant persons of these circumstances prior to completing the assessment.
Using the Right Procedure

If you are unsure whether to use the Appeals procedure or the Complaints procedure, there is a key question to ask yourself. What kind of outcome are you seeking? If you are seeking to have an academic decision changed (such as a mark or grade, a decision about progression, or termination of studies), then you must use the Appeals procedure. The permissible grounds for submitting an appeal are clearly detailed therein. If you are dissatisfied with the level of service you have received from the University, or if you believe that a service needs to be improved, or that the University has failed (for example) to follow one of its administrative processes properly, then the Complaints procedure is normally more appropriate. For matters involving teaching in general, there are also feedback opportunities through Staff-Student Consultative Councils, module questionnaires and School presidents.

You can make both a personal Complaint and an Appeal, by using both the Appeal and Complaints procedures, but it must be emphasised that changing an academic judgment or decision is not one of the outcomes from the Complaints procedure used alone.

Further guidance and support

The Students' Association provides independent and confidential help and advice for students who are contemplating submitting an academic appeal, complaint or are having discipline proceedings taken against them. The Students' Association employs Iain Cupples, the Student Advocate (Education), whose job it is to ensure that you receive help with writing and submitting a submission. Iain can also accompany you to any hearing. He should be your first point of contact as soon as you feel you need help.

Contact
Iain Cupples
Student Advocate (Education)
Telephone: 01334 462700
Email: inc@st-andrews.ac.uk

Student Fees

Graduating in person or in absentia marks the end of your degree or diploma course of studies at the University of St Andrews. If you have been accepted onto a new degree or diploma
programme at the University, the new programme is separate and distinct from the course of studies from which you are about to graduate, and you will be liable for all fees associated with that new programme.

Disability Support
If you require support for disability reasons, for example teaching and exam arrangements, please contact the Disability Team in Student Services who can provide support for a wide range of disabilities such as learning difficulties, visual and hearing impairments, mobility difficulties, Asperger’s, mental health, long standing medical condition and much more [https://www.st-andrews.ac.uk/students/advice/disabilities/](https://www.st-andrews.ac.uk/students/advice/disabilities/).

In the School of Biology, Dr Jacqueline Nairn is the Disability Coordinator.

Opportunities outside Semester time
Careers, Internships and work experience
During your degree you must give serious thought to the career that you intend to follow after you graduate. You should consult members of staff about this, and your Degree Controller and (in due course) Senior Honours project supervisor will usually be those best able to advise you in the first instance. We cannot stress too strongly the wisdom of considering a variety of options, and of consulting the University’s Careers Centre at an early stage.

The Careers Centre is a University organisation with two main functions: to provide students with information and advice about the range of careers open to them; and to help them find a suitable starting point at the conclusion of their course by providing detailed information about employers and jobs, about further study, and about training establishments and courses. It is staffed by full-time advisers who are available for consultation throughout the year at 6 St Mary’s Place.

Inevitably, the main resources of the Centre are devoted to those approaching the end of their studies, but it must be emphasised that the Centre is open to all students. For most students, the final year is a very busy one, and the Centre as a matter of policy, encourages students to register early in their studies in order to ease as much as possible the amount of
time spent in the final year on careers research. You are always welcome, with or without formal registration, to use the available facilities, e.g. to attend information sessions and workshops, to investigate vacation and sponsorship opportunities and, most of all perhaps, to consult in the reference libraries the extensive collection of literature on employment and training in many fields.

During the year, and especially after Christmas, the School receives a great many sheets of information about postgraduate courses, PhD places and job opportunities in the general field of biology. We will endeavour to circulate these to you electronically in a weekly update.

When you apply for jobs or postgraduate positions, you will often be asked to nominate academic referees. Your Degree Controller, 2nd and 3rd year Biology tutorial tutor and project supervisor will, in most cases, be the most obvious people to ask to act as referees for you. If you do ask them, or any other staff member, to prepare a reference, it is a good idea to give them your curriculum vitae to ensure that they are aware of all your activities and can write as well-informed a reference as possible. It is also a good idea to provide them with information relating to the posts for which you are applying so that they are able to provide a more informed assessment of your suitability.

The Employability Coordinator for the University is Pamela Andrew, and she is also the person at the Careers Service who looks after Science students so she is an ideal person to meet with you if you have questions. You can contact her at: pea1@st-andrews.ac.uk.

**Vacation studentships**

The Wellcome Trust, Carnegie Trust and Royal Society of Biology support students for periods of laboratory work in the summer vacation. Information on these studentships will be posted in the School student newsletter. The Careers Centre may also be able to help with advice on summer scholarships but ask them well in advance, as some of the deadlines are very early in the year.
Laidlaw Undergraduate Internship Program

The Laidlaw Undergraduate Internship Programme in Research and Leadership is sponsored by a generous donation from The Rt Hon Lord Laidlaw of Rothiemay, an honorary graduate of the University. This exciting Programme, now in its third year, equips students with the skills and values to become leaders in their chosen occupations beyond University.

