

DEPARTMENT OF BOTANY AND ZOOLOGY

Postgraduate Guide

2024

Departement Plant en Dierkunde Natuurwetenskappe Gebou Stellenbosch Universiteit Tel: 021 808 3236 Department of Botany and Zoology Natural Sciences Building University of Stellenbosch Tel: 021 808 3236

Executive Head:

Prof Theresa Wossler Email: wossler@sun.ac.za Phone: +27 21 808 3160

Departmental Secretary:

Miss Chandre Engelbrecht Email: chandre1@sun.ac.za Phone: +27 21 808 3236

Student representatives:

Postgraduates: Hendre Van Rensburg Email: hvr@sun.ac.za

Postdoctoral fellows: Email: To be confirmed

Chair of postgraduate student committee:

Prof Tammy Robinson-Smythe Email: trobins@sun.ac.za

Academic staff and their research interests:

The Botany and Zoology department consists of a diverse assemblage of academic staff whose interests and expertise in botany and zoology encompass the fields conservation, ecology, evolution, physiology, systematics, invasions, climate change, and ethnobotany. For more details about the academic staff, their contact details and interests, as well as the technical staff and research associates, please visit the staff page on the departmental website.

Cont	ents		
Executive Head:2			
Student representatives: 2			
Chair of postgraduate student committee:			
Academic staff and their research interests:			
1. Po	stgraduate mission statement1		
2. La	anguage policy for postgraduate training1		
	3. Postgraduate degree requirements and general		
	formation1		
3.1	BSc. Honours1		
3.2	MSc2		
3.3.	PhD		
3.4.	Guidelines for upgrading of MSc to PhD3		
3.5.	Applications for MSc and PhD3		
3.6.	Memorandum of Understanding3		
4. In	formation for foreign students3		
5. Du	ıration of Study4		
5.1.	BSc Hons4		
5.2.	MSc4		
5.3.	PhD4		
5.4.	Part-time studies4		
6. Yo	our study4		
6.1	Bursaries4		
6.2	Research4		
6.3	Conference attendance5		
6.4	Participating in teaching5		
6.5	Leave during your study5		
6.6	Examination procedures for your degree5		
	onducting your Research7		
7.1	Relationship between student and supervisor7		
7.2	Preparing a project proposal7		
7.3	Performance measures7		
7.4	Disputes and grievances8		
7.5	Annual Research Meeting (ARM)8		
7.6	Attending seminars and meetings8		
7.7	Formal interactions with the department8		
7.8	Applying for permits and ethics approval8		
7.9	Using departmental facilities9		
7.10	Working environment9		
7.11	Networking9		
7.12	Ownership of data9		
7.13	Publishing your work9		
7.14	Determining authorship10		
7.15	Format and style for dissertations and theses10		
7.16	Plagiarism10		
7.17	Use of AI tools10		
0 **			
	seful information		
8.1	Postgraduate Student Committee 10		

8.2	Wellness and safety	1(
8.3	Entrance to the Natural Sciences building	11
8.4	Telephone and internet usage	11
8.5	Provision of keys	11
8.6	Vehicle Bookings	11
8.7	Camping Store	
8.8	Opportunities for student research assistants	12

1. Postgraduate mission statement

The Department of Botany and Zoology competes internationally in its focal research areas and strives to be a leader both regionally as well as internationally by:

- Maintaining the highest possible standards of teaching and research
- Sustaining a supportive academic environment which encourages critical and independent thinking
- Continually monitoring the success and relevance of its training programmes
- Selecting students of quality who are passionate about their career choices and are driven by curiosity and the will to succeed

2. Language policy for postgraduate training

The University has a flexible and accommodating language policy and most staff members are proficient in English and Afrikaans. While students are free to express themselves in the language of their choice, postgraduate students are strongly encouraged to improve their proficiency in English. Consequently, communication, reports and proposals, dissertations and theses are drafted in English, reflecting its dominance in international science.

