

# North-West University Faculty of Natural and Agricultural Sciences

# **Quality Manual**

Revised: May 2020

Compiled by: Convenor: Prof DA Isabirye
Team Members: Prof Helen Drummond
Prof Gilbert Groenewald
Heleen Swart

History of document: First version: Nov 2017 Approved at FB: May 2018 Revised Version: May 2020

Approved at FB

This document is the approved Quality Manual for the Faculty of Natural and Agricultural Sciences of the North-West University, which came into existence in July 2017. The content of the relevant quality manuals from the former faculties from the three campuses which were drawn into the new Faculty was used as source material. Other source material used is the new guidelines for quality manuals from Quality Enhancement, the new General Academic Rules as approved by the Senate, NWU policies and other official documents of the NWU. Where possible, hyperlinks are provided for easy access to the latter documents.

The document sets out academic and other processes for the Faculty as well as processes to improve the quality of the work. The appendices contain further details of some processes as well as a series of forms to be used in certain of the processes. These can be accessed within the main text through hyperlinks provided.

The first version was made available for comment in November 2017 and a revised and expanded second version in April 2018. The final version was approved by the Faculty Board on 3 May 2018. The Afrikaans version is being prepared.

Updated version: May 2020

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#### 1 CONTENT OF THE QUALITY MANUAL

#### 1.1 Aim of this Quality Manual

The aim of this Quality Manual is to describe the processes which are designed to improve, sustain, monitor and continuously promote quality in the Faculty of Natural and Agricultural Sciences of the North-West University. Quality assurance is a systematic process of checking to see whether a product or service being developed, is meeting specified requirements. Quality assurance makes sure that you are doing the right things (effectiveness) in the right way (efficiency). Quality control makes sure that the results are what you expected.

The primary processes of the Faculty are in the following areas:

- teaching and learning,
- research and postgraduate education,
- implementation of expertise and community engagement.

The Manual describes these processes together with the sub processes involved.

The purpose of the Quality Manual is a means to apply quality assurance as well as to serve as a guide for current and newly appointed staff members.

#### 1.2 Aims of the Faculty of Natural and Agricultural Sciences

The Faculty of Natural and Agricultural Sciences strives to be a balanced faculty where innovative research and teaching-learning of high quality are mutually reinforcing and are carried out in a socially-relevant and ethical way in partnership with stakeholders.

• <u>Aims for Teaching and Learning</u>: It is the aim of the Faculty to deliver students, who have attained at the end of their studies on the different levels, specific outcomes. The outcomes are contained in the Faculty Yearbook.

To achieve this aim, the Faculty focuses on the following aspects of the competitive strategy and strategic agenda:

- Delivery of flagship teaching and learning programmes;
- Promotion of teaching and learning innovation;
- Support for student access, retention and access;
- Effective use of teaching and learning technology.

#### Research aims:

- to add new knowledge to natural and agricultural sciences by publishing scientific articles in scientific journals, to deliver talks on international and national conferences and to register patents;
- to create opportunities for educating postgraduate students in the natural and agricultural sciences to contribute to enhancing the work force capacity in the country and providing men and women who can think independently - by attracting motivated postgraduate students with good academic record;
- to enhance undergraduate education by exploring the relationship between teaching and research;

- o to conduct science in an ethically responsible manner and to reveal philosophical foundations of scientific research;
- to conduct relevant research for the benefit of the people and the country including the establishing of rural development programmes for improving public health, promoting food security and alleviating poverty;
- To contribute to the economy of the country by means of joint projects with government and industry and simultaneously create the opportunity for third money stream income.
- Aims for community engagement including implementation of expertise: Staff and students to perform activities primarily aimed at uplifting or supporting society and or individuals in need of assistance or engagement. This includes commercialization of research and executing outside projects, which include the offering of short courses.
- <u>Strategic aims</u>: Strategic aims and goals form part of the Faculty Plan which appears on the Faculty website and which is updated regularly.

#### 2 THE FACULTY IN CONTEXT

#### 2.1 Dream and purpose of the Faculty

The Faculty is guided by the strategy, dream and purpose of the NWU:

#### **Strategy Statement**

• To transform and position the NWU as a unitary institution of superior academic excellence, with a commitment to social justice.

#### Our Dream

• To be an internationally recognised university in Africa, distinguished for engaged scholarship, social responsiveness and an ethic of care.

#### **Our Purpose**

• To excel in innovative learning and teaching and cutting-edge research, thereby benefitting society through knowledge.

#### 2.2 Strategic plan of the Faculty

The strategic plan of the Faculty contains its vision, mission and core objectives.

#### 2.3 Positioning and structure of faculty

2.3.1 Organogram indicating the organisational structure



# Faculty of Natural and Agricultural Sciences

#### **Executive Dean**

<u>Research &</u> Innovation <u>Deputy Dean</u> Teaching-Learning Deputy Dean
Community
Engagement and
Stakeholder Relations

### **SCHOOLS**

School of Agricultural Sciences
Agriculture Economics and
Extension - Animal Health Sciences
- Animal Science - Crop Sciences

<u>School of Biological Sciences</u> Botany - Microbiology - Zoology School of Computer Science and Information Systems Computer Science and Information Systems

School of Geo- and Spatial
Sciences
Geography - Geology Urban and Regional Planning

School of Mathematical and Statistical Sciences Mathematics and Applied Mathematics - Statistics

School of Physical and Chemical Sciences Biochemistry - Chemistry - Physics

# RESEARCH ENTITIES

Centre for Space Research (Centre of Excellence)

Focus Area for Human Metabolomics Focus Area for Chemical Resource Beneficiation

<u>Unit for Business</u> <u>Mathematics and Informatics</u>

<u>Unit for Environmental Sciences</u> <u>and Management</u> African Centre for Disaster Studies Focus Area for Pure and Applied
Analytics

Focus Area for Material Science Innovation and Modelling

Niche Area for Food Safety and Security

## **CENTRES**

Centre for Applied Radiation
Science and Technology

Centre for Indigenous Knowledge Systems Centre for Water Sciences and Management

<u>Centre for Business and</u> <u>Mathematics and Informatics</u>

### **ACADEMIC SUPPORT SERVICES**

**Instrument Making** 

**Centre for Human Metabolomics** 

#### 2.3.2 Approach to Quality

The aim of the quality policy of NWU is continuous improvement in quality to support the vision to be an internationally recognised university in Africa, distinguished for engaged scholarship, social responsiveness and an ethic of care. Improvement in quality is not an event but rather a continuous process.

In agreement with the management structure of the NWU, there is institutional policy which is valid for the University as a whole. The different policy documents are available at the following web link:

#### http://www.nwu.ac.za/content/policy\_rules

The Faculty processes in this Manual are in agreement with and in support of the institutional policy within the own nature of the activities of the Faculty.

#### 2.3.3 Role players and responsibilities

Key role players	Core responsibilities
Executive Dean	<ul> <li>To ensure, through effective application of the management triangle model, that:</li> <li>a strategic plan is prepared and implemented for the faculty in keeping with the University's vision and strategy;</li> <li>effective development and management of human resources take place in the faculty with a view to motivated and competent employees;</li> <li>the financial resources of the faculty are managed effectively;</li> <li>high-quality research programmes that meet the established quality assurance requirements are implemented and managed;</li> <li>relevant high-quality teaching programmes that meet the internal/external quality assurance requirements are implemented and managed;</li> <li>the faculty is developed in an innovative way through effective marketing regarding students and sources, and through creating a positive image;</li> <li>sufficient and well-maintained facilities and equipment are continuously available to the faculty;</li> <li>and that effective administrative management is practised.</li> <li>Planning of goals and output for the school within the faculty's strategic plan.</li> <li>Managing and developing the human resources in the school in an effective manner, with a view to competent and motivated staff that perform optimally.</li> <li>Managing the financial resources of the school effectively, through sound financial management methods and controls.</li> </ul>