Interns will design, pursue and report on a research question of their own devising working on this research with an academic in their chosen School. Importantly, interns will also complete intensive, bespoke Leadership training sessions.

This programme is open to undergraduate students in their penultimate year of study.

Please see the Laidlaw website for more information at [https://www.st-andrews.ac.uk/students/involve/laidlaw/](https://www.st-andrews.ac.uk/students/involve/laidlaw/).

Undergraduate Research Assistantship Scheme (URAS)

This programme was introduced to promote projects that emphasise the many ways in which Research and Teaching can come together and to give undergraduate students the opportunity to gain experience doing independent research. The URAS is open to any undergraduate student matriculated at the University of St Andrews. URAS funding (currently at £50 per 6 hours of work, up to £2,000 per School) cannot be used to support research for a credit-bearing programme. The programme is administered by the Proctor’s Office. For full details of the application process visit [https://www.st-andrews.ac.uk/students/academic/internships/researchassistantscheme/](https://www.st-andrews.ac.uk/students/academic/internships/researchassistantscheme/).

Advertisements posted in School of Biology buildings

From time to time, posters advertising a variety of summer schools, fieldwork centres, charity-based research projects, ecotourism organisations and other similar activities may be posted on notice boards (usually by interested students). These seek to encourage your involvement during vacation periods. You will also find notices advertising post-graduate programmes at a variety of institutions and also advertisements for jobs available to you after graduation. Any information which comes into the School of Biology regarding possible placements or internships will be circulated in a regular e-mail.
PLEASE NOTE, unless specifically stated, the School and the University may not take any responsibility for your engagement in these activities. They are not recognised components of your degree programme and are not regulated in any way by the University. You may not be insured by the University when participating in these schemes and must ensure that you arrange your own travel and personal insurance for such activities outwith your degree programme. If you are considering pursuing any of these opportunities, but have any concerns relating to it, you are encouraged to discuss these informally with staff.

A comprehensive list of possible UG summer vacation scholarship is available on:
https://www.rsb.org.uk/get-involved/grants/undergraduate-studentships
Guidelines for Preparation and Presentation of Essays

Doing your research first
i) You may be provided with some references on your essay topics. More may be found in the reference lists at the end of the recommended papers, or by consulting the Web-based systems in the Library. Although textbooks may be a useful source of background material, they are not usually sufficiently advanced or up-to-date to provide you with all of the information that you need for an Honours-level essay. You should now be reading scientific papers (in the Periodicals section of the library) and review articles as your primary source material.

ii) Don't get carried away. While we do expect you to read the original literature at this level, your topic may be one on which whole books have been written. You must be selective and try to strike a good balance between providing an overview and getting into detail on relevant points.

iii) Make careful notes, including specific examples and numerical facts. These notes should be good enough to become part of your course and revision material, and will underpin your essay.

iv) A lot of information is available on the Internet. This can be useful but, while we encourage you to access this information, you must be aware of its limitations. Whereas scientific literature that is published in reputable journals is subject to peer review and verification by acknowledged experts in the field, this is not the case for the vast majority of information on Web pages, which is often of very poor quality and may be completely wrong. You must also be very careful NOT to just copy material from the Web - this is plagiarism for which the penalties could be severe.

Making a plan of your answer to the question
i) Understand the question fully. Do not twist it to suit yourself, or just see one possible angle and miss others. See how it allows /requires you to link together different ideas, from different parts of the course or beyond it. Think about the meaning of 'Compare and contrast A and B', or 'Assess...' or 'Discuss...', and then do it - each is quite different from being asked just to 'describe'.
ii) Write down the main issues and work out the links between them to give a proper plan. This plan should be evident to the reader, but does not need to be given explicitly, let alone spelt out in the introduction and then again at the end.

iii) Be different and controversial only if you can justify it; but do try to be critical.

**Using your notes to assemble a coherent essay around the plan**

i) By this stage, you should not need the books and papers at all. Do not sit with a reference propped up beside you while you write the essay itself.

ii) What we want from you is a clear and concise summary of the important points and the main work in the area, while following any specific guidelines that have been given. The work must be your own account, not a thinly veiled précis of a standard review or text.

iii) Don’t try to cram everything in, but do use sub-headings, diagrams and tables listing important points if these seem appropriate. If you are in any doubt about what is required of you, do consult the person who set the essay.

iv) NEVER copy chunks from books, or even regurgitate the same sequences of ideas and facts from them. This is **plagiarism** – see academic misconduct. It is equally important that you do NOT copy essays or practical write-ups from each other or from past students; and you must not copy out material from research papers without acknowledging its source.

v) Acknowledge your sources of information. Do this by citing the relevant references in the text and then listing them in the references at the end of your essay, as explained below.

**Content**

i) Aim to integrate and to analyse ideas and facts into a coherent and interesting and well-balanced whole that is easy to read and understand.

ii) Make sure the text proceeds logically through the arguments.