3. Postgraduate degree requirements and general information

3.1 BSc. Honours

If you plan to enrol for an Honours course in Botany and Zoology at a South African university, Stellenbosch University must be at the top of your list of possible choices. The Department of Botany and Zoology has developed highly competitive research programmes in several focal research areas, this is reflected in the design of the Honours course. The department is currently a leader in the study of plant and animal diversity of the Cape Region and its coastline as well as in the fields of systematics and molecular ecology, evolutionary ecology and physiology, plant physiology, medicinal plant biology and global change biology. Although emphasis is placed on research, our aim is to deliver well-rounded biologists. The course provides the opportunity for students to be

exposed to a wide range of disciplines, which will assist those with plans to continue their studies in Botany and/or Zoology to make more informed career choices. For those who have already decided on a specific research field, the programme also allows for a considerable degree of specialisation.

Selection criteria for BSc. Honours in Botany and Zoology

The Department of Botany and Zoology uses the following criteria in making recommendations to the University regarding entrance to the Honours course.

Graduates of the Science Faculty of Stellenbosch University

Students, who have obtained a BSc degree in the Faculty of Science, should have completed a major in Botany, Zoology or related. These modules are by definition all undergraduate modules currently offered by academic staff of the Department of Botany and Zoology and also include some life science modules offered by other departments including Genetics, Conservation Ecology and Entomology, Biochemistry and Microbiology.

An average of 65 % in the third year modules is generally required.

Students not meeting any of the above criteria can still apply for Honours but may be subjected to an interview, following which a recommendation will be made to the Executive Head of the Department.

Graduate students from outside institutions and other faculties within Stellenbosch University

Students who obtained a first degree in faculties other than the Faculty of Science at Stellenbosch University can apply to do Honours in Botany or Zoology, but acceptance will be subject to the University requirements. These application forms will be reviewed by the Postgraduate Committee of the department which will make a recommendation to the Faculty. The committee will be flexible in its approach but generally a mean of 65 % in the third year is required. In instances where the mark is <65% or the committee feels that the student does not have the necessary theoretical

background the Postgraduate committee may request that the student do additional course work during the Honours year and/or to take the course over a two- year period.

BSc Honours Course outline

The BSc (Hons) course in Biodiversity and Ecology is a one-year course designed to bridge the gap between undergraduate training and post-graduate research. The course does not cover every Botanical and Zoological field, but rather makes use of the expertise available within the Department of Botany and Zoology to provide focused modules in those areas within which staff have considerable research experience. The course comprises theoretical work, seminars, practical tasks, independent research work, and independent consultation of the broader botanical and zoological literature. Evaluation takes a variety of forms including oral examinations, written exams, essays, book reviews, a research project and the production of a popular article on the research project.

For successful completion of the honours course, students are required to successfully complete the compulsory generic skills module, three modules chosen out of the four choice modules on offer and a research project (an average of 50% must be obtained for the three modules and no module may be failed with less than 40%). The generic skills module includes philosophy of science, a week-long natural history field excursion, an introduction to basic statistics, and lectures on communication skills and research design. The research project is undertaken over the full duration of the course and the research module contributes half of the final score. Research projects are chosen in consultation with the staff and generally concern issues within the main research fields of the staff. Students are required to attend all departmental seminars (can be examined on these seminars during the oral examination) and also to take part in demonstrating to undergraduate students during practical sessions for which there is remuneration.

On completion of the course, students will not only have

improved their knowledge of and skills in Botany or Zoology, but they can also be confident that they will fit in easily with research groups elsewhere. In addition, they will have had the opportunity of working together with one of the most vibrant and dynamic research departments in Southern Africa, and certainly one whose staff are recognized internationally as outstanding specialists in their fields.

Mandatory departmental activities

Weekly seminar attendance is compulsory for all honours students. Each student has to undertake some undergraduate demonstrating.

More information regarding the B.Sc. Hons. Course outline can be obtained from Dr Victor Rambau or by visiting our website.

3.2 MSc

A Masters degree can be undertaken with a specialisation in either botany or zoology.

Selection criteria for an MSc in Botany or Zoology

Students must have successfully completed a BSc Honours degree (or equivalent). The department has a minimum entry requirement and prospective students must have obtained at least 65% for their Honours degree (or its equivalent), this will be waived only in exceptional circumstances. Applicants should approach potential supervisor/s to negotiate acceptance into a supervisor's laboratory / group. In cases of uncertainty, applications should be made to the Executive Head of the Department (see above) who will identify potential supervisors. Once accepted by the supervisor(s), main supervisor will complete the 'recommendation for acceptance form' and forward this to Executive Head of the department for approval.