	The Deputy Dean of the Faculty will be responsible for:
	Generic operational responsibilities of a Dean;
	<ul> <li>Functional and coordination responsibilities (one DED Teaching and Learning (TL) and the other Research and Innovation (RI));</li> </ul>
	Support the ED in internal and external evaluation programmes (one DED in TL and the other RI);
Deputy Dean	Operational QA process regarding teaching and learning and research and innovation (one DED TL and the other post graduate and RI);
	Report to Executive Dean with regards to functional responsibilities;
	Clear input towards strategy of Faculty;
	<ul> <li>Oversee/responsible for the requirement and utilisation of resources on campus where based;</li> </ul>
	Graduation ceremonies on campus.
School Director	<ul> <li>Planning, implementing and evaluating the school's teaching-learning programmes and an effective marketing and recruitment strategy with a view to the enrolment and delivery of students within relevant teaching-learning programmes of a high quality, and in accordance with the negotiated student numbers, study levels and fields of study as contained in the three-year rolling plan of the University/faculty.</li> <li>Active promotion and support of research and M and D training with the object of ensuring scientifically well-structured and quality research programmes and linked M and D training within the focus area or research unit. This must be done in collaboration with the director of the focus area / unit.</li> <li>Planning, organising and evaluating the school's programmes for the marketing of expertise, to establish well-structured and source-generating programmes that support the teaching and research programmes.</li> <li>Ensuring adequate and well-maintained facilities and equipment for the school.</li> <li>Ensuring effective administrative management in the school.</li> <li>Developing a positive image of the school through effective liaison and marketing.</li> <li>Developing own professional and academic leadership and management skills, with a view to academic leadership and effective quality management in the school.</li> </ul>
	<ul> <li>Preparing and implementing a strategic research plan for the RESEARCH ENTITY within the research strategy of the University and</li> </ul>
Research	the faculty/faculties.
Director	Expert guidance, innovation and initiative regarding research      Transport in the force area / unit
	<ul> <li>programmes in the focus area / unit.</li> <li>Preparing applications and actively attempting to obtain funds, facilities and equipment for the focus area / unit through</li> </ul>

- independent initiatives and through activation of researchers' potential in this regard.
- Organising and coordinating resources for the achievement of goals, including staff, M and D students, finance and equipment.
- Planning and organising ways to market the research expertise of the focus area / unit by engaging in income-driven research contracts and undertaking research projects for which there is a market.
- Selecting researchers to participate in the programmes in the research entity and participating in the planning of task agreements for these researchers.
- Involvement in the planning of staff structures, establishment of
  positions and the appointment and evaluation of staff involved in the
  research entity, with the necessary emphasis on capacity building
  and supplementing of expertise.
- Implementing applicable quality promotion and assurance systems and mechanisms to ensure high quality research outputs.
- Managing the integration with and participation of M and D students in programmes in the research entity.
- Developing a positive image of the research entity through effective liaison and marketing.
- Developing own professional and academic leadership and management skills, with a view to high-level expert guidance and research management in the research entity.

Note: Research master's and doctoral programmes are closely aligned with research programmes at the NWU and the Faculty. The research programmes are managed mostly through research entities and their directors, although there are some cases where research programmes are managed by a school director as the responsible manager. The substructures of the Faculty which are responsible for research and postgraduate education are, for simplicity, in what follows, designated collectively as "entities". These could be research entities, such as niche areas, focus areas, research units or centres of excellence, but in some cases they can also be schools. The manager involved is, again for simplicity, designated a "research director".

#### 2.3.4 Sites of Delivery

The NWU has three existing sites of delivery (campuses), namely the Mahikeng, Potchefstroom and Vanderbijlpark campuses.

#### 2.3.5 Mode of delivery

Except for one, all programmes are contact programmes and in many cases are programmes with experiential learning, such as practical sessions in laboratories. Some programmes incorporate advanced educational technology, which give them the character of blended learning.

The Faculty is committed to offering open and distance learning programmes with the purpose of serving larger numbers of students. The first such programme, the BSc in IT (distance) has been phased in, with the first students expected to complete at the end of 2020.

#### 2.3.6 Programme documents for each programme.

The programme document is the primary source of information and must therefore always be updated and be available at the owner of the programme. It must comply with the structural requirements of both its owner and the University. The programme information in yearbooks, for example, has to correspond with the programme document, which always contains the most recent information about the programme. The SCAS Qualification and Programme Template (available on the Quality Enhancement website) is now considered to be the programme document.

#### 2.4 Standing Committees of the Faculty Board

#### 2.4.1 Terms of reference of standing committees

Terms of reference for the establishment of standing committees of the Faculty are given below.

- The office of the Registrar provided guidelines in this regard, which were followed as applicable to the Faculty.
- The Faculty Management Committee meets mostly monthly during the academic year. The chairperson will determine the frequency.
- The two main standing committees handle matters before the meetings of the Faculty Management Committee to which they report through their minutes and for consideration and decision making by the Faculty Management Committee.
- The Faculty Management, in turn, reports to the Faculty Board.
- The guidelines from the Registrar imply that the Deputy Deans for Teaching and Learning and for Research and Innovation have the responsibility to chair the appropriate committee meeting as described below. However, they are both required to attend both meetings, which ensures that there is coordination between teaching and learning and research and innovation. It also ensures proper campus representation.

#### 2.4.2 Faculty Board committee

#### **MEMBERSHIP**

The membership of the Faculty Board Committee is as follows:

- The Executive Dean (chairperson of the Faculty Board, per appointment contract).
- Deputy Deans (per appointment contract).
- Directors (School/Centre and Research Entity Directors, per appointment contract).
- Academic employees elected by the academic employees with due account to the geographic representation of the Faculty, the positions within the faculty as well as representation in terms of race, gender and disability (three-year term).
- Senior Faculty Administrator (per appointment contract).0
- Student representation by means of a representative of formally constituted substructures of the Student Representative Council (SRC) and designated annually by the SRC (one-year term). Two representatives, chosen by them.

#### 2.4.3 Faculty Management committee

The Faculty has a Faculty Management Committee which functions according to the following guidelines:

#### 1. PURPOSE

The Faculty Management Committee is a standing subcommittee of the Faculty Board and serves as Executive Committee of the Faculty Board. It handles Faculty matters between meetings of the Faculty Board and reports all activities to the next meeting of the Faculty Board.

#### 2. MEMBERSHIP

The membership of the Faculty Management Committee is as follows:

- The Executive Dean (Chair).
- The Deputy Dean for Teaching and Learning.
- The Deputy Dean for Research and Innovation.
- The Deputy Dean for Community Engagement and Stakeholder Relations.
- The Directors of Schools and Research Entities and Directors of Centres as determined by the Dean.
- SALA (Student Academic Lifecycle Administration): The Senior Faculty Administrator (SFA).
- The Quality Coordinator.
- Two representatives of the Academic Student Societies, chosen by them.
- Secretariat services are provided by Corporate Information and Governance Services.

The Executive Dean and the deputy deans determine the final composition of the Faculty Management Committee.

#### 3. MEETINGS

The Faculty Management Committee usually meets monthly during the academic year. The minutes are included in the agenda of the Faculty Board for consideration and final decision making. The Faculty Committee Coordinator schedules the meeting dates.

#### 4. FUNCTIONS

The Faculty Management Committee handles matters as stated in its purpose above and, more specifically, the following matters:

- Executing any matters on behalf of the Faculty Board and to report any such activities to the Faculty Board at the next meeting of the Faculty Board.
- Considering the minutes and recommendations of the Teaching and Learning Committee and the Research and Innovation Committee and other Faculty committees for decision making and recommendation to the Faculty Board.
- Determining the memberships of all standing committees, appointing chairpersons for standing committees.
- Considering and approving honorary and extra-ordinary appointments.
- Considering and making recommendations regarding nominations for honorary awards.
- Considering and approving members of the Faculty nominated and appointed for Senate
- Approving and monitoring the implementation of the strategic plan of the Faculty.

- Fulfilling a coordinating role for all matters that need to be tabled at Senate and standing committees of Senate.
- Initiate, when appropriate, any investigation regarding any matters related to teaching-learning, research, community engagement and commercialisation activities in the Faculty.
- Fulfilling a governance role regarding the employment equity plan in the Faculty.
- Overseeing the management of instances of alleged plagiarism within the Faculty.

#### 2.4.4 Teaching and Learning committee

The Faculty has a Teaching and Learning Committee which functions according to the following guidelines:

#### 1. PURPOSE

The Teaching and Learning Committee is a standing subcommittee of the Faculty Board and the Faculty Management Committee and advises the Faculty Management and Faculty Board on all matters with respect to teaching and learning and the promotion of the quality thereof.

