

UNIVERSITY OF CAPE TOWN



DEPARTMENT OF BIOLOGICAL SCIENCES

DEPARTMENTAL GUIDE 2024





GUIDE TO THE DEPARTMENT OF BIOLOGICAL SCIENCES

Welcome to the Department of Biological Sciences at the University of Cape Town. This guide is intended to assist you in finding your way around the department and its facilities. Additional information is available on the [UCT website](#), [faculty website](#) and the [departmental website](#). Where appropriate this guide will provide links to other sources.

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1. LOCATION

The Department of Biological Sciences is situated on the northern [side of the University of Cape Town's Upper Campus](#). The Department consists of two buildings located on either side of University Avenue - the John Day building (JD) is located on the western side, and the H.W. Pearson building (HWP) is located on the eastern side. Floor plans can be used to navigate the department and are available on every floor of the relevant building near stairwells and elevators. To make contact with the department you can use the north entrance of the John Day building to access reception.

2.FACILITIES

2.1 Communal spaces

The department has several communal workspaces that can be utilised by all departmental students and staff. These are work spaces and should be used with discretion to ensure a peaceful working environment for all:

- H.W. Pearson computer centre (Room 3.06 HWP)
- John Day Museum (Room 3.01 JD)
- Bolus Herbarium Library (Room 4.07 HWP)
- John Day Tearoom (John Day 1st Floor)

Additionally, postgraduates have access to the Niven Library.

2.2 General Lab Equipment

The department has a range of general laboratory equipment (e.g. scales, balances, glassware, lab consumables etc.) that can be utilised for research purposes. To access the equipment please contact the relevant staff member listed below.

Plant Physiology and General Equipment in HWP

Dr Dawood Hattas (Principal Scientific Officer)
Room: 4.03 HWP
Tel: 0216502443
Email: Dawood.Hattas@uct.ac.za

General Equipment in JD

Ms Liesl Phigeland (Principal Scientific Officer)

Room: 3.15 JD

Tel: 0216503647

Email: liesl.phigeland@uct.ac.za

Microscopes in JD

Mr Bongani Tom (Departmental Assistant JD)

Room: 3.13 JD

Tel: 0216503034

Email: bongani.tom@uct.ac.za

Microscopes in HWP

Mr Frederick Stellenboom (Departmental Assistant HWP)

Room: 3.12 HWP

Tel: 0216501592

Email: frederick.stellenboom@uct.ac.za

2.3 Special Lab Equipment

In addition to general laboratory equipment, the department offers equipment for specialised research. To access this equipment please contact the relevant staff member listed below.

Elemental analyser

CHN Analyser

Freeze drier

Refrigerated centrifuge

Infrared gas analyser

Root analyser

UV/VIS Spectrophotometer/Plate reader

Reflectometer (measures colour)

Canopy Analyser (measures Leaf Area Index),

etc.

Dr Dawood Hattas (Principal Scientific Officer)

Room: 4.03 HWP

Tel: 0216502443

Email: Dawood.Hattas@uct.ac.za

Digital Imaging studio - Photography, Photo microscopy, SEM & EDX Analysis Unit

Mr Michael Brooks (Principal Technical Officer)

Room :3.03 JD

Email: Michael.Brooks@uct.ac.za

Cal 3k Bomb Calorimeter

Zeiss Axio Observer Fluorescent Inverted Microscope

Ms Liesl Phigeland (Chief Scientific Officer)

Room: 3.15 JD

Tel: 0216503647

Email: liesl.phigeland@uct.ac.za

2.4 Field Equipment

Field equipment ranging from tape measures, secateurs, spades, shovels, metre rules, ranging rods, pressure bombs, clipboards, box sieves, quadrats, rodent traps amongst others is available on request.

To book equipment for fieldwork contact [Ms Isabella Gongota](#).

Room: HWP 3.12

Email: Isabella.Gongota@uct.ac.za.

AND

[Mr Bongani Tom](#)

Room: JD 3.13

Email: Bongani.Tom@uct.ac.za

2.5 IT, Printing & Photocopying Support Services

While many postgraduate offices and laboratories have their own computers and printing solutions, the department also has a general use computer laboratory (HWP 3.06), printers and photocopiers (JD 1.33 & JD Museum; HWP 4.05) which can be accessed using a valid student card or student account number. For assistance with IT support, printing, photocopying and student accounts please contact [Ms Andrea Plos](#).