3.3. PhD

Students must have successfully completed an MSc degree (or equivalent) in the biological sciences. Applicants should approach potential supervisor/s directly to negotiate acceptance to the supervisor's PhD programme, after which an online application should be

made. The supervisor will submit the 'recommendation of acceptance form' to the Executive Head of the department. In cases of uncertainty, applications can be made to the Executive Head of the Department who will identify appropriate supervisors.

3.4. Guidelines for upgrading of MSc to PhD

The requirements for the upgrading of MSc degrees to PhD are outlined in the University Year Book and the amended Faculty Guidelines. The department's criteria for the selection of potential studies to be considered for upgrading are:

- The application for upgrading must be done within 18 months of registration for the MSc and is limited to good students who can be assessed on tangible outputs. All upgrades must be finalized before the end of October each year.
- Outputs for consideration of upgrading include incremental improvement as evident from the six monthly evaluations and annual report, conference participation (either oral or poster presentations), peer-reviewed publications (including those in review/in press), participation in activities which enhance general scholarship (i.e. teaching, participation in local scientific society matters, departmental seminars etc.).
- The supervisor(s) and student must show that the upgrading of the study involves more than simply increasing the volume of data. There has to be clear evidence of a conceptual expansion (intellectual leap) in the study. This must be more than adding techniques to address the questions that were formulated at the start of the MSc.
- The candidate will be required to submit a written PhD research proposal that justifies the expansion of the philosophical/ conceptual component of the study. The candidate will also be required, as with new PhD investigations, to give an oral upgrade proposal.

• The supervisor suggests a panel of three experts, including people who work outside the department, to the judge the written and oral upgrade application. The Head of Department selects one of these three to chair the meeting and write a short summary of the panel's findings. That report is sent to a fourth member of staff, whose job it is to see that a consistently high standard is maintained across all upgrades. This member of staff sends his/her recommendation to the departmental head who will then make the recommendation to the faculty committee for final approval.

3.5. Applications for MSc and PhD

Students wishing to join this department for their MSc or PhD degrees should apply <u>online</u>. Note that an admission fee is required.

3.6. Memorandum of Understanding

It is required of all postgraduate students and supervisors to complete and sign a memorandum of understanding to ensure optimal supervision and compliance by both parties. This form can be obtained from the departmental secretary and must be submitted to the secretary of the Department together with the signed acceptance of registration form.

4. Information for foreign students

Although the undergraduate language of tuition at Stellenbosch University is multilingual, at postgraduate level it is almost exclusively English. Reports, proposals and final PhD submission are drafted in English, reflecting the dominance of the language in international science.

Apart from the academic requirements for admission to degree programmes, international students have to provide official documentary evidence of their competence in English. The University accepts results from IELTS and TOEFL. The minimum requirements are:

IELTS: 6.5

• TOEFL: 550 (paper based) or 213 (computer based), preferably with a TWE score of 4.5.

In addition to the above, all international students are required to take an English proficiency test at the University prior to registration as a student. The International Office will assist international students who are not adequately proficient in English to obtain access to English courses so as to provide a thorough grounding for postgraduate study programmes.

All international students must arrive in Stellenbosch with adequate funding (either their own funds or sponsored) to pay for their complete study programme. No international student should have the expectation of a full or partial scholarship from the University unless specifically arranged with a prospective supervisor or sponsor. As a rule Stellenbosch University does not provide full scholarships or financial assistance (loans, partial scholarships, grants or bursaries) to international students but project supervisors may be able to provide bursaries from external funds. Foreign students are advised to contact the International Office of the University for full information on e.g. visa requirements and accommodation.

5. Duration of Study

5.1. BSc Hons

Full-time honours students finish their degrees within one year after first registration.

5.2. MSc

A full-time M.Sc. student must finish his/her degree within two years of first registration.

5.3. PhD

A full-time Ph.D. student must finish his/her degree within three years after date of first registration.

5.4. Part-time studies

In exceptional cases students may approach a supervisor about doing a postgraduate degree part-time. However,

it should be noted that there is no official part-time registration for these degrees. Nonetheless, students who can only work on their theses part-time will be allowed three years for an MSc and five years for a PhD degree, despite officially being seen to exceed the two and three year limits respectively.