#### 2. MEMBERSHIP

The membership of the Teaching and Learning Committee is as follows:

- The Deputy Dean for Teaching and Learning (Chair).
- The Deputy Dean for Research and Innovation.
- The Deputy Dean for Community Engagement and Stakeholder Relations.
- The directors of the schools and those centres involved in undergraduate programmes.
- The Faculty Committee Coordinator.
- SALA: The Senior Faculty Administrator (SFA) and the member of the office of the SFA, on each campus, responsible for undergraduate teaching and learning.
- The Ouality Coordinator.
- A representative of the Centre for Teaching and Learning.
- Two representatives of the Academic Student Societies, chosen by them.
- Secretariat services are provided by Corporate Information and Governance Services.

The Executive Dean and the deputy deans determine the final composition of the Committee.

Enhancement of campus representation needs to be considered in the appointment of members.

#### 3. MEETINGS

The Teaching and Learning Committee meets monthly during term time, where there is a scheduled meeting of the Faculty Management Committee. The minutes are included in the agenda of the Faculty Management Committee for consideration and decision making. The Faculty Committee Coordinator schedules the meeting dates.

#### 4. FUNCTIONS

The Teaching and Learning Committee handles matters as stated in its purpose above and, more specifically, the following matters:

- Planning of undergraduate and honours teaching-learning programmes to be offered within the Faculty
  - Overseeing SCAS process for undergraduate and honours programmes within the Faculty.
  - > Monitoring the approval route of undergraduate and honours academic programmes
  - Overseeing the implementation of e-learning within the Faculty.
  - Determining the minimum admission requirements for each undergraduate and honours qualification and its programmes offered in the Faculty.
  - > Determining the minimum and maximum enrolment in undergraduate and honours qualifications offered by the Faculty.
  - ➤ Considering and recommending the Faculty rules regarding undergraduate and honours programmes to be included in the Faculty yearbook and making recommendations regarding general academic rules.
  - ➤ Determining the scope of and implementation of selection procedures for undergraduate and honours degrees, diplomas or certificates within the Faculty.
  - Monitoring of reports of Internal Programme Evaluations and External Programme Evaluations and making recommendations to the Faculty Management.
- Development and implementation of policy for teaching and learning.
  - Improvement of teaching and learning practice.
  - Promotion of research in teaching and teaching innovation.
  - Institutional Teaching Excellence Award (TEA).
  - Handling of matters concerning teaching and learning as referred to the Faculty by Senate.
- Handling assessment of students
  - Consideration and approval of final assessment results in accordance with the rules regarding the requirements for undergraduate and honours degrees, diplomas or certificates and the determining of the graduation lists for these qualifications.
  - Monitoring assessment outcomes in all programmes after each examination opportunity.
  - > Recommending termination of studies for Undergraduate and Honours students.
- Implementation of Supplemental Instruction.

The chairperson ensures that the agenda is limited to the mentioned matters and not matters which directors and other functionaries can handle by themselves.

#### 2.4.5 Research and Innovation committee

The Faculty has a Research and Innovation Committee which functions according to the following guidelines:

#### 1. PURPOSE

The Research and Innovation Committee is a standing subcommittee of the Faculty Board and the Faculty Management Committee and advises the Faculty Board and the Faculty Management on all matters with respect to research and innovation and postgraduate education and the promotion of the quality thereof.

#### 2. MEMBERSHIP

The membership of the Research and innovation Committee is as follows:

The Deputy Dean for Research and innovation (Chair).

- The Deputy Dean for Teaching and Learning.
- The Deputy Dean for Community Engagement and Stakeholder Relations.
- The directors of the research entities and those schools and centres involved in postgraduate programmes.
- The Faculty Committee Coordinator.
- SALA: The Senior Faculty Administrator (SFA) and the member of the office of the SFA, on each campus, responsible for undergraduate teaching and learning.
- The Quality Coordinator.
- Two representatives of the Academic Student Societies, chosen by them.
- Secretariat services are provided by Corporate Information and Governance Services.

The Executive Dean and the deputy deans determine the final composition of the Committee.

Enhancement of campus representation needs to be considered in the appointment of members.

#### 3. MEETINGS

The Research and Innovation Committee meets during each month where there is a scheduled meeting of the Faculty Management Committee. The minutes are included in the agenda of the Faculty Management Committee for consideration and decision making. The Committee Coordinatorschedules the meeting dates.

#### 4. FUNCTIONS

The Research and innovation Committee handles matters as stated in its purpose above and, more specifically, the following matters:

- Master's and doctoral programmes:
  - Planning of master's and doctoral programmes to be offered within the Faculty.
  - Overseeing the SCAS process for master's and doctoral programmes within the Faculty.
  - > Monitoring the approval route of master's and doctoral academic programmes.
  - > Determining the minimum admission requirements for each master's and doctoral qualification and its programmes offered in the Faculty.
  - > Determining the minimum and maximum enrolment in master's and doctoral qualifications offered by the Faculty.
  - Considering and recommending the Faculty rules regarding master's and doctoral programmes to be included in the Faculty yearbook and making recommendations regarding general academic rules.
  - Determining the scope of and implementation of selection procedures for master's and doctoral degrees within the Faculty.
  - Monitoring of reports of Internal Programme Evaluations and External Programme Evaluations for postgraduate programmes and making recommendations to the Faculty Management.
- Monitoring progress of postgraduate students.
  - Monitoring the regular progress reports of postgraduate students and their supervisors or promoters.
  - > Recommending termination of studies for master's and doctoral students.

- Development and implementation of policy for research and innovation.
  - Overseeing and monitoring the activities of research entities.
  - Monitoring research output of the Faculty.
  - Monitoring reports of internal and external evaluations of research entities.
  - ➤ Planning of research in the Faculty to be conducted in the programmes of the research entities and directing financial support from Faculty funds mostly to research done in this context.
  - > Identifying new research entities to be established based on available expertise and demand according to procedures in this regard.
  - Recommending termination of a research entity on recommendation of the Research Support Commission if research aims are not achieved.
  - ➤ Handling of matters concerning research and innovation as referred to the Faculty by Senate.
- Approval of steps in the research part of programmes of postgraduate students.
  - > Appointment of supervisors and promoters.
  - > Approval of titles for master's mini-dissertations and dissertations and for doctoral theses based on submitted research proposals.
  - > Appointment of examiners for mini-dissertation, dissertation.
  - > Consideration and approval of results in accordance with the rules regarding the requirements for master's and doctoral degrees and the determining of the graduation lists for master's and doctoral qualifications.
- Policy and financing of postdoctoral fellows.

The chairperson ensures that the agenda is limited to the mentioned matters and not matters which directors and other functionaries can handle by themselves.

#### 2.5 Policies

The NWU must comply with all the relevant legislation and regulations that may apply at institutional and operational level in the environments in which the University functions. The Faculty continuously takes note of new proclamations, acts, regulations and statutory expectations applicable to its areas of expertise.

The academic directors concerned ensure that professional qualifications under their jurisdiction satisfy the respective accreditation requirements set by the professional bodies.

The General Academic Rules as approved by the NWU Council apply to all Senate-approved academic programmes that lead to formal qualifications in the Programme and Qualification Mix (PQM) of the University. These Rules must be read with and applied subject to the Higher Education Act (101 of 1997), the Higher Education Qualifications Sub-framework (HEQSF 2014) and the Statute of the North-West University, and in conjunction with policies as determined by Senate and Council, such as, but not limited to, the Admissions Policy and all other related policies for the governance, management and administration of teaching, learning and research, as well as the schedule of payable fees as determined annually by the University.

Subject to these Rules, the Faculty Board makes faculty rules about the qualifications and programmes that are part of the approved NWU PQM and offered by the faculty and submits these rules to Senate for approval. The faculty rules appear in the faculty yearbooks, available on the following NWU website: http://studies.nwu.ac.za/studies/yearbooks

In addition, the Faculty has its own guidelines and processes accepted by the Faculty Board and most of these are published in this Quality Manual.

# 2.6 Advertising and communication of qualifications and programmes

The responsibility for advertising and communication of qualifications and programmes within the Faculty is that of a Senior Liaison Officer. The Senior Liaison Officer is the contact person with the news media and handles the social media. Another responsibility is regular contact with prospective students, their parents and other stakeholder groups. Other responsibilities include the design of marketing and information brochures, organizing open days, conducting information sessions for school groups and the upkeep of the Faculty website.