(NB: These two points are really the core of essay-writing and underline its value – they are exactly the skills you will need in most jobs.)

iii) Use good punctuation (get advice if you have problems) and proper paragraphs.

iv) Avoid silly humour and being whacky just for the sake of it, although we will usually enjoy reading a little bit of light relief.
v) In general, use formal unemotional scientific language; don't be wordy or prosy just for the sake of it and avoid slang. Poor scientific writing can appear somewhat stilted, but good scientific writing with short clear non-sloppy sentences is a prose that 'flows' easily and conveys information concisely. See later for detailed points.

vi) A good way of improving your writing is to read well-written articles. You will gradually learn how to write well if you read well.

Presentation

i) Word-processed form is standard - WHY? For YOU – you can reorganise and reassemble ideas; also you can correct, alter spellings, count words, etc., very easily. You can use italics (for genus and species only - NB not for other taxonomic ranks). No mistakes should get through the system - you should produce a professional piece of work of which you can be proud. For US - sloppiness is eliminated, and it is much quicker to read than most handwriting.

ii) Please double space and leave reasonable margins to allow room for us to comment and correct.

Length and Depth of essays

i) The length of the essay may be specified – e.g., 2000 words, or 6 sides. Stick to it.

ii) Do not produce screeds of irrelevance, and do not get the content unbalanced.

Specific Points to note (arising from previous Honours essays):

- Be careful with Latin/Greek endings and plurals. Notably: 'DATA' is a plural word ('These data are', not 'this data is') - the singular is 'datum'. 'CRITERIA' is also a plural – the singular is 'criterion'.

- Use italics for all genus and species names, but not for higher taxonomic ranks; and only abbreviate the genus names to a single letter (as seen in many scientific papers) after you have already given it in full at least once, e.g. "Lumbricus terrestris (Annelida)", and then later on “L. terrestris”.

- Avoid sloppy expressions: "roughly, fairly, around, about" - usually better to use 'approximately' (but avoid too much repetition of any one word) "significant" has a precise scientific meaning and should not be used just to mean interesting or important.
Contractions: "don't, won't, can't" - write these out in full. Also "lab" should always be laboratory. NB "it's" is only ever correct when short for 'it is', and you will not be using these contractions of word pairs - so avoid “it’s” altogether!

Avoid prosy expressions such as: "In order to.." - wordy for the sake of it: 'To..' means exactly the same. "It is interesting to note that.." (And usually what follows is not very interesting!) "Let us consider.."

Usually, avoid 'first person' and stick to 'third person': "We might expect that..." Stick to the third person: try 'It might be expected that..' "When we take a close look at.." The same applies: try 'On closer examination..' 

Beware of the use of "like" - replace with 'such as' or 'as with' according to context. Beware of the use of "actual" and "actually" - often used carelessly. Beware of the difference between "repetition" and "replication". Beware of the spelling of "there" and "their" - elementary school stuff.

Abbreviations should be given in full when the word is first mentioned with the abbreviation in parenthesis after it. If there are a lot of abbreviations, consider adding an abbreviations list.

References

When you are preparing or writing a piece of work, you are likely to consult various sources, ranging from textbooks to scientific papers to the internet. Some of the information you come across will be ‘general knowledge’ while other information will be more specific, novel and detailed.

It is important that you know how to reference the latter appropriately so that you can give credit where credit is due, avoid issues of plagiarism and, most importantly, allow the interested reader to pursue the topic in more detail.

Within the School of Biology, the preferred method of citing (making reference to) a piece of work is the Harvard system. Below is a short summary of this system. If you require more details, then there are several websites that expand on the various permutations.

General rules for citing

1) Cite the reference in the body of the text where you first present the information.

Examples of the preferred method of citing are shown below:
Either: “A recent report by Smith et al. (2003) has shown that chocolate has a positive effect on mood.”

Or: “The consumption of four cups of coffee a day has been shown to cause an increase in resting pulse rate (Brown et al., 1995).”

Note that ‘et al.’ is used if the number of authors is > 2. Thus if it is a single author, then simply write Brown (1995), if 2 authors then Brown and Smith (1997). Any more than that, and you simply write the first author and then ‘et al.’. If you cite two or more articles by the same author(s) published in the same year, use letters to distinguish them (“Angus is wet in summer (Brown, 1997a) but Fife is wetter (Brown, 1997b”).

Cite website sources in a similar manner, with author and date if known. Problems arise with internet sources as it is not always possible to ascertain authorship or the date of writing. If this is the case, then use the name of the organisation or some other identifier, and quote the date accessed. Do not include the URL within the body of text. The URL and the title of the page are to be listed in the reference list/bibliography (see below).

If you are quoting from the source material directly and the quote is less than about 40 words in total, then use quotation marks around that part of the text. If the quote is more than 40 words in length, then indent the phrase so that it is set apart from the main body of text. In general, it is neither advisable nor appropriate to use long direct quotes in scientific writing; rewrite the material in your own words and reference as above.

2) Cite only those sources you have actually read.

As a general rule, do not make reference to articles you have not read. However sometimes, it is not possible to obtain or read the original article that contains the relevant information. In this situation you then cite both the original article and the source where you came across it, e.g., “(Cajal, 1924, cited in Bruisner et al, 2003)”. In your reference list/bibliography include the details of both sources.