6. Your study

6.1 Bursaries

While some supervisors may be able to offer bursaries linked to research grants that they hold, students are strongly encouraged to apply to the NRF for bursaries. In cases where a supervisor holds an NRF grant, students need to apply directly to the NRF while providing a reference number that links their application to the project already funded through their supervisors. In this situation supervisors have no power over the allocation of bursaries and they are administered solely by the NRF. Details related to NRF funding can be found on their website.

Students are encouraged to visit the postgraduate funding office website for information on additional postgraduate funding opportunities, including those administered by the Faculty of Science and the University of Stellenbosch..

While the department offers a range of bursaries to postgraduate students, these are offered on an *ad hoc* basis and are dependent of the availability of funds.

6.2 Research

During your study you are entitled to make use of the appropriate departmental research infrastructure including laboratories, work space, equipment and computer facilities. The department is not responsible for consumables; these are covered by your supervisor. Similarly, the cost of fieldwork (transport, accommodation and research consumables) must be borne by the supervisor. Students are generally expected to cover their own daily expenses on these trips. Cost of literature acquisition, photocopying,

private phone calls, and production and binding of the final thesis are for the student's own account. Supervisors will take responsibility for obtaining the necessary funding for running the research projects. All expenses incurred in respect of the research must be approved by the supervisor, who is responsible for the management of the research funds.

6.3 Conference attendance

You may be provided with an opportunity to present the results of your research at a scientific conference during your study. Funding is available from various sources (e.g. supervisors, NRF, Stellenbosch University) for students to attend both local and international conferences, and the award of such funding is made on a competitive basis. Your supervisor should be approached regarding applications.

6.4 Participating in teaching

Teaching is an important skill that students must develop as part of their postgraduate training. Honours students are expected - and masters and doctoral students are encouraged - to make themselves available as demonstrators/tutors at the beginning of each academic year. The department remunerates students for this aspect of their training. Participation is, however, often restricted by bursary terms and conditions, but these can take the form of assistance with undergraduate practicals and field camps. Honours students will have to confine their demonstrating to the second semester to avoid clashes with their own coursework. Materials (slides, overheads, notes) generated in the course of teaching activities remain the property of the department.

6.5 Leave during your study

A total of 21 days vacation is due to MSc and PhD students annually. The University is officially closed between Christmas and New Year and the timing of remaining leave days need to be agreed upon by the supervisor and noted in the memorandum of understanding. Absence from your laboratory or working place must at all times be with the full

knowledge of your supervisor and it is your responsibility to arrange leave well in advance.

6.6 Examination procedures for your degree

See Faculty guidelines for additional information.

MSc

Generally, the supervisor of an MSc candidate will hold a full-time permanent appointment on the lecturing staff of the Department of Botany and Zoology. In instances where the proposed supervisor is a postdoctoral fellow or holds a professional/academic position at another institution, a permanent member of the academic staff must be appointed as co-supervisor. Note that this staff member is responsible for all administration relating to both the student and the degree. This includes the first and second semester progress reports as well as the submission names of examiners to the Faculty Board and the handling of all examination administration

MSc Oral requirements

All MSc candidates will give an oral presentation of the project proposal within four months of registration. In addition, Science Faculty guidelines stipulate that all students must complete an oral/public exam as part of the requirements for the degree. The Department of Botany and Zoology has a weighting of 80% for the thesis, and 20% for the final oral presentation. The presentation is judged by a panel consisting of at least three members of the department that were not associated with the project. This panel is responsible for the allocation of the oral mark. Proposal and defence presentations can take place on a day and time agreed on by the student, supervisor and assessment panel, with input from the staff member in change of seminar bookings.

Appointment of examiners for MSc theses

In brief, a minimum of two examiners is required (two external or, alternatively, one external and one internal) i.e. there must be at least two independent examiners, of which at least one must be outside of the University of Stellenbosch. The independent internal examiner is

nominated based on the fact that he/she has no involvement with the thesis. Note that the requirement for an independent internal examiner can be waived through the appointment of a second external examiner.

Examination of MSc theses

The supervisor (and co-supervisor if applicable) submits a report on the thesis that must include an unambiguous recommendation on the outcome (simply whether you recommend a pass or distinction - no mark is required). This report will be considered by the Dean together with the examiners' reports (which stipulate an actual mark).