Information on the different fields of study, requirements, how to apply and other useful information, both for undergraduate and postgraduate studies, appears on the website of the Faculty at the following link: <a href="http://natural-sciences.nwu.ac.za/">http://natural-sciences.nwu.ac.za/</a>

#### 2.7 Infrastructure and facilities

#### 2.7.1 Suitable and sufficient venues

The Faculty has, at its disposal, venues for teaching, venues for group work and equipped laboratories for the subjects where practical laboratory work is a requirement. The Deputy Dean Teaching and Learning is a member of the Senate Committee for Enhancement of the Teaching and Learning Environment.

#### 2.7.2 Library resources

Library facilities are available and trained librarians assist students and staff. A budget for purchasing new books and journals is approved on an annual basis. The Deputy Dean Teaching and Learning is a member of the Senate Library and Information Services Committee.

#### 2.7.3 IT infrastructure (hardware and software)

IT laboratories equipped with computers and the required software are available for classes needing these facilities. A budget for the purchase of specialized computers and programmes is available where needed.

#### 2.7.4 Occupational Health and Safety

- The Occupational Health and Safety Act (85/1993 and 181/1993) has implications at several levels, such as general safety, safety in laboratories, etc.
- The Faculty has an Occupational Health and Safety Sub-Committee on each Campus that consists of the safety representatives for the Schools, Research Entities and other sections on each Campus within the Faculty. The safety representatives on each Campus are responsible for the general upkeep of an Occupational Health and Safety System

- within the sections of the Faculty. Safety reports are completed monthly per section on the Campuses within the Faculty and submitted.
- All matters concerning general occupational health and safety system requirements, laboratory safety, requirements for clothing in laboratories, emergency plans, emergency equipment and removal of chemical waste, are handled by the safety representative involved. Documentation with prescriptions in this regard is available in the different sections. The NWU Safety Management System with standard guidelines and overall policy of the University is available on the intranet and implemented. The implementation of this system ensures a systematic approach to the management of health and safety risks, associated with all NWU activities.
- There are four annual meetings of the Campus OHS Sub-Committees, two weeks prior to the Campus OHS Committee quarterly meeting dates, to enable reporting to the relevant Campus Occupational Health and Safety Committees by the Chairperson of the relevant Campus OHS Sub-Committee.

#### 2.8 Management of risk

- The University developed a process for risk management. Risk is defined as anything that can prevent the University from achieving its objectives. Risk management refers to the practice of identifying potential risks in advance and taking precautionary steps to reduce/curb the risk. Risk management is: the identification, assessment, and prioritisation of risks, followed by a coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events (risks) or to maximize the realisation of opportunities.
- In order to make identification and management of risk part of the daily work activities, the Department Internal Audit in the Office of the Registrar developed the document Guidelines for the identification and management of risks to be included as part of daily operations and quality management-related activities and it is available at Internal Audit.
- The Executive Dean, school directors, research directors and faculty administrators are responsible for encouraging and implementing good risk-management practice within schools, sections and the faculty. When identifying risks, achieving the NWU Strategy Statement needs to be kept in mind.
- Each faculty should document the process of risk management and keep a record of risks identified. For the process of what is expected during identification and management of risks, the risk- identification and management template as provided by the Risk and Compliance division is to be used.
  - ➢ Risk Identification: Risk identification is the process of determining risks that could potentially prevent the process, qualification, programme, enterprise, faculty, school, department, sub-department or unit from achieving its objectives. It includes documenting (records) and communicating (line managers/committees) the concern to the responsible persons/process owners/departments, sub-departments, divisions, schools, programme groups, and subject groups.
  - Risk management processes are embedded within the operational activities across all the NWU processes and structures. This includes **risk control**. This equally applies to all academic and support departments/divisions/units. When evaluating efficiency and/or effectiveness, the identification and management of risks are equally

important. In order to integrate the identification and management of risks as part of daily operations, the *Guidelines for the identification and management of risks*, as developed by the Internal Audit Department and the Registrar's Office, need to be consulted.

#### 2.9 Staff

#### 2.9.1 Staff Management

Every staff member completes a task agreement form and a personal development plan, with the School Director and/or Research Director concerned annually. The directors monitor the staff member continuously. At the end of the year, they evaluate the staff member's progress according to his/her measurable outputs and an evaluative interview. This leads to a new task agreement and personal development plan for the next year.

Promotion of academic staff takes place in accordance with the central policy of the University. In the process of promotion, the Faculty recognises the National Research Foundation (NRF) rating that staff have acquired.

#### 2.9.2 Staff responsibilities in teaching and learning

- The Faculty expects its academic staff to be actively involved in undergraduate and postgraduate teaching-learning.
- Academic staff members are responsible for the quality of the modules which were agreed on with them during the discussion of their task agreements.
- The Faculty expects lecturers to attend seminars, workshops and/or training sessions to enable them to be knowledgeable about the latest teaching-learning strategies and technology.
- When staff is appointed, attention must be given to the teaching record and potential of candidates.
- A candidate's teaching record is taken into consideration in staff promotions.
- Training in teaching is given to newly appointed lecturers.
- The quality of modules is measured continuously (also by the students involved).
- Lecturers must keep abreast of the university policy regarding teaching-learning.
- For each module, a study guide and/or e-guide must be compiled. This is done under supervision of the School Director involved.
- For each module, an eFundi site is established.
- The lecturer ensures that suitable study material is available to students and plans and organises the teaching and learning environment in such a way that optimal teaching and learning can take place.
- Within the learning environment lecturers must encourage students to be independent by making the necessary adjustments in respect of the teaching-learning strategies.

- The lecturer takes care of regular evaluation of the progress of students and speedy feedback of the evaluation to the students, including making available the memorandums (preferably electronically) of all formative assessment opportunities.
- The lecturer must identify all students who perform poorly and propose remediating measures.
- With a view to maintaining a high level of teaching-learning, lecturers are encouraged to participate in the Teaching Excellence Award (TEA) programme.
- The School Director and director(s) of the research entity (entities) within which the staff members involved work, come to an agreement on the use of each staff member in order to attain the teaching and research aims for the next year.
- The School and Research Directors conduct performance agreement discussions with each staff member based on the division of teaching obligations and of the research expectations.

#### 2.9.3 Staff development in teaching-learning

- Participation in work sessions of the Centre for Teaching and Learning: The Faculty recommends that lecturers participate in the regular work sessions that Centre for Teaching and Learning offers on the improvement of teaching-learning.
- Participation in the TEA Programme:
  - The Teaching Excellence Award (TEA) is aimed at encouraging fulltime academic staff who are involved in contact teaching at the NWU to develop their teaching skills and provide proof driven demonstration that their teaching practices fit in an excellent way with the outcome based teaching principles which should lead to effective learning in the higher education environment.
  - Through the award the TEA recognizes that an academic staff member has reached the status of excellent university teaching. The award is one mechanism to recognize this achievement. The TEA process also provides academic staff opportunities to improve their teaching practices optimally, through scheduled workshops and under supervision of an experienced academic advisor and an academic peer member from the same subject of study.
  - There are more details and the necessary forms on the Intranet home page of the Centre for Teaching and Learning.

#### 2.9.4 Staff development in research

During the annual conversations on task agreements separate attention is given to progress by staff members in their research and supervision of postgraduate students. Developmental aspects are contained in the personal development plan of the staff member.

#### 2.10 Position of the Faculty quality coordinator

Quality management is the responsibility of the Executive Dean, school directors and research directors. A quality coordinator provides support and submits a monthly report to

the faculty management committee. The Quality Coordinator is responsible for the annual revision of this Quality Manual.

The responsibilities of the quality coordinator are to:

- <u>Liaise</u> with Quality Enhancement regarding all planned evaluations/ reviews/ capacity development/ quality awareness/ quality-related activities. (as agreed to with Faculty management and relevant role players)
- <u>Maintain faculty database</u> of all quality-related activities and records, such as Internal Evaluations (IPE's); External Evaluations (EPE's); National Reviews (CHE); and/or Professional Body Reviews/ Evaluations
- Report on relevant quality related issues to the Faculty Management and the Faculty Board, such as findings/outcomes of all evaluation/ review activities (IPE's; EPE's, CHE/HEQC Reviews, Professional Reviews).
- Provide continuous <u>support and guidance</u> to the relevant academics during any Internal Evaluation (IPE)/ External Evaluation (EPE)/ National Review (CHE/HEQC) and or Professional Body Evaluation/Review process and during <u>any</u> follow-up actions emanating from such evaluations/reviews.
- Verify the correctness of all Self-Evaluation Reports (SER).
- <u>Co-ordinate and collect</u> all evidence documentation in support of any quality related initiative/ activity
- Co-ordinate logistical arrangements during panel visits.
- <u>Drive and support</u> the annual compilation/review/update of the faculty quality manual.
- <u>Support</u> the quality-related activities in the faculty and assist where necessary, as agreed with the Executive Dean.
- Actively <u>liaise/</u> communicate/ network/ with Quality Enhancement on any quality related issues.
- Act as an observer, if possible, during internal and external evaluations.