3) List the references at the end of the text

At the end of your piece of work list the references in alphabetical order according to the surname of the first author (see the note below re: bibliography vs reference list). If you have cited several articles by the same author, then list the articles chronologically.
4) Bibliography vs Reference List

These two terms are not, as is commonly thought, interchangeable. However there are conflicting ideas about what each should include. Please note that within the School of Biology the following definitions apply:

• A reference list is a list of all the source material you have directly cited within the body of text.

• A bibliography on the other hand is a list of the articles you have read and consulted but which you have not cited within the text. In textbooks this list would often be headed “Background Reading”. Depending on the type of exercise you undertake, you should give either a reference list, or a bibliography, or both.

FINALLY - CHECK EVERY SENTENCE, EVERY SPELLING, AND EVERY BIT OF PUNCTUATION BEFORE YOU HAND IN THE WORK. When submitting a Word-processed essay there is no excuse for having numerous spelling mistakes. NOTICE that a spell-check programme alone will not find all errors – if you have produced another ‘real word’ a slip may not register as a spelling error.
PRE-HONOURS MARK DESCRIPTORS 2017-18

Please note that these descriptors should be used against what is expected of a student at their level.

<table>
<thead>
<tr>
<th>Mark</th>
<th>Criteria</th>
</tr>
</thead>
</table>
| 17 - 20 | Excellence: work characterised by  
Original thought and reflection.  
Critical awareness and analytical ability  
Use of wider reading or links with other modules/wider curriculum. beyond that recommended  
Evidence of the criteria below along with anything above - 19-20.  
Excellent use of data and examples.  
Strong structural organisation.  
Flair in presentation.  
Well-balanced arguments.  
Thorough understanding of the topic/assessment task. |
| 14 – 16 | Merit: work characterised by  
Solid knowledge and use of literature.  
Signs of analytical ability  
Clear evidence of reading within module material.  
Logical organisation and consistent relevance.  
Well-chosen use of examples and data.  
Fluent presentation.  
Well-structured arguments.  
Some excellent work, but not fully developed.  
Solid understanding of the topic/assessment task. |
| 12–13 | Satisfactory: work characterised by  
Tendency to be descriptive.  
Some evidence of reading within module material.  
Some use of examples and data.  
Coherently structured and presented.  
Evidence of argument.  
Some good quality work.  
Reasonable understanding of the topic/assessment task. |
| 7–11 | Pass: work characterised by  
Predominately descriptive.  
Some errors of fact or interpretation.  
Very little evidence of reading module material.  
Limited use of examples and data.  
Some weaknesses in structure and presentation.  
Weakly developed arguments.  
Limited understanding of the topic/assessment task. |
| 5–6 | Marginal Fail: work characterised by  
Descriptive work.  
Many errors of fact or interpretation.  
Minimal of reading module material.  
Weak structure and presentation.  
Weakly argued.  
Little relevant illustrative material.  
Poor understanding of the topic/assessment task. |
| 0–4 | Poor Fail: work characterised by  
Very poor structure and presentation.  
No evidence of reading module material  
Often too short.  
No clear argument.  
May be unfinished, in note form, or partial answer.  
Inadequate understanding of the topic. |
HONOURS MARK DESCRIPTORS 2017-18

<table>
<thead>
<tr>
<th>Allowed Marks</th>
<th>Descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Class</td>
<td>Very good to excellent Honours standard</td>
</tr>
<tr>
<td>19, 20</td>
<td>As 17-18, except there is additional clear evidence that the student has valuable originality in perspective or exceptional depth of understanding, and/or has integrated appropriate material in addition to that presented by the question setter in the taught module.</td>
</tr>
<tr>
<td>17, 18</td>
<td>A very good understanding of the major issues, with a clear, well-informed and well-structured contextual framework and argument around the topic. There is an appropriate mix of theory and evidence.</td>
</tr>
<tr>
<td>Upper 2nd Class</td>
<td>Good Honours standard.</td>
</tr>
<tr>
<td>14, 15, 16</td>
<td>The answer displays a good understanding of the main relevant issues. There are no major conceptual errors on key issues, but there may be minor errors. The essay is generally well written and comprehensible.</td>
</tr>
<tr>
<td>Lower 2nd Class</td>
<td>Adequate Honours standard.</td>
</tr>
<tr>
<td>11, 12, 13</td>
<td>The answer shows an understanding of the key issues and has a suitable contextual framework, but without great depth. The arguments are weakly articulated.</td>
</tr>
<tr>
<td>3rd Class</td>
<td>Minimal Honours standard</td>
</tr>
<tr>
<td>9, 10</td>
<td>Most of the key issues are addressed correctly but superficially, and without showing real understanding. Some relevant evidence and/or factual information. Poorly organized and lacking a contextual framework.</td>
</tr>
<tr>
<td>Pass, Ordinary</td>
<td>Not Honours standard</td>
</tr>
<tr>
<td>7</td>
<td>Many of the key issues are addressed, but either very superficially or with important errors and/or omissions. Little relevant evidence and few facts. Brief, or unnecessarily padded and/or very poorly organized.</td>
</tr>
<tr>
<td>FAIL</td>
<td>Unacceptable performance: NOT CREDITWORTHY</td>
</tr>
<tr>
<td>5</td>
<td>Some key issues are addressed correctly, albeit superficially, but others have serious conceptual errors or are missing. Little relevant evidence and few correct facts.</td>
</tr>
<tr>
<td>3</td>
<td>Some relevant information is presented, but the key issues of the topic either are largely wrong or missing. Extremely superficial throughout. Little or no relevant evidence and few correct facts.</td>
</tr>
<tr>
<td>1</td>
<td>Contains a small amount of biological or informational content, but either irrelevant, wrong, or trivial.</td>
</tr>
<tr>
<td>0</td>
<td>No biological content at all.</td>
</tr>
</tbody>
</table>
Treatment of Irrelevant Material at Honours and Pre-Honours