Ms Plos is the Principal Technical Officer and manages departmental desktop and networked computing services, is the ICTS liaison, the HWP computer lab administrator, CB computer lab administrator, web CMS Domain administrator, and provides general hardware and software support.

Room: 3.16 JD

Email: andrea.plos@uct.ac.za

2.6 Postgraduate Laboratories and Facilities

There are a number of laboratories utilised by our postgraduate students, some of which have specialised work spaces suited to certain kinds of research. To make use of these spaces please contact the relevant staff member listed below.

2.6.1 H.W Pearson

Soils Lab - Room 1.01

This space is used for soil processing. It is not a storage place for soils. All soils should be processed within a month, thereafter they will be disposed of if not claimed.

Constant Temperature Room - Room 2.10.

The chambers are kept at 10 and 15 degrees Celsius (+/- 1 deg). The chambers have shelving with fluorescent light canopies with automatic on/off switching. There are also 4C, 10C and 25C rooms in HWP on level 3.

Glass Houses - located inside the department on Level 2, as well as opposite HWP on Residence Road and Madiba Circle.

The Departmental Glasshouse is primarily used for undergraduate experimental work, the Residence Road Glasshouse for postgraduate research and the Madiba Circle Glasshouse to house and propagate a rare selection of succulent plants from around the world.

Sterile Lab - Room 2.23

Houses autoclaves (high pressure steam sterilisers for soil and liquids), reverse osmosis water (for analysis) and laminar flow cabinets. These cabinets are tissue culture hoods, which are carefully enclosed to prevent contamination of any particle sensitive material. Air is drawn through a HEPA filter and blown in a very smooth, laminar flow towards the user.

For use of the above spaces please contact Technical Officer [Ms Isabella Gongota](mailto:isabella.gongota@uct.ac.za)

Room: 3.05 HWP

Tel: 0216502437

Email: isabella.gongota@uct.ac.za

Systematics Lab - Room 3.13

The lab is equipped with necessary equipment for the extraction, isolation and replication of DNA samples (PCR). There are no facilities for DNA sequencing. The lab offers two large horizontal -70 °C freezers for the storage of molecular sample material.

Contact [Dr Jacqueline Bishop](mailto:jacqueline.bishop@uct.ac.za) or

[Ms Isabella Gongota](mailto:isabella.gongota@uct.ac.za)

Room HWP 3.22

Room HWP 3.12

Email: jacqueline.bishop@uct.ac.za

Email: isabella.gongota@uct.ac.za

2.6.2 John Day

Animal processing lab - Room 2.24

This lab is for the processing/dissection of animal material. The lab has a large wash-up area and deep basins for handling large specimens. Extractor arms are used to extract unpleasant odours resulting from the processing of biological material. To book this space please email liesl.phigeland@uct.ac.za and complete the user form.

NB. Animal waste to be placed in the waste freezer (room 2.29).

Chemical Processing lab and Balance Room - Room 2.07

This lab is for the processing/sorting of biological material preserved in alcohol or formalin as well as for postgraduate projects requiring the use of chemicals and scientific equipment. The lab includes a balance room which houses analytical balances. Extractor hoods and extraction arms are provided for working with volatile chemicals. To book this space please email liesl.phigeland@uct.ac.za

NB. Chemicals to be labelled and stored in chemical safety cabinets, Material Safety data Sheets (MSDS) filed for each chemical, and chemical waste to be stored in labelled waste bottles.

2.7 General Facilities

The following facilities are available for use upon request with the relevant staff member listed below.

Aquaria - HWP Rooms 2.15 & 2.16 (**Ms Isabella Gongota**); JD Rooms 1.19, 1.21, 1.22, 1.25 & 1.26 (**Ms Andrea Plos**, Tel: (021) 650 5064, Email: andrea.plos@uct.ac.za)

The department has numerous aquaria for research purposes that can be controlled for environmental conditions.

Phytotron - Room 2.25. HWP

These are controlled environment facilities. The phytotron houses five plant growth chambers with a total of 18 square metres of growth space plus associated instrumentation and laboratories. All five chambers are equipped with automatic refrigeration valves, atomizing spray nozzles, and provide control over temperature (+/- 1 deg. Celsius), relative humidity (not always at the set point +/- 10%), light intensity and photoperiod. The chambers are equipped with 250W incandescent light bulbs and metal halide canopies (SunMaster Cool Deluxe), providing intensities in the range of 600 to 1200 umoles/m²/s.