#### 3 MANAGEMENT

#### 3.1 Overall planning

The Executive Dean is responsible for preparing and implementing a strategic plan for the Faculty in keeping with the University's vision and strategy.

# 3.2 Management and coordination of qualifications and programmes

All programmes offered by the University must have at least the following:

- Programme owners: A school that has developed a programme and registered it in its name for purposes of subsidy is the owner of the programme. Ownership may change hands by mutual consent of schools within a faculty. If a programme does not have an owner, it may not be offered.
- **Programme managers:** The programme manager, who is appointed by the School Director, develops the programme, manages programme delivery and maintains the programme document on behalf of its owner.

#### 3.3 Appointment and responsibilities of subject group leaders

The Executive Dean consults with the School Director concerned and appoints a subject group leader for a suitable term, usually 3 years.

#### The responsibilities are:

- The primary task of the subject group leader has to do with advice to the school director
  concerning staff utilization in teaching programmes to increase depth in the subject
  field. This concerns advice regarding staff utilization in teaching up to the postgraduate
  diploma, honours degree and taught modules for the master's degree.
- Since the division of work is closely tied to timetables, the setting of class and supervision schedules, as well as coordinating student assistants and markers to assist staff, falls within the scope of responsibilities of the Subject group leader. In this regard the chair may ask for help from the administrative and/or other staff in the school.
- The monitoring of student performance and decisions on student reassessments similarly
  fall within the responsibility of the Subject group leader together with the staff member
  involved. They provide summary statistics of examination results for approval by the
  school director, who is responsible for the finalization of the examination results.
- The depth in a field also depends on class and practical exemptions and therefore subject group leaders provide advice in this regard to the School Director. (The handling of student admission, requests and examination is the responsibility of the School Director.)
- Regular revision of syllabuses according to an approved curriculation model to comply continuously with the teaching-learning aims of the University, Faculty and school.
- Advise the school director regarding staff requests that relate to the day-to-day functioning of the subject group, including arrangements for leave of staff members. The School Director recommends these requests for approval to the Executive Dean. Also included is co-ordination and communication of staff grievances on conditions of service, job satisfaction, promotion, etc.
- Supports the school director in the execution of the strategic policy of the school, faculty and university (as is also expected from every other member of staff).
- Steps into the shoes of the school director when absent in an acting capacity when requested.

#### 3.4 Programme impact and user surveys

Programme owners have the responsibility to continuously evaluate the effectiveness of their programmes to improve a programme's design, delivery and resourcing, and for staff development and student support, where necessary. This is done through user surveys, reviews and impact studies where appropriate, especially in the more professional programmes, where employability of students and requirements of the professional bodies play an important role. In the more basic programmes, contact with fellow academics at other universities and discussions at academic conferences contribute to the evaluations.

#### 3.5 Administrative support

The Faculty makes use of University wide administrative systems for providing information, managing the programme information system, dealing with a diverse student population and ensuring the integrity of processes leading to certification of the qualification obtained through the programmes offered.

# 3.6 Identifying and monitoring of student progress and non-active and at-risk students

- It is the responsibility of each lecturer to regularly evaluate the progress of students. In addition, the Directors/Subject group leaders identify, with the assistance of the Faculty Administrator after each examination, students whose progress is unsatisfactory. This leads to interviews with students and where necessary students receive help with study methods with the aim of improving performance.
- It is accepted that it is impossible for the Faculty to formulate an undergraduate throughput rate policy for the Faculty as a whole. Many the students attending classes in the Faculty are from other faculties and they only take one or more service modules in natural sciences subjects. Pass norms are determined separately for each module in the Faculty. The Teaching and Learning Committee monitors after each examination the throughput figures in view of the pass norms by means of a report from each school director. The school director calculates, for each module, a combined throughput rate based on both examination opportunities and the number of students enrolled on the day of count. This throughput rate is calculated for every module as follows:

Throughput rate = Total number of students that passed both examination opportunities

Number of students that are registered on the day of count

The pass norms of the Faculty are: First year: 70%, Second year: 75%, Third year: 80%. If a negative deviation larger than 10% from this norm is found, the relevant results are finalised in consultation with the Executive Dean and/or Deputy Dean Teaching and Learning (T&L). After the second examination opportunity at the end of every semester, the School Director sends a report form (see Appendix 3.6.A) with the throughput rates of all modules of the school to the Deputy Dean, T&L. The throughput rates must be reported at the first meeting of the T&L Committee in the following semester.

• There is a comprehensive process for the <u>monitoring of the progress of postgraduate</u> students, which is described elsewhere in this manual.

APPENDIX 3.6.A: Throughput figures undergraduate

#### 4 TEACHING AND LEARNING

#### 4.1 Approach to teaching-learning

In agreement with the National Education Policy for Outcomes-based Education and the level descriptors of the National Qualifications Framework, the teaching and learning approach of the NWU is one of guided, independent, outcomes-based study within a blended teaching and learning environment. The lecturer guides learners to attain the outcomes unique to a programme and its composite modules through active learning activities suitable to the level of autonomy expected of learners on a specific level of study.

Teaching-learning at the NWU is governed by the Teaching and learning policy and is still in the process of being updated.

APPENDIX 4.1.A: <u>Teaching and learning policy</u>.

#### 4.2 Admission requirements

Admission requirements for the programmes offered by the Faculty, are contained in the Faculty Yearbooks.

#### 4.3 Programme development

The Faculty, in initiating new programmes and in evaluating existing ones, ensures that they are consistent with programme accreditation criteria set out by the HEQC.

APPENDIX 4.3.A: <u>HEQC Criteria for Programme Accreditation</u>

# 4.4 Approval of new qualifications, programmes, changes to existing programmes, termination of programmes and faculty rules

- According to the Academic Programme Management Policy, Academic Programme Management refers to activities executed by academics in faculties to regularly review and improve the quality of academic programmes at the NWU, including the development of new academic programmes to be considered by the DoHET, the HEQC and SAQA to become part of the NWU approved Programme Qualification Mix (PQM), the list of accredited programmes by the HEQC and the list of qualifications registered by SAQA. Approval of new programmes, changes to existing programmes and termination of programmes are regulated by the Academic Programme Management Policy which outlines who the different role players are and what their functions are. All programme changes to the yearbook, should be discussed with the faculty Q&APP representative to ensure that the correct procedure is followed.
- Each change to a programme must be approved by both Faculty Management and SCAS (Senate Committee for Academic Standards), and where necessary DoHET approval must

be awaited, before it is published in the Yearbook. The latter process is handled by Qualifications and Academic Programme Planning (QAPP).

- The rules of the Faculty of Natural and Agricultural Sciences are published in the Faculty's Yearbook. The yearbook consists of two volumes, viz. an undergraduate and a postgraduate volume. The latter contains the rules for postgraduate diplomas, honours, master's and doctoral degrees. The Senior Faculty Administrator of the Faculty has the overhead responsibility to compile the Yearbook and to make sure that it is updated annually.
- The director of each school in the Faculty is responsible for the rules that apply to the undergraduate, postgraduate diploma and honours qualifications and/or programmes that belong to the school. The director takes the initiative when these rules are updated. The rules for structured master's degrees are the joint responsibility of the school director and the research director involved and they will come to a mutual agreement about dividing the responsibility for changes between them. The research director or other person appointed, is responsible for all other master's and doctoral degrees. The directors are also responsible to make sure that the changes in rules are made in the appropriate programme documents.
- Each change of a faculty rule or implementation of a new rule (as allowed by the Arules), must be approved by both Faculty Management and SCAS/Senate. All admissions requirements that need to be changed must be approved by both Faculty Management and ARC (Admissions Requirements Committee)/Senate before it is published in the Yearbook. APPENDIX 4.4.A: <a href="Academic Programme Management Policy">Academic Programme Management Policy</a>; <a href="http://services.nwu.ac.za/qualification-and-academic-programme-planning/important-policies-and-guiding-documents">http://services.nwu.ac.za/qualification-and-academic-programme-planning/important-policies-and-guiding-documents</a>

APPENDIX 4.4.B: Procedures to be followed to change a faculty rule

#### 4.5 Recruitment and admission of students

#### 4.5.1 Recruitment of students

The Department of Corporate Relations and Marketing of the NWU develops strategies to recruit prospective students. The Faculty liaises with this Department with regards to recruitment needs and planning.

