**Guidelines for Undergraduate Laboratory and Field classes in SBES**

Core practical skills, both in the laboratory and field are key components of our undergraduate programmes. These core skills are taught by a team of academic and technical staff and demonstrators. The basic role and responsibilities of each of these cohorts are outlined below. This is not intended to be an exhaustive list as specific responsibilities will vary depending on the module and the skills being taught, and exceptions may arise depending on the practicals involved. It should be noted that any exception must be approved by the Head of T&L and if technical resources are involved they should be discussed with the Chief Technical Officer (CTO). The basic role and responsibilities of academic staff, technical staff and demonstrators involved in the delivery of practical classes are presented below. Please read the guidelines for all cohorts so as to avoid any miscommunication or misunderstandings.

**Academic staff**

The academic staff member has overall responsibility for the practical class including assessment and should:

* Ensure that all activities comply with Health and Safety regulations (white coats, goggles etc.; See SBES Safety Statement for details and consult with Technical staff if necessary). Ensure all risk assessments are prepared and available on Brightspace and reviewed/updated as necessary.
* Liaise with technical staff concerning resources needed for each practical class. Academic staff should discuss the practical requirements with the Technical Officer(s) before the trimester commences and they should provide a list of requirements at least 2 weeks (4 weeks for live specimens) before the practical. Longer lead in times are required if a practical needs live material or requires material to be ordered specifically.
* Ensure an appropriate laboratory manual is available on Brightspace for students before the practical sessions start. The School should not sell laboratory manuals to students. Academic staff may wish to print some spare ones for students who forget theirs but students should be informed that they need to print out and bring the manual to the class if that is what is required.
* Ensure demonstrators have adequate training to teach the material required. This may involve running through the practical with students before the session (15 mins max) or in some cases involve more detailed training ahead of the practicals.
* Provide relevant material to demonstrators ahead of each practical class including where they can source appropriate background material if they are demonstrating a class outside their immediate area of expertise.
* Provide the pre-practical presentation to any demonstrator/ technical staff member expected to deliver it.
* If demonstrators are expected to grade laboratory reports, the academic staff member must provide an appropriate marking/grading scheme and model answer(s). Assessments should be designed to assess the learning outcomes of the practical session(s) and due consideration should be given to the workload of demonstrators. Academic staff should not typically expect demonstrators to grade assessments for smaller classes (<40 students). Information on grading requirements for demonstrators should be discussed with the Head of School or the Head of T&L and must be provided to Rachael Reenan before the start of the trimester.
* Be present at the beginning of the practical class and preferably throughout the practical. These classes provide a good opportunity for staff to interact with students which is very much appreciated by students. If a staff member is not present during the practical they should be on-site and available throughout. If for any reason they can’t be present and available, another academic staff member must step in.
* Complete an incident report for any accident that may occur during the practical and submit to the CTO in a timely manner.
* Ensure the labs are locked and power is turned off if a practical finishes out of hours.
* Ensure all grades are entered into the UCD system and students are provided with appropriate feedback within 20 days in line with UCD Academic Regulations.
* Be aware of what the guidelines provided to the demonstrators and the additional payments agreed for specific modules (see Table 1)

**Technical staff**

The role of technical staff is to support academic staff and demonstrators and where appropriate (and in agreement with the Head of School) to teach certain practical classes. Responsibilities of technical staff include:

* Maintain all lab equipment and labs associated with the practical classes.
* Liaise with academic staff concerning resources needed for the practical sessions.
* Liaise with academic staff in the preparation of risk assessments and general health and safety regulations.
* Provide material needed for the practical classes and ensure appropriate IT/AV resources are in place and working.
* Ensure the laboratories are set up as required.
* Assist in the training of demonstrators where appropriate and agreed in advance.
* The technical officer responsible for the practical should be present in the laboratory 15 mins before the practical starts and for at least the first 10-15 mins. They should be on-site and available throughout the practical to respond to any issues arising with the labs or materials during the practical class.
* Remove/dispose of material after the practical and ensure the laboratory is ready for the next laboratory session.
* Ensure labs are open for practical classes and lock up and power off afterwards in normal working hours.

**Demonstrators**

Demonstrators in SBES are important members of our practical teaching teams and are generally the people the students have most interaction with. Demonstrators will be provided with the resources they need to demonstrate the laboratory (lab manual, source of background reading and specific training where required) by the academic staff member and if required to grade laboratory reports. Demonstrators will be provided with a grading scheme, model answer and indication of workload involved. Given the breadth of material we teach in SBES it is not always possible to allocate a demonstrator to a module in their specific area of expertise. It is assumed all PhD students in, or graduates of the School of Biology & Environmental Science have the requisite knowledge or ability to demonstrate in their assigned modules.