To make use of these facilities please contact Chief Technical Officer **Ms Isabella**

Gongota

Room: 3.05 HWP

Tel: 0216502437

Email: isabella.gongota@uct.ac.za

Freezers and storage - There are several freezers and cold storage rooms available for specimen storage. To make use of these facilities please contact **Mr Taahir Jabaar**.

Room: 2.04.2 JD

Email: taahir.jabaar@uct.ac.za

Libraries - The department has two libraries, the Niven Library and the Bolus Herbarium Library. The Niven Library is part of the FitzPatrick Institute of Ornithology and can be accessed by postgraduates and researchers. Undergraduates may be granted access to this space under special conditions, or upon request with the librarian. The Bolus Herbarium Library is open to all students with a valid student card.

Dive unit - located in the Oceanography Department (R.W James Building)

The UCT Research Diving Unit (RDU) is fully equipped with a decompression chamber and compressor. Most scientific diving at UCT is carried out in conjunction with the RDU. Courses are offered to both UCT students and non-students. For more information please contact the RDU supervisor **Mr Pieter Truter**.

Email: pieter.truter@uct.ac.za

Tel: +27 (0) 21 650 3285

2.8 Vehicles

The department owns several bakkies and trailers for field excursions and general departmental use. Vehicles can also be hired through the department when necessary for research- and teaching-related transport needs. To enquire about vehicle use or vehicle hire please contact **Ms Raeza Rayner** at reception.

Email: raeza.rayner@uct.ac.za

2.9 Boats

The department makes use of two research vessels - the *Sargasso* and the *Ma-Re 1*. The *Ma-Re 1* research boat is a 7.3m Gemini semi-rigid inflatable vessel, powered by two 90hp outboards, and has removable dive racks which make it suitable for both SCUBA and surface diving. It also comes with a stainless steel gantry, providing a platform for the deployment of oceanographic equipment, nets etc. *Ma-Re 1* has navigational equipment and is licensed for 10 people, offering sufficient capacity for student field trips. The *Sargasso* is a 11m sport-fishing vessel, useful for near-coast research in the Western Cape. To enquire about the use of these boats please contact

A Prof Colin Attwood (*Sargasso*) or

Tel: +27-(0)21-650-3612

Email: colin.attwood@uct.ac.za

Mr Pieter Truter (*Ma-Re 1*)

Tel: +27 (0) 21 650 3285

Email: pieter.truter@uct.ac.za

3. Waste Management

3.1 Undergraduates and Honours

Waste from undergraduate and Honours students is managed by the department. Please make use of labelled disposal bins within laboratories and adhere to the health and safety instructions given by your course convenors and laboratory demonstrators.

3.2 Postgraduates and Researchers

- Chemical waste

All staff and students working in research labs and/or in the field are responsible for the chemical waste that they generate.

Chemical waste should never be poured down the sink or drain. Chemical waste must be stored in appropriate size waste containers (available from departmental assistants). The waste container must be clearly labelled with the name of all chemical components and the disposal method indicated in the safety/hazard data sheet: AB (Ash Blend), Encapsulation, ITP (Inorganic Treatment Plant).

Properly labelled chemical waste containers should be taken over to the MCB chemical waste store. Email blommie.filmer@uct.ac.za in advance to confirm the volume and content of your chemical waste.

- **Animal waste**
All animal waste must be discarded according to strict protocols and never disposed of in an office or public standard refuse bins. All animal waste as well as materials contaminated with body fluids (tissues, cotton wool, rubber/nitrile/latex gloves), must be placed in the appropriate container available in the processing labs. Once finished with the processing, the bin liner bag must be closed with a string or cable tie and deposited in the *waste freezer* in room JD 2.29.
The manager of this facility is Mr Bongani Tom.
Room: 3.13 JD
Email: Bongani.Tom@uct.ac.za.
- **Laboratory waste**
All laboratory materials such as empty vials, syringes, needles, capillary tubes, blades, petri dishes, broken glass as well as any other sharp material needs to be discarded in a properly labelled container (available from departmental assistants). This applies for materials used in the field which should be taken back to campus for proper disposal.

4. Staff Contacts

Please follow the embedded links for a comprehensive list of [academic](#), [support](#), and [administrative](#) staff contacts. The [UCT White Pages](#) can also be consulted for staff contact details, using a valid UCT login.