This liaison is done through the Senior Faculty Liaison Officer and includes providing information to prospective students on the Faculty website and through brochures and marketing material, open days, science weeks, community projects, school visits and receiving visits by school groups.

#### 4.5.2 Admission of First time entry (FTE's) undergraduate students

Prospective undergraduate students apply for admission to the North-West University at the Central Applications and Admissions Office (CAAO), of the University. This office selects students and decides whether applicants will be accepted as students. Faculty Management or the Executive Dean does not participate in the selection process.

The NWU Admissions Policy, General Academic Rules and NWU Policy on Students with Disabilities apply. The CAAO will make applications, for admission to specific professional programmes where admission is subject to specific selection procedures, available to the

School Director concerned. Admission statistics are managed by the CAAO for strategic purposes and will be available on the HEDA dashboard for reference and future planning. If the applications received for a programme are more than the relevant subject group will able to manage, the group of students who has the best prospect of success in the opinion of the Senior Faculty Administrator, where necessary in consultation with the School Director, is selected for the appropriate programme. The background and potential of students are also considered in this selection process.

The minimum requirements for admission to the Faculty of Natural and Agricultural Sciences, are published in its yearbook every year.

# 4.5.3 Admission of Non-first time entry (Non-FTE's) undergraduate students

Non-first time entering students / returning students, who want to apply for admission to another programme, will only be considered for enrolment in the event of compliance with the criteria and faculty rules as stipulated in the relevant yearbooks of the faculty.

#### 4.5.4 Admission of honours and postgraduate diploma students

- Selection: The purpose of selection of students for a programme is to admit only those students who on the basis of their academic record and other proven appropriate prior learning, have a realistic prospect of success, taking into account the background and potential of the students. The following are checked by the programme leader / selection panel before or during the selection:
  - Compliance with general and faculty specific admission requirements. (If an applicant does not comply with the specific admission requirements for a qualification programme, the School Director may formally apply at the Faculty Board for approval of admission to the specific qualification programme as per A-Rule 1.6);
- **Honours degrees and postgraduate diplomas:** The School Director in consultation with the Subject group leader concerned, performs the selection. Each school has own criteria for this purpose.
- Target dates: Target dates for (i) receiving applications (i.e. a closing date for receiving applications) and (ii) making known the results of the selection to prospective students, are determined annually by the School Director in consultation with the Subject group leader concerned:
- Administration of selecting applications:
  - > Applications for admission are submitted to Student Academic Lyfe Cycle Administration (SALA) CAAO office, from where these are made available to the School Director concerned.
  - After selection has been completed according to the rules of the yearbook, the School Director communicates the results to SALA CAAO, from where the student is informed about the decision.
- Late applications: Late applications are considered if there is still space for an additional student in the relevant programme.

#### 4.5.5 Recognition of prior learning (RPL)

#### Recognition of Prior Learning (RPL) refers to A-Rule 1.6.

A-Rule 1.6.2: Only proven **informal or non-formal** learning may be taken into consideration by means of RPL, the process of equivalence-setting between such learning and formal modules must be documented, and its outcome must be recorded on the official student record.

The Faculty of Natural and Agricultural Sciences accepts the principles of outcomes directed, resource-based and life-long learning, in which considerations of articulation and mobility play a significant role.

Recognition of prior learning concerns the provable knowledge and learning that an applicant has acquired through experience. At all times, the purpose is to consider the level of knowledge and skills, assessing it in the context of the exit level skills required for the intended teaching-learning programme or modules in the programme, or for the status for which the applicant applies, and not only the experience that an applicant may put on paper.

Recognition of prior learning therefore takes place against the background of appropriate and demonstrable knowledge and skills of the applicant, considering the exit levels that must be achieved by the chosen teaching-learning programme.

The Faculty of Natural and Agricultural Sciences accepts that recognition of prior learning can and must take place within the normal, existing policy on admission of students.

#### 4.5.6 Credit recognition and transfer (CRT)

#### Credit recognition and transfer (CRT) refers to A-Rule 1.7

A-Rule 1.7.1.2: Credit recognition and transfer may only be granted for credits obtained during studies towards a **formal qualification**, including credits obtained for modules taken for non-degree purposes.

The Faculty subscribes to the view that credit recognition and transfer whether acquired through teaching-learning programmes at this or another institution, is an essential element in deciding on admission to a chosen teaching-learning programme and in awarding credits with a view to placement in the chosen teaching-learning programme. No distinction ought to be made between core and elective modules, or between so-called major and minor subjects regarding credit recognition. If the applicant is found to be capable, the credits may be awarded in terms of existing credit values of modules at the University, in accordance with national prescriptions and faculty rules regarding the appropriate curriculum.

The Faculty of Natural and Agricultural Sciences accepts that credit recognition and transfer can and must take place within the normal, existing policy on admission of students and awarding credits to prospective and current students- whether they are from this or another institution - in a valid, trustworthy and fair manner.

# 4.5.7 Procedure for the Recognition of Prior Learning or Credit Recognition and Transfer

Recognition of prior learning (RPL) or credit recognition and transfer (CRT), takes place by completing a student request form according to the relevant prescriptions, with a view to admission to a teaching-learning programme of the University, whether at entrance level or

at some other level of a specific programme, or awarding applicants a specific status that will enable them further their studies at this University. A successful application for RPL or CRT do not result in the University conferring any qualification, to such successful applicant.

The prior learning or credit recognition of an applicant is evaluated according to the following procedures:

- Applicants complete a student request form and supply all substantiating documents as may be requested to explain and give proof of their reputed prior learning or modules previously passed, to the Subject group leader and the School Director or the Research Director in case of postgraduate studies.
- The Subject group leader makes a recommendation to the School Director in respect of RPL or CRT that must be confirmed by the School Director, who will send a combined recommendation to the Faculty Administrator. The School/Research Director is responsible for the recommendation in the case of postgraduate studies.
- The Faculty Administrator checks the recommendations and consults the Executive Dean or the respective Deputy Dean, in cases of uncertainty. The Faculty Administrator formulates an official formal decision, which must be entered in the student record.
- The request form is sent to SALA Administration offices. SALA enters the formal official decision in the student's record.

#### 4.5.8 Policy on recognition of BTech for admission to the MSc

- Prospective students should submit a complete academic record and the names of two referees to the research director.
- A mentor with a PhD degree who can serve as co-supervisor at the workplace of the prospective student should be identified beforehand. The mentor should confirm availability in writing.
- A complete project proposal should be submitted beforehand. The project proposal should consist of the following headings: title, purpose and goals, literature background with literature references (which support the purpose and goals), work plan and time schedule. The academic level of the envisioned study should clearly appear in the proposal. In case a project has not been identified, this should be discussed with the research director.
- Written proof should be supplied beforehand of the availability of access to facilities (laboratory(ies), analytical instruments, etc.) at the workplace of the prospective student, in order to complete the MSc successfully in the prescribed time.
- Modules with a minimum total credit value of 32 from the Hons BSc programme, should be completed successfully during the first 18 months of the MSc study.
- Final approval is subject to finding a suitable supervisor.

#### 4.6 Staff development in terms of teaching and learning

The Faculty encourages staff members to participate in training sessions offered by Centre for Teaching and Learning and also to <u>participate in the TEA programme</u>.

#### 4.7 Development of learning material and study guides

The development and use of study guides is described in the STUDY GUIDE POLICY which states: The aim of this policy is to assure quality in the development, production and use of study guides at the NWU, as necessitated in ..... the Teaching and Learning Policy of the NWU, namely that each module of each taught programme must be provided with a study guide adhering to the criteria for interactive study material approved by the NWU. The introduction of study guides for all modules taught at the NWU aims to improve the quality of the teaching and learning experiences at the institution.

Full information about the requirements and design of study guides, is available on the web site of Centre for Teaching and Learning.