All the examiners shall be appointed by the Faculty Board on the recommendation of the Department. The names of the examiners are submitted to Faculty Board by the supervisor, in the case where the supervisor is from an outside institution, by the co-supervisor. Nomination forms must reach the faculty secretary by advertised dates round the end of August for the December graduation and end of October for the April graduation ceremony.

Communication with independent examiners

Candidates and supervisors shall under no circumstances communicate with the examiners during the examination process.

Final mark for an MSc

The final mark to be allocated for an MSc is based on the marks of the examiners, as well as the mark obtained for the oral presentation (see above). A distinction is usually only awarded based on the suggestions of the examiners.

Closing dates for the submission of MSc theses

Submission of copies of the dissertation intended for examination is via the secretary's office. See Faculty guidelines for the number of copies required. The submission dates vary each year; details are available from the faculty office.

PhD

Generally, the supervisor of a PhD candidate will hold a full-time permanent appointment on the lecturing staff

of the Department of Botany and Zoology. In instances where the proposed supervisor holds a professional/academic position at another institution, a permanent member of the academic staff must be appointed as co-supervisor. Note the full-time staff member is responsible for all administration relating to both the student and the degree. This includes the first and second semester progress as well as the submission names of examiners to the Faculty board via the Executive Head of the Department.

Nomination of examiners of the thesis

In brief, a minimum of three examiners are required for a PhD thesis (three external or, alternatively, one internal and two external) of which at least one must be outside of South Africa (an international examiner). External examiners are, by definition, not in the employ the University of Stellenbosch. The independent internal examiner (i.e. someone in the employment of the University of Stellenbosch) is nominated based on the fact that he/she has no involvement with the thesis, and is familiar with the subject matter covered in the thesis.

Examination of the thesis

Each of the examiners (whether external or internal) shall submit a confidential written and signed report on the thesis to the Dean of Science. Each examiner must include an unambiguous recommendation on the outcome in his/her report (i.e. whether the degree be awarded or not). All examiners must approve the dissertation before the degree can be conferred. If no agreement can be reached, an independent external assessor can be appointed by the Dean to determine the final result.

Communication with unattached examiners

Candidates and supervisors shall under no circumstances communicate with the examiners (about the thesis) during the examination process.

Ph.D. oral requirements

In terms of full-time study a Ph.D. candidate will give an oral proposal presentation within four months of registration, a presentation at the departmental

research ARM in their second year and a final presentation of the thesis results on completion of the PhD study. A final oral defence at the end of the PhD is also a faculty requirement and this will happen in front of a panel of three departmental approved examination members, an unattached non-examining chairperson. Examiners are also present for the oral defence. All presentation dates must be organised with input from the student, supervisor, assessment panel and the member of staff in charge of departmental seminars.

7. Conducting your Research

7.1 Relationship between student and supervisor

Postgraduate projects are undertaken in the form of a partnership between the student and supervisor. The supervisor will assist the student in the choice of research project, the planning of the study and the execution of the research project. The compulsory memorandum of understanding (MOU) must be submitted together with the acceptance of registration and should be used by student and supervisor to guide their relationship by make their expectations and responsibilities clear.

7.2 Preparing a project proposal

A research proposal is a prerequisite for all MSc and PhD studies. The proposal must be completed within four months of registration. A panel of three staff, appointed by the supervisor and supported by the Executive Head of the department, will assess the written proposal and attend the oral proposal presentation. The written proposal must be made available to the evaluation committee at least one week prior to the oral presentation.

The research proposal should include Specific Aims, Background and Significance, Research Design, Methodology and References as described below:

- Specific aims state concisely what the research is intended to accomplish and/or what hypothesis is to be tested.
- Background and significance Sketch the background to the proposal, critically evaluate existing

- knowledge, and specifically identify gaps, which the research is intended to fill
- Research design and methods Describe the experimental design and the procedures to be used to accomplish the aims of the research. Include how the data will be analysed to accomplish the specific aims.