Markers must carefully consider whether unexpected material is indeed irrelevant, and students should be given the benefit of any reasonable doubt.

Where material is clearly irrelevant, the following guidelines apply.

- Where irrelevant material occurs within an answer which is generally on-topic, it should be ignored.
- Where the whole answer appears to be a response to a question that was not asked
  - If the answer is biological, but not in any way related to the actual question, award mark 1.
  - If the answer is related to the topic of the question but clearly NOT on the actual topic, mark according to the quality of the material presented, using the following guidelines.
    - An excellent essay: mark 11
    - A good essay: mark 9
    - An adequate essay: mark 7
    - A poor essay: mark 3.

The purpose of these guidelines is to help ensure consistency of treatment when students present irrelevant material.
### Practical Report assessment criteria

<table>
<thead>
<tr>
<th>Section</th>
<th>6 or less</th>
<th>7-10</th>
<th>11-13</th>
<th>14-16</th>
<th>17-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>Absent.</td>
<td>Omits important points, unclear and includes much irrelevant material.</td>
<td>Summarises the aims and key findings of the report but includes some irrelevant material and could be more concise.</td>
<td>A good abstract, which is clear and concise but may fall short on presentation of findings, approach/techniques, or significance of the results.</td>
<td>Aims and findings are clear and concise. Succinct account of approach/techniques. Significance of results very clear knowledge to date is made clear.</td>
</tr>
<tr>
<td>Introduction</td>
<td>Aims of the work are not clear. Poor range of references and/or review of references is weak. No meaningful hypotheses are given.</td>
<td>Aims of the work are not clear. Not all references are relevant and some key peer-reviewed references missing. Hypotheses are not appropriate and/or unclear.</td>
<td>Aims of the work are clear. Good review of references sourced but review of peer-reviewed references falls short on presentation. Hypotheses are presented but lack clarity.</td>
<td>Aims of the work are clear. Very good review of relevant background peer-reviewed references. Hypotheses are clear and appropriate.</td>
<td>Aims of the work are clear. Excellent and concise review of relevant background peer-reviewed references. Hypotheses are clear, unambiguous and appropriate.</td>
</tr>
<tr>
<td>Materials and Methods</td>
<td>Section either missing or completely inadequate.</td>
<td>Insufficient information provided to enable replication of the experiments.</td>
<td>Describes well most aspects of the experimental methods and analysis procedures but a number of minor errors or omissions. Standard methods referenced appropriately.</td>
<td>Fully describes all aspects of the experimental methods and analysis procedures, but a few minor errors. Standard methods referenced appropriately.</td>
<td>Fully describes all aspects of the experimental methods and analysis procedures. Clear and concise, sufficient for replication, no omissions or errors. Standard methods referenced appropriately.</td>
</tr>
<tr>
<td>Results</td>
<td>Results section is incomplete. Evidence of lack of understanding. Lacks text to describe observations.</td>
<td>Results section is mostly incomplete or incorrect. Evidence of lapses in analysis. Calculations may have some errors. Text included which fails to describe observations accurately.</td>
<td>Data manipulated appropriately but evidence of lapses in analysis. Calculations may have some errors. Includes mostly relevant text to describe observations accurately.</td>
<td>Data manipulated well. Calculations correct. Data handled well. Accurate text included to describe observations.</td>
<td>Data manipulated very well. Calculations correct. Evidence of original/innovative data handling. Concise and accurate text included to describe observations.</td>
</tr>
<tr>
<td>Figures and tables</td>
<td>Very unsatisfactory presentation with omissions in figures and tables, significant errors in captions and equations. Inappropriate choice of presentation of results.</td>
<td>Less than adequate presentation of figures, tables, equations and graphs with errors and omissions (captions). Numerical data/theory poorly presented with many errors.</td>
<td>Good results, fairly well presented with figures, tables, equations and graphs, but with some errors and lack of clarity (e.g. captions, axes labels). Numerical data presented but not readily accessible.</td>
<td>High quality results, well presented with clear figures, tables, equations and graphs. Carefully presented numerical data.</td>
<td>Exceptional quality results, carefully presented with very clear figures, tables, equations and graphs. Carefully presented numerical data in a readily accessible way.</td>
</tr>
<tr>
<td>Discussion</td>
<td>Interpretation of the results flawed. Few or no references to appropriate peer-reviewed publications. Poor organisation. Evidence of minimal effort.</td>
<td>Little discussion and interpretation of the results and their significance. Lacks evidence of relevant further reading. Poor organisation. Very weak conclusions.</td>
<td>Clear discussion but may lack scope, conciseness and/or relevance. Evidence of limited further reading. Attempts to interpret results and their significance, though with some misunderstandings. May contain some inappropriate conclusions, which lack supporting evidence.</td>
<td>Complete and mostly clear discussion. Evidence of further reading, of relevant material. Data placed in context with appropriate peer-reviewed references. Appropriate conclusion but not fully supported.</td>
<td>Clear, complete and concise. Evidence of extensive further reading of relevant material. Data placed in context with appropriate peer-reviewed references. Appropriate conclusions with supporting evidence.</td>
</tr>
<tr>
<td>Structure</td>
<td>Report is very poorly structured throughout, causing considerable confusion to the reader.</td>
<td>Report exhibits a poor structure, with one or more sections treated too briefly.</td>
<td>Report is generally well structured but sometimes loses flow or structure.</td>
<td>Report is well structured with a logical flow.</td>
<td>Report is outstandingly clear with a flawless structure.</td>
</tr>
<tr>
<td>Writing</td>
<td>Standard of writing that requires considerable effort by the reader to understand the report. Extensive formatting, spelling and grammatical errors.</td>
<td>Standard of writing that requires work by the reader to understand the report. Formatting, spelling and grammatical errors significantly detract from the readability.</td>
<td>Lacks conciseness and clarity. Some formatting, spelling and grammatical errors.</td>
<td>Clear and concise. Well organised. Good writing, largely free from formatting, spelling and grammatical errors.</td>
<td>Very clear and concise. Very well organised. Excellent writing, completely free from formatting, spelling and grammatical errors.</td>
</tr>
<tr>
<td>References*</td>
<td>Incorrect or inconsistent format.</td>
<td>Mostly incorrect or inconsistent format.</td>
<td>Mostly correct and consistent format.</td>
<td>Correct and consistent format.</td>
<td>Consistently adheres to correct format.</td>
</tr>
</tbody>
</table>