* All SBES PhD and MSc (research) students located on the UCD campus must demonstrate on practical classes while registered for a graduate research degree in the School.
* Demonstrators must conform with SBES and UCD Health and Safety regulations (see link to Safety Statement below) and ensure the students also adhere to these guidelines.
* Demonstrators should ensure they understand and are familiar with the practical content and turn up on time for the pre-practical and 10 min before the practical starts if there is no pre-practical talk scheduled
* Demonstrators should undertake any training required for the practical.
* Demonstrators should attend the pre-practical talk.
* Demonstrators should actively engage with students and deal with their queries.
* More experienced demonstrators may be expected to give pre-practical talks.
* Demonstrators should grade laboratory reports and provide feedback to students where appropriate. Grades should be collated and passed onto the academic staff member within the time period specified.
* Demonstrators should ensure that students leave the laboratory clean and tidy.
* Demonstrators should demonstrate the sessions allocated to them. In the event of illness or some other extenuating circumstances, it is the responsibility of the demonstrator to arrange cover. By definition this should be an infrequent occurrence, continuity is important for the students and they highly value having the same demonstrator for a specific module. If a demonstrator can’t make a practical session they must arrange cover.
  + This can be done by contacting all the demonstrators (not just those demonstrators in the same modules) via email  cc’ing both [rachael.reenan@ucd.ie](mailto:rachaeal.reenan@ucd.ie) and the academic staff member in charge.
  + If arranging cover for demonstrating a Stage 3 or Stage 4 module, the demonstrator must check with the academic staff member that the replacement has the requisite skills as these modules can require specialised knowledge.
  + Once cover is arranged, the demonstrator must inform the academic staff member and pass on any material to the demonstrator that they need for the lab.
  + If a demonstrator is unable to arrange cover, they need to let the academic staff member know ASAP and cc [rachael.reenan@ucd.ie](mailto:rachaeal.reenan@ucd.ie) It is not sufficient to only send out one email requesting cover and not follow up if no response is received
  + If a replacement has to grade material, it is the demonstrator assigned to that practical session responsibility to get the grades from the replacement and pass them on to the Academic staff member in charge.
* Demonstrators will be paid a rate of €20.73 per hour for the first 2 years and then a senior demonstrator rate of €24.90 per hour thereafter if they have sufficient demonstrating experience (at least 90 hours over a 2 year period).
* Demonstrators will be paid for the timetabled hours for a practical session. They will not be paid for pre-practical talks unless stated below which will be no more than 15 min
* The School will pay demonstrators extra for each practical session in the modules listed in Table 1 to take account of the time needed to grade lab reports.
* All PhD students in SBES must complete BIOL40100, Teaching in Higher Education as a Graduate Assistant (SBES) in the first year.

**General**

* Allocation of demonstrators will be managed centrally and while every effort will be made to assign demonstrators with appropriate skills to specialised modules, requests by staff for specific demonstrators and requests by demonstrators to be assigned to specific modules will not be possible.
* Payment for grading must be agreed with the Head of School in advance of the practicals.
* Addition of practical/field sessions or tutorials that require demonstrators to new or existing modules must be discussed with, and approved by the Head of School.
* The ratio of demonstrators:students allocated to Stage 3 modules will typically be lower than for Stage 1 and 2 modules to reflect the growing independence and skill base of the students.
* With the exception of their first trimester in SBES, PhD and MSc (Research) students will be expected to demonstrate while registered for a higher degree. The workload in their final trimester will be reduced and involve no more than 1 module

**Table 1: Modules that demonstrators can claim additional payment (as detailed) to the timetabled hours for grading duties.**

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| --- | --- | --- | --- |
| **Module code** | **Name** | **Trimester** | **Demonstrator payments** |
| BIOL00010 | Fundamentals of Biology | Autumn | Paid 1h extra per practical session to grade  Paid 1h extra for the pre-meeting  Paid 1h extra to cover all the pre-practicals |
| BIOL10120 | Cell Biology and Genetics (NEU) | Autumn | Paid 1h extra per practical session to grade  Paid 1h extra for the pre-meeting  Paid 1h extra to cover all the pre-practicals |
| BIOL10140 | Life on earth | Autumn | Paid 1h extra per practical session to grade  Paid 1h extra for the pre-meeting  Paid 1h extra if need to attend dissection training |
| ENVB30010 | Systems Ecology | Autumn | Paid 2h extra to cover corrections in Wk 6  Paid 2h extra for two pre-practical sessions |
| ZOOL40510 | Conservation of Biodiversity: Theory and Practice | Autumn | Paid 1h extra per practical session to grade |
| CELB20060 | Principles of Cell and Molecular Biology | Autumn | Paid 1h extra per practical session to grade |
| BIOL10130 | Biology in Action | Autumn | Paid an extra session at end to grade  Paid 1h extra for the pre-meeting  Paid 1h extra to cover all the pre-practicals |
| ZOOL10010 | Medical Zoology | Autumn | Paid an extra session at end (to cover grading and pre-practicals)  Paid 1h extra for the pre-meeting |
| CELB30110 | Plant Cell Biology | Autumn | Paid 1h extra for last practical only |
| CELB30130 | Cell Biology of Disease | Autumn | To be reviewed yearly by HoS – some prep work may be claimable |
| BMOL20060 | Biomolecular Lab Skills 1 | Autumn | Paid 1h extra to cover the first pre-practical  Paid 3hs to cover the correcting of the last assignment |
| BIOL10010 | Animal Biology and Evolution | Spring | Paid 1h extra per practical session (to cover grading and pre-pracs)  Paid 1h extra for the pre-meeting |
| BIOL10030 | Cell and Plant Biology | Spring | Paid 1h extra per practical session to grade  Paid 1h extra for the pre-meeting  Paid 1h extra to cover all the pre-practicals |
| BIOL10110 | Biology: Cell Biology and Genetics | Spring | Paid 1h extra per practical session to grade  Paid 1h extra for the pre-meeting  Paid 1h extra to cover all the pre-practicals |
| ZOOL30010 | Functional Morphology | Spring | Paid 1h extra per practical session to grade |
| ENVB40680 | Soil Ecology | Spring | Paid 1h extra to cover grading for entire module |
| GENE20020 | Principles of Genetics | Spring | Paid an extra session at end to cover all the pre-practicals |
| CELB30120 | Hot Topics in Cell Biology | Spring | To be reviewed yearly by HoS – some prep work may be claimable |
| GENE40080 | Population Genetics | Spring | Paid 1h extra for the pre-meeting |

*For all other modules demonstrators should claim the scheduled hours for a practical session*

**SBES Safety Statement**

<https://www.ucd.ie/bioenvsci/t4media/SBES%20SAFETY%20STATEMENT_AUGUST%202019%20FOR%20WEBSITE.pdf>