An oral presentation of the research proposal is a prerequisite for all postgraduate thesis-based research. This defence of the proposal must be completed within four months of registration or the matter may be referred to the Postgraduate Committee. Since the function of the oral and written proposal is to identify potential pitfalls before the study is too advanced, the defence should be presented before all interested staff and students and, in particular, researchers in related fields from sister departments on campus as well as from outside institutions. In cases where the project proposal was deemed inadequate based on peer review, the evaluation panel will interact with both student and supervisor before making a recommendation. This will normally entail a repeat of the oral presentation and /or a re- submission of the written proposal. The second proposal must address all issues raised at the initial presentation and should be to the satisfaction of the evaluation panel. The postgraduate committee will provide an oversight role and both structures will report to the executive head of the department for mediation.

7.3 Performance measures

Supervisors have the right to request that the registration of students who fail to maintain satisfactory academic progress in any phase of their postgraduate programme be terminated. However, to be both effective and fair, students must be made aware of the conditions governing postgraduate study in the department; students will be required to indicate acceptance on registration by the Science Faculty.

All students (full-time or part-time) must meet regularly with their supervisor(s) to review and critically evaluate research and in line with a signed Memorandum of Understanding (MOU).

In addition, students are required to submit bi-annual progress reports (due May and November). This should detail incremental progress, problems that may have hindered the student's progress in the period under review, information on publications, awards received, conference participation, courses passed and other related outputs. The progress reports are directed to the postgraduate student committee of the department, who will evaluate these and if necessary, interact with the student and supervisor in case of any problems indicated.

7.4 Disputes and grievances

In cases of dispute, the supervisor must notify the student in writing of his/her concern about the student's performance. Bi-annual progress reports will also be considered as official communication between students and supervisors. Unsatisfactory progress highlighted by supervisors will be noted by the postgraduate committee and brought to the attention of the Executive Head. Further actions for aiding progress may be developed during interactions with the postgraduate committee. A mediation period of a maximum of one semester is allowed during which mutually agreed measurements will be put in place to remedy the situation. Following this period, a student who fails to meet the agreed obligations will be considered for deregistration. In such cases the Executive Head of Department will make the recommendation to the Faculty Board, and due process (as per the Faculty of Science post-graduate guidelines) will be followed.

Students have recourse in cases of disputes with their supervisors firstly through the Executive Head or if the need arises, through mechanisms described in the Faculty of Science post-graduate. All incidents must be documented in writing.

7.5 Annual Research Meeting (ARM)

The annual research meeting is held in November every year is it is compulsory for all staff, postdocs and students to attend. The ARM provides a forum of the research activities of the department and requires Honours students, 2nd year MSc and PhD students to present their research. As such, this is a valuable training opportunity (in a supportive environment) and acts as a precursor to participation at national and international scientific meetings. Students will be required to present the outcomes of their research at these meetings (as specified below):

Student prizes will be awarded for the best presentations at the ARM.

Should a student not attend the ARM without a good reason, registration for the following year can be suspended until such time as a full explanation had been made in writing and after consultation between the Postgraduate Committee and the supervisor.

7.6 Attending seminars and meetings

Attendance at departmental seminars and other academic meetings is compulsory for all registered postgraduate students. Seminars are usually scheduled for Wednesday at 1pm, but may occasionally fall on another weekday. Seminars are advertised through the departmental secretary well in advance. Leave of absence for fieldwork or other research activities must be negotiated with the supervisor.

7.7 Formal interactions with the department

Students have full representation at staff meetings through an elected student representative. The representative is elected each year by the student body and can raise issues on behalf of students during staff meetings. All postgraduate students and postdocs are entitled to attend the general sessions of some departmental staff meetings (such as at the ARM). In addition, the Executive head the Department has an open door policy and encourages students to make use of this should the need arise.

7.8 Applying for permits and ethics approval

In many instances journals will not publish articles which do not contain valid permit numbers indicating that specimens were obtained legally. In addition, the issuing of permits is often conditional on providing regular progress reports, that material be deposited in recognised museum or herbarium collections (voucher specimens), and that a final report (often the thesis or publication) be furnished. While the supervisor is responsible for applying for permits, they may request input from the student in terms of providing feedback, lodging specimens etc. Research projects involving animal experimentation or human subjects have to be submitted to the University Animal Ethics Committee for approval.