APPENDIX 4.7.A: Study guide design: <a href="http://services.nwu.ac.za/centre-teaching-and-learning-ctl/ctl-learning-design">http://services.nwu.ac.za/centre-teaching-and-learning-ctl/ctl-learning-design</a>

#### 4.8 Module file

The Faculty requires a module file for each module. This file has to contain the following: study guide, list of outcomes in the calendar, supporting audio and digital study material, formative and summative assessment planning, class tests and assignments with memoranda, examination and test papers with memoranda, reports of internal/external moderators, examples of marked examination answer scripts, number of enrolments and throughput rates, feedback of students on the module and on presenters of the module, as found in prescribed questionnaires and CV's of the lecturers. A module file is kept for 3 years after presentation of the module. It is now policy that the module files be kept in electronic format and will not be in paper format anymore. Each module should have an eFundi site and should be used for communication with students, placing of resources, etc.

#### 4.9 Student Academic Life Cycle Administration of an Undergraduate Student

- Enquiries, application and admission
- Registration, re-registration and amendment process
- Study guidance and Assessment
- Monitoring of academc performace
- Examination process
  - Attainment of the degree: graduates and results process
  - Storing of records accoring to File Management Plan of the NWU

#### 4.10 Support of students

#### **Reception of students**

The Faculty endeavours to give optimal support to every new student who reports at the Faculty at the beginning of the year. Through this support, the Faculty wants to ensure that students start their study in the best possible way.

The Faculty Administrator, faculty advisors, subject group leaders and school directors are available throughout the year to offer counselling to students, attend to their enquires and support them in managing their study programmes. During the reception of new students at the beginning of the academic year, the following aspects receive special attention:

- Reception of parents and students: Within the framework of the programme for the
  reception and introduction of first years, the Faculty organises a reception for new first
  years and their parents. It is a different day on each campus. During this occasion staff
  representing every subject, are present to supply general information to parents and
  students.
- Programme/Curriculum counselling: During orientation week, yearbooks and registration documents, information about timetables and about faculty counsellors are distributed to all first years. A counselling session takes place during which Faculty counsellors or subject group leaders of the Faculty with the support of the specific Campus Faculty Administrator, provide intensive counselling to students on the respective campuses, on matters such as the following:
  - the structure of academic programmes in the Faculty;

- > available programmes and if students want to change (depending on capacity)
- how to go about in selecting an appropriate programme;
- completion of registrationforms of the Faculty.

Thereafter, the student receives the registration form for the specific programme for which the student has applied for. The Faculty Administrator and faculty counsellors will be available in their offices during the whole orientation/registration period, to give advice to individual students.

- Curriculum control for registration: On the appointed day, representatives of all schools and subjects in the Faculty are available in a central venue to make sure that each student's registration form has been completed correctly. Opportunities are available to students to request individual counselling. If the registration form has been completed correctly, a staff member signs it and the student may proceed to register online or at the available registration service points.
- Dividing practical sessions at Potchefstroom campus only: In the Programme for the reception and introduction of first years, time is set aside for dividing practical sessions among students. This is necessary because the practical groups are very large. All students from faculties involved with natural and agriculture sciences, come together in designated venues for this important action. After this session, each student will know where to find the practical sessions on the timetable.
- **Practicals at MC:** During the Orientation Week, the students will be taken on a tour of the Faculty and will be shown where all the labs are.

#### 4.10.1 Student requests and procedures

The specific Campus Faculty Administrator of the Faculty is the address for all requests
of students regarding changes in enrolments, class schedule problems, absence,
examination issues and related matters.

#### • Non-degree purposes students

- > Students who want to study for non-degree purpose must complete an NWU application and student request form and comply with the admission requirements.
- > The programme leader / subject group leader of the faculty must approve and sign the application and student request forms.
- Admission is only applicable for that specific academic year.
- ➤ The student submits the application and student request forms at the CAAO for processing on the system and providing of a registration form. The student then checks in at the faculty for curriculum control.
- > Students should preferably not be registered as "non-graduation" students as it has a subsidy implication.
- The following matters regarding undergraduate students must be dealt with by means of student requests, through the specific Campus Faculty Administrator:
  - Qualification/Programme/Curriculum changes
  - > Exemption from prerequisites and parallel requirements
  - Exemption of, or recognition of credits / modules

- Exemption from practical work or class attendance in a module
- > Repetition of modules
- Permission to take additional modules (Refer to A-Rule 2.3)
- Readmission after Interruption of studies (A-Rule 1.19)
- Extention of period of study (A-rule 1.17)
- Enrolled simultaneously for more than one qualification at the university (refer to A-rule 1.10.6)
- ➤ Enrolled simultaneously at more than one institution (refer to A-rule 1.10.5)
  - Modules lacking to complete degree: UG-yearbook ref: NAS1.4: If a student lacks five modules at the most to complete his/her degree, these modules may be completed at another university, subject to the following conditions:
    - The degree must be completed within the maximum time allowed according to A-Rule 1.14. If it takes longer, a written application must be made for extension of the studies.
    - At least one core module on third year level must be completed at NWU.
    - o The student must register at both NWU and the other university.

If a student has an academic request which influences the current registration, or an exclusion which needs to be addressed, the specific student request form must be completed.

APPENDIX 4.10.1A: <u>Appeal against exclusion</u>. This form will be made available as soon as possible.

#### Procedures

- Forms for student requests are available from the specific Campus Faculty Administrator.
- > All student requests must be referred to the Subject group leader and/or school director concerned, if necessary, for recommendations.
- In order to speed up finalisation of student requests, school directors have the capacity, in all cases where student requests can be clearly dealt with according to appropriate rules, to delegate to a subject group leader the task of making recommendations to the specific Campus Faculty Administrator.
- In all cases where doubt arises, the Faculty Administrator will consult the school director concerned.

#### Qualification or Programme changes

Students may only register for one of the specified programmes in the yearbook at the beginning of the year (scheduled registration and amendment period). Any deviation from the selected programme or a later change, however small, may only be requested by means of a student request. These requests are considered according to the following criteria:

deviation from the published programme must be as small as possible;

- the proposed change must support the student's intended core subject combination as meaningfully as possible;
- > the proposed change must, subject to the above-mentioned criterion, be a solution to otherwise unsurpassable timetable or other problems so that the student may complete the degree earlier.

#### • Module changes in registration

The form for changing a module, which has to be completed by a student to change the subjects for which the student is registered, is only signed by the specific Campus Faculty Administrator.

Lecturers must not sign these forms, except when it is requested that a lecturer must confirm that the student does attend classes.

However, since 2020, it is possible for a student to do an online request to add and/or drop modules on the DIY platform. The requests are either approved/rejected by the specific Campus Faculty Administrator or referred to the respective subject group leader / director.

#### Change of campus

- > Students who want to transfer between campuses, must report to the Undergraduate Registration and Student Records department on their current campus, to complete the prescribed change of campus form.
- Move from extended programme to a mainstream programme:
  - Only students who want to change from campus may apply, and
  - ❖ who have passed all the extended modules (i.e. their first two years), and
  - preferably in the minimum time
  - ❖ all these applications will have to serve at the T&L for approval
  - Students from other universities who apply for a main stream programme, must:
    - provide proof that the first two years have been successfully completed in the program for which the student was registered.
    - Such student's application must be recommended by the respective School Director and the corresponding modules that may be credited, must be confirmed.

## • Module recognitions (Credit recognition and transfer: A-Rule 1.7) See also 4.5.6 and 4.5.7

- > Subjects passed at this University with a view to a specific degree are not automatically recognised for another degree if the student changes from one programme to another. The student must direct an appropriate request to the specific Campus Faculty Administrator, who deals with these subject recognitions within the existing programmes.
- When a student applies for recognition of subjects already passed at another university, the student must supply full details of the contents of the subjects for which recognition is requested. Relevant yearbooks, or certified copies of extracts from relevant yearbooks, may be presented. In cases that are clearly covered by rules, the Faculty Administrator will submit the information to the subject group leader concerned, to make a recommendation. In cases where interpretation of rules is necessary, the information will be submitted to the school director concerned.

> Students who want to take one or more subjects at UNISA (or any other institution) with a view to recognition of a degree of North-West University, must get the necessary permission BEFOREHAND by means of a student request, for simultaneous registration at more than one institution (refer to rule A-rule 1.10.5)

#### • Linked and concurrent modules (A-rule 1.8)

- Linked modules, being modules identified as assumed learning for a subsequent module or modules and are specified in the Faculty yearbook.
- Linked modules must have been passed before a student may register for a successive module.
- Exception must be dealt with through a student request, which has been approved by the School Director.