Please note, some practical reports only require some of the sections detailed below, while others may require additional information. Please check the requirements for each practical report and the weighting of each section. In year 3 and year 4, there will be greater focus on assessing evidence of breadth and depth of reading and understanding. In year 3 and year 4, there will be greater focus on assessing evidence of breadth and depth of reading and understanding.
**Laboratory Notebook assessment criteria**

Please note, some lab notebooks may not be assessed on all of the sections detailed below, and some lab notebooks may require additional information. Please check the requirements for each lab notebook and the weighting of each section.

<table>
<thead>
<tr>
<th>Section</th>
<th>&lt;10</th>
<th>11-13</th>
<th>14-16</th>
<th>17-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index</td>
<td>No index or poor index</td>
<td>Reasonable index with a number of lapses</td>
<td>Good index with only occasional lapses</td>
<td>Excellent, clear index</td>
</tr>
<tr>
<td>Dates and Titles</td>
<td>Poor recording of dates. Titles either not provided or not relevant</td>
<td>Reasonable recording of dates with number of lapses. Reasonable titles provided throughout notebook</td>
<td>Good recording of dates with occasional lapses. Good title descriptors provided throughout notebook</td>
<td>Accurate and consistent recording of dates. Excellent title descriptors provided throughout notebook</td>
</tr>
<tr>
<td>Experimental Rationale</td>
<td>Rationale either not provided or difficult to follow or not relevant</td>
<td>Rationale provided for every experiment but falls short on clarity</td>
<td>Rationale provided for every experiment. Mostly clear and easy to follow</td>
<td>Rationale for every experiment set out in a very clear, concise and easy to follow manner</td>
</tr>
<tr>
<td>Experimental Methods</td>
<td>Weak description of experimental methods. Difficult to follow or not accurate</td>
<td>Reasonable description of experimental methods but falls short on clarity in some areas</td>
<td>Good, mostly clear and complete description of experimental methods</td>
<td>Excellent unambiguous and complete description of experimental methods</td>
</tr>
<tr>
<td>Recording of raw data in lab notebook, or field book for field based studies</td>
<td>Weak with gaps/inaccuracies in raw data sets and control/calibration data, difficult to follow, units unclear. Possible errors but not identified as such. Impossible to audit and reach independent conclusions</td>
<td>Mostly good with a few lapses in accuracy/detail for all raw data including control/calibration data. Mostly correct units throughout. Errors identified as such. Mostly easy to audit and to reach and independent conclusion</td>
<td>Good with only occasional lapses in accuracy/detail for all raw data including control/calibration data. Correct units throughout. Errors clearly identified as such. Easy to audit and to reach an independent conclusion</td>
<td>Excellent evidenced by accuracy and detail provided for all raw data, including control/calibration data. Correct units throughout. Errors clearly identified as such. Very easy to audit and reach independent conclusion</td>
</tr>
<tr>
<td>Data accurately transferred from field book to lab notebook (for field based studies only)</td>
<td>Weak. A number of lapses in accuracy/clarity of data transfer</td>
<td>Mostly good with a few lapses in accuracy/clarity of data transfer</td>
<td>Very good with only occasional ambiguity</td>
<td>Excellent with no ambiguity</td>
</tr>
</tbody>
</table>