7.9 Using departmental facilities

The department has several facilities that are managed by technical staff. The departmental infrastructure includes among others animal and plant rearing rooms, temperature controlled rooms and behavioural observation rooms. There are also modern laboratories equipped for tissue culture, molecular and ecophysiological research. All these facilities can only be used with prior arrangements and in some instances, usage fees are in place to maintain and repair equipment. Students are expected to take care when using facilities, and damage to facilities and equipment must be reported to your project supervisor.

Laboratory facilities with no card access must be locked when not in use. Keys provided must be returned to the lab manager once the student has completed his/her study.

Animal Rooms, Greenhouses and Laboratories

Plants and animals that are housed in the departmental animal rooms and greenhouses are the responsibility of the researchers concerned. Animals must be fed and watered daily and the cages or tanks must be cleaned regularly. Upon completion of the project, the animals must be disposed of in accordance with permit conditions and the University's guidelines on animal ethics. Tanks and cages must be cleaned and stored. Laboratories must be kept clean and orderly at all times. Upon completion of an experiment the researcher must immediately clean the laboratory and wash and store any equipment used.

7.10 Working environment

Postgraduate students will be allocated desk space in one of the research laboratories or in one of the identified postgraduate offices. Where possible, students will be provided with basic computer and printing facilities. Specific needs must be discussed with the supervisor prior to commencement of your project. All postgraduate students have access to e-mail and the internet, as well as library facilities. All university correspondence is sent to official university student email addresses. As such student must check these regularly or setup an auto-forward to any other email address that they may be using in order to ensure that they receive all official communication from the department and university.

7.11 Networking

Students are encouraged to establish contact with other scientist working in their research field. Such networking will not only benefit current research but will also provide useful contacts for future opportunities. Supervisors must be informed of all correspondence relating to your project. Since research data are owned by the University, and not by the student, data may not be exchanged without the supervisors consent.

7.12 Ownership of data

All data (electronic, specimen samples, DNA etc) and other materials collected during your time as a student in the Department of Botany and Zoology, belong to Stellenbosch University. There can be exceptions only in cases where legal contracts have been entered into between the University and the researcher(s) concerned.

Lab books, slides, reprints and photocopies (not purchased by the student) and electronic data files remain the property of the department and cannot be removed when students complete their degrees. All data must be provided to the supervisor prior to graduation.

7.13 Publishing your work

You are expected to prepare the results of your MSc

/PhD study for publication in peer-reviewed journals. This is usually done in close association with your supervisor. All publications resulting from your thesis must carry the name of the Department of Botany and Zoology, Stellenbosch University as your affiliated address. This applies even in cases where publications appear after you have left the department. In this instance your new postal address may appear as a footnote. Before manuscripts are submitted for publication, all listed co-authors must have the opportunity to comment on the contents. Grant agencies and institutions which provide research funding must be appropriately acknowledged. This is standard and most journals provide clear instructions as to authorship, copyright, acknowledgements and data sharing.

7.14 Determining authorship

Authorship of papers is determined by the relative contributions made to the study. These contributions include the formulation of the research question and inputs in the project's design, providing finance, study material and facilities, data collection, analyses and interpretation, and manuscript preparation. In most cases supervisors will have contributed in several of these areas and will be a co-author as a matter of course. Supervisors will also be the corresponding author, unless specified otherwise in the Memorandum of Understanding. In all instances where the student has collected, analysed and interpreted the data, as well as written a draft manuscript, he or she will be first author. In instances where students leave the department without preparing manuscripts for publication the supervisor has, after two years, the right to publish the work without the consent of the student. This is important since the supervisor is ultimately responsible to the funding institutions, many of which require publications as impacts and outputs In this case, students are expected to cooperate fully in the preparation of manuscripts, including providing access to data, scripts or software to enable the supervisor to carry analyses. In such instances, the supervisor will normally be the first author and the student will be a co-author.

7.15 Format and style for dissertations and theses

The department operates a flexible policy on the structure of the text, presentation of figures, tables and appendices etc. The general style (including citations) must follow a journal as determined in consultation with your supervisor. There are, however, formal requirements for the formatting of the first few pages of any thesis or dissertation from Stellenbosch University. These can be obtained in the General Calendar.