Quick Contacts:

Head of Department - Associate Prof Colin Attwood

Room: JDay 1.34.1

Tel: +27-(0)21-6503626

Email: colin.attwood@uct.ac.za

Departmental Manager - Mrs Claire Khai

Room : JDay 1.34

Email: Claire.Khai@uct.ac.za

5. Student Advisors

The department has numerous designated student advisors that can be consulted regarding course selection, changing courses/majors, and general academic support. Find the list of student advisors [here](#).

6. Administrative Support

For a comprehensive list of the department's administrative support team please follow the link here. The contacts below will be able to assist with most of your administrative queries.

Administrative Assistant

- Research fund reporting/management and maintenance, financial statements, publications, PG applications, uploading contracts, cost recoveries
HR/Grant/Scholarship payments

Mrs Soraya Abrahams

Room : 1.33 JD

Email: Soraya.Abrahams@uct.ac.za

Senior Secretary

- Undergraduate administration, honours application administration, issuing of keys, venue bookings

Ms Raaeza Rayner

Room : 1.34 JD

Email: Raaeza.Rayner@uct.ac.za

Administrative Assistant

- Financial, HR and Academic administration for research funds

Ms Natalie Jodamus

Room : 1.33 JD

Email: Natalie.Jodamus@uct.ac.za

Departmental Manager

- General administration, academic administration, financial administration and human resource matters of the department.

Mrs Claire Khai

Room : 1.34 JD

Email: Claire.Khai@uct.ac.za

Procurement Officer

- Generating purchase orders, delivery and payment follow ups, clearing p/card transactions and p/card reporting, vendor applications.

Mr Carlisle Anthony

Room : 1.33 JD

Email: carlisle.anthony@uct.ac.za

7. Postgraduate Forms

The Memorandum of Understanding (MoU)

The MOU is a formal agreement between a postgraduate student and their supervisor regarding their expectations of each other, and the requirements for the research for their degree. The intention is for students and supervisors to discuss and agree on several important issues at the point of registration. While this document may seem daunting, it is important to complete each section with care. In addition to helping plan the Master's or Doctoral Research programme, the MoU will be referred to in the case of any conflict or dispute arising during the course of study. Common disputes include issues over who funds research, authorship, intellectual property rights, insufficient contact time and feedback from supervisors. In addition to the actual outline of the research proposal, students and supervisors should agree on the milestones that need to be achieved so that students can graduate in the expected time for a Masters (2 years) or Doctoral (3 years) degree. This is important, as postgraduate funding is limited to the expected duration of the degree. Students and supervisors need to have a discussion on what funding the postgraduate student has to support themselves, prior to embarking on the degree. There should also be a clear understanding of what financial resources are available to cover the cost of research incurred by the student. It is also important to agree on a number of important intellectual property issues, prior to commencement of the degree, including authorship, use of third party data, plans for management of research data, and compliance with UCT's intellectual policy guidelines. It is also essential to discuss whether the proposed research requires ethical approval, permits to collect material, and biosafety approval prior to commencement of any research.

The Progress and Planned Activities (PPA)

The PPA form is an extension of the original MoU and captures the progress made by the student in the previous year of registration, as well as the planned activities for the year ahead, towards the completion of the requirements for the degree. The PPA is completed at the start of the second and subsequent years of registration. This process represents an annual review of progress and should be seen as an extension to the initial MoU. If in the opinion of the supervisor, adequate progress is not being made, the PPA form should clearly lay down criteria (such as submission dates and milestones) against which further progress shall be measured. In November of each year, each student's progress will be assessed according to the criteria laid down in the MoU or PPA form. If progress is deemed to be unsatisfactory, a candidate may be refused permission to re-register in the following year.

8. Academic Programme

There are three biology majors offered by the department - Major in Biology [BIO12], Major in Marine Biology [BIO05] and Major in Quantitative Biology [BIO13]. For details regarding degree and course requirements and descriptions of courses offered by the department, please consult the [science faculty handbook](#) or [departmental website](#).

9. Postgraduate Applications and Funding

Below are useful links for postgraduate students. For further queries regarding your postgraduate degree please consult with the administrative team.