64
| Group recording of raw data in field based studies | Weak with a number of lapses in the following: terminology, standardisation of data sheets, standardisation of data collection, cross-referencing, data signed | Mostly good with a few lapses in the following: terminology, standardisation of data sheets, standardisation of data collection, cross-referencing, data signed | Very good with occasional lapses in the following: terminology, standardisation of data sheets, standardisation of data collection, cross-referencing, data signed | Excellent. Consistency in the following: terminology, standardisation of data sheets, standardisation of data collection, cross-referencing, data signed |
| Data presentation | Poor presentation of data. Either presented in an inappropriate or incorrect manner | Mostly good presentation of data with a number of lapses | Good presentation of data with occasional lapses | Excellent, appropriate presentation of all data |
| Data manipulation/calculations | Weak data manipulation/calculations evidenced by consistent misunderstandings/errors | Mostly good data manipulation using mostly appropriate approaches/calculations | Good data manipulation using standard approaches/calculations | Excellent, perhaps novel, but consistently appropriate data manipulation/calculations |
| Summaries and ideas | Either no summaries/ideas recorded or weak interpretation of data. May consistently over-interpret or fail to interpret most of the data | Mostly good interpretation of data. Falls short by over-interpretation or failure to assign importance to all data. Mostly good suggestions arising from data | Good, careful interpretation of data. Good suggestions following on from good interpretation | Excellent, concise, thoughtful interpretation of data. Thoughts arising from data suggest an excellent understanding |
# Research Proposal assessment criteria

Please note, some Research Proposal assessments only require some of the sections detailed below. Please check the requirements for each assessment and the weighting for each section.

<table>
<thead>
<tr>
<th>Importance of problem</th>
<th>&lt;10</th>
<th>11-13</th>
<th>14-16</th>
<th>17-20</th>
</tr>
</thead>
</table>

| Background | Poor range of references. Many key references missing. | Good range of references. Some important references/topics missing. | Very good range of peer-reviewed references. | Extensive, relevant, up-to-date range of peer-reviewed references. |

| Structure/Style | Poor structure/style. Fails to communicate key points clearly. | Structure/style mostly appropriate. Not all key points presented clearly. | Very good structure/style. Written such that most key points are clear. | Excellent structure/style. Written such that all key points are clear and engaging. |


| Appropriateness of staff/equip/costs | Unrealistic costings. Not all aspects considered. | Some costs considered appropriately. Other costs not realistic with aims/budget difficult to achieve. | Carefully costed, some aspects overlooked, which may compromise aims/budget. | Very carefully costed. Kept to realistic minimum without compromising aims. |

| Overall rating of scientific merit | Poorly considered experiments and outcomes. Will not contribute to this area of science. | A good application. Some weaknesses in experimental planning and possible outcomes. Potential to add to this area but needs work. | Outcomes and experiments are very good & worth pursuing. Results will add to this area of science. | Planned experiments and outcomes excellent. Will take this area of science beyond current limits. |

| Adhering to presentation guidelines | Ignores guidelines. | A number of deviations from the guidelines. | Adheres to guidelines in most of submission. | Adheres to guidelines throughout. |
Oral Presentation marking criteria

Please note, some oral presentation assessments may not be assessed on all of the sections detailed below.

In years 3, 4 & 5, there will be greater focus on assessing evidence of breadth and depth of reading and understanding.