7.16 Plagiarism

Plagiarism is the illegal use of intellectual information. It is the use of another author's research, ideas or language without proper attribution. Plagiarism is unethical and illegal, and is punishable. The <u>University's policy on plagiarism</u> is binding in this respect. It is the student's responsibility to inform themselves of what constitutes plagiarism and to avoid plagiarism at all costs.

7.17 Use of AI tools

Al applications can be beneficial learning aides and time saving tools, when used appropriately. The department supports and encourages the ethical use of Al tools in research. Students are quired to engage with their supervisors about the appropriate use of Al tools in their research context. Details must be recorded in the Memorandum of Understanding

8 Useful information

8.1 Postgraduate Student Committee

This committee oversees postgraduate matters in the department, including monitoring student progress. The committee can liaise between students and their supervisors and is the first port of call for both should difficulties arise. Matters will be treated confidentially at all times.

8.2 Wellness and safety

Stellenbosch University takes the wellness and safety of their students very seriously and has a number of measures in place to support students.

Centre for Student Counselling and Development

The CSCD consists of five units, each focused on supporting students in different ways. Support is routinely offered in the form of psychotherapy, social work support services, psychiatric services, developmental work sessions, career development, academic development, psychometric assessment and most recently in the form of a 24-hour Emergency Service.

Students are strongly encouraged to familiarise themselves with the CSCD and the services they offer. This can be done by visiting their <u>website</u> and saving the emergency number (010 205 3032) for easy use.

Campus safety

Campus Security deploys officers that patrol the grounds of the university, helping to ensure safety on campus and help in emergencies.

If students need to move between buildings or between a building and their car between 20h00 and 5h00 a security officer can provide an escort.

- Call 021 808 2333 or 021 808 4202 and wait for the officer to join you.
- You can also Whatsapp the security office at 082 808 2333 to contact you. No voice calls are possible to this number.

Students are encouraged to visit the campus safety website for more information and safety tips.

8.3 Entrance to the Natural Sciences building

Entrance to the building is regulated by a card system. Students, visiting scientists and new staff members must activate their student or staff cards so that they can access the building after hours. The north door (on the Merriman Avenue side) is always locked and can only be opened by means of a security card. You may not allow people entry outside of when the front door is open, if those people are not able to open the front door themselves. This is to ensure the safety of all members of

the department, as well as equipment housed in the building.

8.4 Telephone and internet usage

Students are advised to consult with their supervisors before making long distance calls related to their research. All telephone calls by students must be written down and at the end of each month they will be billed (i.e. an honour system applies). Access to telephones varies between offices/laboratories. Internet usage on Departmental and laboratory computers should be strictly related to research and academic activities only.

8.5 Provision of keys

All keys are provided by Mrs Janette Hutton, Rm1006. A small deposit is payable before keys will be issued. Keys must be returned on completion of the degree and the deposit will be returned. Keys will not be provided to students without the supervisor's permission. If a key is lost, it must be reported and a deposit will be required before replacement keys are issued.

8.6 Vehicle Bookings

Students must clear all vehicle bookings with their respective supervisors. Vehicles are booked through Mrs Janine Basson. Persons wishing to book a vehicle should give suitable notice, as well as all critical information (type of vehicle, date and time, cost point, US/student number of driver, reason for booking, destination, estimated kilometres and how many passengers and the driver's cell phone number). The keys for the vehicle may be collected from the Vehicle Pool / or suitable rental agency. At the same time you will receive a card which must be filled in prior to driving the vehicle. Keys are returned to the office at the vehicle park. Persons making use of university vehicles must be in possession of a valid driver's license and have held the license for a minimum of a year.

8.7 Camping Store

The camping store (room 1033) is situated next to the annex-lecture hall. Collecting and returning any items needed for field trips must be organised through Mr

Jonathan Williams. If he is not available, one of the other technical officials will assist you. The register in the camp store must always be filled in. The camp store provides: gas bottles, gas lamps, cool-boxes and a limited supply of eating utensils. Items must be returned in the same condition they were received.

8.8 Opportunities for student research assistants

Academic staff frequently appoints *ad hoc* research assistants. These appointments may be restricted by other funding mechanisms (bursary stipulations) and remuneration is based on a sliding scale depending on the student's highest qualification. *Ad hoc* appointments are usually advertised internally, and interested persons are advised to check the general notice-board in this regard.