[Postgraduate Funding Office](#)
[Funding Opportunities](#)
[Funding Guide](#)
[Application Process](#)

10. Postgraduate Guidelines

In consultation with their supervisors, all postgraduate students complete an online *Memorandum of Understanding* (MoU) in their first year of registration and an online *Progress and Planned Activity* (PPA) report on re-registration each year. Students wishing to upgrade from a Masters to a PhD degree are required to submit an [application form](#).

11. Student Support Contacts

Please consult the lists below for a broad range of support services and contacts. For more information you can visit the [UCT website](#).

Help with registration and general FAQs

Student Orientation and Advocacy Service

DestinationUCT: A new tool answering frequently asked questions about UCT via WhatsApp offers prospective students the opportunity to access the information they need quickly and easily. DestinationUCT is a collaboration between the Academic Development Programme (ADP) within the Centre for Higher Education Development (CHED), the Academic Advising Project, student support services from across the institution and external service provider Konobo.

To connect to DestinationUCT, follow these simple steps:

1. Add the number 060 018 0288 to your contact list on WhatsApp.
2. Type “Hi” and the menu for DestinationUCT will pop up.
3. You can then type in a specific number to make a selection and explore the contents that you wish to.

UCT Central Advising and Referral System (UCT CARES) provides the campus community with a central point of contact for the information and services they need.
Email uctcares@uct.ac.za to get help or referral to help.

Financial Support

National Student Financial Aid Scheme

Tel: 0860 0067 327 (toll free)
Email: info@NSFAS.org.za

Student Financial Aid Office

Tel: 021 650 3545

Postgraduate Centre & Funding Office

Tel: 021 650 3622
Email: pgfunding@uct.ac.za

Accommodation

Student Housing Admissions & Advocacy Services

Tel: 021 650 2977
Email: res@uct.ac.za.

Vacation Student Accommodation

Tel: 021 650 1050
Email: stayandconnect@uct.ac.za

Off Campus Student Accommodation Service

Tel: 021 650 4934
Email: ocsas@uct.ac.za (preferred)

All Africa House

Tel: 27 (0)21 650 4152
Email: aah@uct.ac.za

Health and Safety

Campus Protection Services (CPS)
Tel: 021 650 2222/ 3 (24-hour hotline)

COVID-19 24-hour hotline
Tel: 021 650 1271

Access Control
Tel: 021 650 1199
Email: access.control@uct.ac.za

COVID-19 Assessment and Advisory Session
Tel: 021 650 5620 or 021 650 1271 (after hours, weekends and public holidays)

Safety, Health and Environment Officer
Tel: 021 650 2660 or speed dial 8056

Student Health Service
Tel: 021 650 1020

Sexual Harassment Assistance
Tel: 021 650 3530

Survivor Support Office
Tel: 021 650 3530

Sexual Assault Emergency Response
Tel: 072 393 7824 (24/7 hotline)

Triage Nurse Telephone Medical Advice
Tel: 021 650 5620

Reproductive Health & Emergencies
Tel: Toll free 0800 11 77 85

Disability Services
Tel: 021 650 2427

Mental Health and Wellness

Please consult the [Student Wellness website](#) for mental and physical health services provided by UCT, as well as links to other useful resources and contacts. If you are in need of immediate help regarding your mental health please use the contact below.

**South African Depression and Anxiety Group
(SADAG) UCT Student Careline**
Tel: 0800 24 25 26 or
SMS 31393 for a call-me-back.

12. Student Representation

There are multiple student representative bodies in the department. Class representatives are selected in every course to aid in communication between course convenors, lecturers and the student cohort. Class representatives attend departmental meetings and are a pathway for students to elevate their concerns. The Postgraduate Committee is a group of postgraduate students that volunteer their services to the department to assist in managing departmental affairs and developing a student support framework. These roles include, but are not limited to, a chairperson, vice chairperson, secretary, academic representative, social media manager, transformation representative, and sports and recreation manager. Students can also participate in other working groups within the department when positions become available. To contact the Biological Sciences Postgraduate Committee email uctbioscipg@gmail.com.

13. Job Opportunities for Students

Within the department students can find work as demonstrators for undergraduate practical courses. Additionally, part-time positions become available when postgraduate researchers or academic staff members require assistance with field work, data collection, lab work etc. Students should check their inbox to keep informed of new work opportunities, or can also approach course convenors if they have a particular interest in demonstrating on a course. The [UCT Libraries](#) also hire students as library assistants.