<table>
<thead>
<tr>
<th></th>
<th>10</th>
<th>11-13</th>
<th>14-16</th>
<th>17-20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Delivery</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Read the talk</td>
<td></td>
<td>Extensive use of notes throughout delivery</td>
<td>Very good. Delivered with occasional use of notes</td>
<td>Excellent. Delivered with confidence and entirely without use of notes</td>
</tr>
<tr>
<td>Poorly structured and very difficult to follow throughout entire presentation</td>
<td></td>
<td>Mostly well structured, however, some of the content was unclear</td>
<td>Well-structured with only odd passages less easy to follow</td>
<td>Very well-structured, easy to follow entire presentation</td>
</tr>
<tr>
<td><strong>Structure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A weak selection of references. Limited range or irrelevant to topic</td>
<td></td>
<td>A satisfactory range of references. Mostly relevant review sources with little or no primary source material</td>
<td>A very good range of references. Good choice of review sources and some primary source material</td>
<td>Excellent range of relevant, up to date references, including primary source material</td>
</tr>
<tr>
<td>Significant difficulty with timing. Less than 50% of time filled or 50% over time</td>
<td></td>
<td>Had to adjust to meet time constraints by rushing or finishing too soon</td>
<td>Very good. Timing within stated time +/- 20%</td>
<td>Excellent. Timing within stated time +/- 10%</td>
</tr>
<tr>
<td><strong>Timing</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor. Difficult to follow</td>
<td></td>
<td>Requires some effort to retain attention</td>
<td>Very good, easy to retain attention</td>
<td>Enjoyable, dynamic, stimulating</td>
</tr>
<tr>
<td><strong>Presentation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor quality visual aids which lack clarity, relevance, logic</td>
<td></td>
<td>Too busy or too little information. Unclear in some places</td>
<td>Very good but could be improved with some attention to consistency or amount of content</td>
<td>Professional, clear, logical use of visual aids</td>
</tr>
<tr>
<td>Failed to answer questions. Appeared to lack confidence/knowledge to respond to questions</td>
<td></td>
<td>Gave satisfactory response, perhaps required a bit of coaxing. Response could be improved with more confident delivery or more detail</td>
<td>Very good. Shows a good understanding of topic and questions. Responded appropriately to questions</td>
<td>Excellent. Gave confident, detailed and relevant responses. Clearly on comfortable with subject</td>
</tr>
<tr>
<td><strong>Group presentation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor group performance. Division of sections and lack of consistency throughout the presentation suggest little or no teamwork. Inability to support each other during questions.</td>
<td></td>
<td>Satisfactory group performance. Presentation mostly consistent throughout and sections shared in a mostly logical way.</td>
<td>Very good group performance. Evidence of very good teamwork e.g. consistency throughout presentation, good division of sections and very good interactions during questions</td>
<td>Excellent group performance. Clear evidence of excellent teamwork e.g. cross-referencing or sharing responses to questions. Sections divided logically.</td>
</tr>
</tbody>
</table>
Proposed assessment criteria for Poster Presentation marking

Please note, some poster presentation assessments may not be assessed on all of the sections detailed below. In years 3, 4 and 5, there will be greater focus on assessing evidence of breadth and depth of reading and understanding.

<table>
<thead>
<tr>
<th></th>
<th>&lt;10</th>
<th>11-13</th>
<th>14-16</th>
<th>17-20</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background reading</strong></td>
<td>Poor range of references. May be irrelevant or may be limited in number</td>
<td>Satisfactory range of references. Satisfactory use of review sources but limited, or no primary, sources.</td>
<td>Very good range of relevant references. Very good range of primary sources as well as reviews.</td>
<td>Extensive, relevant and recent. Excellent range of relevant primary sources as well as reviews.</td>
</tr>
<tr>
<td><strong>Preparation</strong></td>
<td>Little or no evidence of good preparation. Basic understanding of the key points. Most points are covered superficially/poorly. Poor analysis of material</td>
<td>Most of the key points are covered indicative of satisfactory preparation. One or two points may be covered in less depth, or content/importance of some points may not be fully understood</td>
<td>Very good preparation. Content indicates a very good understanding of all key points</td>
<td>Clear evidence of extensive preparation evidenced by thoughtful and insightful poster presentation</td>
</tr>
<tr>
<td><strong>Presentation</strong></td>
<td>Poor. Lacks clarity, focus, relevance and/or consistency. Difficult to follow evidence presented and to identify take home message</td>
<td>Satisfactory, with one or two lapses in clarity or focus or relevance or consistency. Take home message remains clear</td>
<td>Very good and clear throughout. Evidence presented and take home messages are clear</td>
<td>Excellent. Clear and logical. Evidence presented and take home messages are very clear</td>
</tr>
<tr>
<td><strong>Ease of viewing &amp; navigation</strong></td>
<td>Poor. Difficult to read much of the text and the images. Difficult to navigate around the poster content</td>
<td>Satisfactory. Most of the text and images are clear with one or two lapses in quality. Easy to follow most of the information presented</td>
<td>Very good. All text and images are very clear with only occasional lapses. Easy to follow all of the information presented</td>
<td>Excellent. All text and images are very clear. Very easy to follow all of the information presented</td>
</tr>
<tr>
<td><strong>Question session</strong></td>
<td>Failed to answer questions. Appeared to lack confidence/knowledge to respond to questions</td>
<td>Gave satisfactory response, perhaps required a bit of coaxing. Response could be improved with more confident delivery or more detail</td>
<td>Very good. Shows a good understanding of topic and questions. Responded appropriately to questions</td>
<td>Excellent. Gave confident, detailed and relevant responses. Clearly on comfortable with subject</td>
</tr>
<tr>
<td><strong>Group poster presentation</strong></td>
<td>Poor group performance. Division of sections and/or lack of consistency throughout the presentation suggest little or no teamwork. Inability to support each other during questions</td>
<td>Satisfactory group performance. Presentation mostly consistent throughout and sections shared in a mostly logical way</td>
<td>Very good group performance. Evidence of very good teamwork e.g. consistency throughout presentation, good division of sections and very good interactions during questions</td>
<td>Excellent group performance. Clear evidence of excellent teamwork e.g. cross-referencing or sharing responses to questions. Sections divided logically</td>
</tr>
</tbody>
</table>