#### • Exemption from practical work or class attendance in a module (refer to A-rule 1.12):

<u>Exemption from repeating practicals</u>: Where a student fails a module that has a practical component, but passes the practical component, the student may apply by means of a student request to the School Director concerned, to be exempted from the practical component when the student repeats the module.

The granting of the exemption is valid only for the year following the year when the student failed the module.

#### Class exemption is only considered in exceptional cases:

In cases where a student is repeating a module, exemption from practical sessions or some scheduled classes may be considered. A request for exemption must be submitted on a *Student Request Form* and will only be considered subject to the following conditions:

- Exemption from class attendance will only be considered where there is a timetable clash.
- > The theory component of a participation mark from the preceeding year will not be carried forward
- > The student must accept explicit responsibility to attend all theory evaluation opportunities and to submit all tasks, assignments etc.
- > No extra tests will be set to accommodate a student with timetable clashes.
- Exemption from attending practical sessions can be granted and the participation mark for practicals obtained in the preceding year can be carried forward, provided the mark is at least 50%. (A-Rule 1.12.1)
- > The school director concerned recommends approval of class or practical exemption.
- The school director is entitled to endorse conditions to the approval of the request and if the student fails to conform to any of these conditions, the student will not receive proof of participation for that module. The conditions will be supplied to the student in writing as part of the school director's recommendation.
- If exemption from class attendance or practical sessions is granted in respect of a module, the student must register for the module.

#### Exemption from class attendance because of organised events (Policy is in process to be reviewed)

Students who are unable to attend one or more classes because of valid organised events (sports events, academic tours etc.) must apply on the specific student request form, for exemption BEFOREHAND.

- The student completes the prescribed form at the office of the specific Campus Faculty Administrator and submits substantiating documents at the office.
- The Faculty Administrator sends valid applications to the SALA Executive Dean/Director Timetables & Assessments, who will approve them in final instance.
- > The specific Campus Faculty Administrator sends copies of the approved applications to inform all lecturers concerned.

IMPORTANT: Lecturers in their own interest must make it very clear to students that exemption because of valid organised events must be obtained BEFOREHAND and that it will not be granted afterwards.

## Absence from classes and tests for example, because of illness, death of an immediate family member, etc

- > These absences are dealt with and fully recorded in the schools.
- > School directors see that the students are properly informed about the procedures that are followed in each school.
- > Sickness absence is only granted if the student submits a legal medical certificate.
- A sickness certificate in which the medical practitioner declares, "According to information provided ... the student was sick", is not acceptable. For a funeral a letter/death certificate in the event of the death of an immediate family member and also letters from religious institutions like Muslim religious days etc., is needed.
- ➤ A letter of ABSENCE must be submitted at the lecturer, secretary of school/Dean's office (SALA personnel), within 7 (seven) working days after return from such an absence.
- Only medical certificates that are issued by medical practitioners or an attendance letter from Provincial Primary Health Care Clinics as well as Military sick depots, where these documents are issued by registered nurses, may be approved.
- > Students who could not participate in the prescribed minimum class activities because of poor health, may only in exceptional cases be allowed to the examination with the permission of the Executive Dean.
- > Students must be properly informed about these rules.

#### • Changes in the timetable

Class, test and examination timetables may only be changed under exceptional circumstances, after the changes have been discussed, WITH AMPLE TIME ON HAND, with everyone who is or may be affected by such changes (e.g. all students concerned, the Examination Division etc.), and the changes have been approved by the EXECUTIVE DEAN or DEPUTY DEAN in WRITING on recommendation of the school director. Individual lecturers may under no circumstances make any ad hoc changes to any official timetable.

#### 4.10.2 Assessment and Examination

- Requirements for admission to the examination (Participation marks according to faculty rules): A-Rule 1.13.2
  - The participation mark for a module consists of marks for tests, assignments and practical work. For each teaching and learning task (class tests, assignments, reports, etc.) executed by means of an assessment in a module, a mark will be awarded.
  - A student's participation mark is the weighted average of these marks.
  - The ratio between theory and practical for the calculation of the participation mark is set out in the study guides of the various modules and explained in the yearbook.
  - The minimum participation mark a student needs for admission to an examination is 40% (A-Rule 1.13.2.1) unless otherwise stated in the faculty rules.
    - ❖ A-Rule 1.13.2.3: Faculty rule indicates- only for **bona fide first year** students, **first** semester, a 35% is required for admission to the examination.
  - > Some modules do not require a participation mark or no examination is necessary. Only satisfactory participation is required. The information of these modules must be indicated in the relevant Yearbooks (A-Rule 1.13.2.3).

#### • Examination timetables

- ➤ The official timetables and rosters are released electronically according to annual planning by SAS. Students can download their personal timetables from the web according to their respective student numbers.
- Provisional timetables are released on the NWU webpage under "exam timetables" for commentary from faculties:
  - Address: www.nwu.ac.za
  - Current Students
  - Exam Timetables
  - Choose Campus
  - Select relevant timetable
- No examination timetables may be communicated verbally/telephonically to students/parents.

#### Examination centres: applicable to distance learning

The Examination section annually provides a list of active examination centres. Every year during registration, distance students (part time/Sentra) must indicate their exam centres on the registration or curriculum control form.

#### Changes to examination centres

The annual deadlines for changes to examination centres are published in Undergraduate Administration's annual plan (around 15 April and 15 September). The responsible official at the Examination section emails a notification to all roleplayers as soon as attendance lists have been finalised. This notification serves as cut-off date for changes of exam centres.

If a student wants to change his/her exam centre, the following procedure is followed, depending on when the request is received:

#### \* Requests for changes within deadline

Student makes written request (student request form or via email). The request is received and handled by the relevant UG SALA UODL official.

\* Requests after deadline / notification of finalisation of attendance lists Student makes written request (student request form or via email). The request is received by the relevant UG SALA UODL official.

#### Examination

#### Submission of semester test papers

Semester Test papers must be submitted in printed form at the Examination Section of the relevant campus.

The period in which these must be submitted, will be communicated by SALA with academic staff.

The Examination and Timetables Administrator do not handle this aspect of assessment.

#### Submission of formal assessments

- Formal Examination papers must be submitted on the official NWU electronic examination submission manager.
- The dates of submission will be decided upon and published by SALA.
- ❖ Information regarding this will be communicated by the relevant Examination and Timetables administrator to all academic staff.
- ❖ Papers will be authorised on the system by the exam Examinations and Timetables Administrator.
- Communications regarding examination papers during the submission period can be directed towards the relevant administrator.

#### > Determination of module mark (A-rule 1.13.1)

The module mark for every module is calculate from the participation mark and the examination mark.

Calculation of final module marks for distance students are indicated in the study guide.

The weight of the participation mark may be between 30% and 70% of the final module mark.

Also note the provisions of A-rule 2.5.2, an executive dean may, in consultation with the

- ❖ academic director concerned, allocate a pass mark of 50% to a first-time entering undergraduate student who achieved a final module mark of no less than 40% and an examination mark of at least 50%.
- Number of examination opoportunities: See A-Rules 1.13.4 & 2.5.3 (Undergraduate) & 3.5.2 (Hons & Postgraduate diploma) & 4.11.3 (Master's coursework) & 5.11.3 (Doctoral coursework)

Examinations are dealt with strictly according to the General Rules. Students in Actuarial Science, who would like to be considered for actuarial exemption, must write their examinations during the first examination opportunity.

**Dean's concession examination:** According to the General Rules 1.13.6, there is provision for a *Dean's concession examination* (third examination opportunity):

A student who, having used one or both examination opportunities provided for in the rules relating to the various qualification types and levels, has passed all coursework modules but one required for the completion of a programme leading to a qualification, may apply to the Executive Dean concerned to be granted a final assessment opportunity in the outstanding module provided that -

- the student has achieved an adequate participation mark in the module for admission to the examination;
- o the student has previously failed the module in question;
- the student completes the final assessment for the applicable module in the following examination period that is scheduled for such assessment opportunities in the annual university calendar;
- o the maximum mark that can be obtained for a final assessment is 50%;
- o the final module mark is based solely on the mark achieved in the final assessment, without taking the participation mark into account, and
- the student is required to pay the applicable fee for the final assessment opportunity but is not required to re-register for the programme concerned, and provided that the student must have been registered for the module in the academic year during which all the other requirements for the attainment of the qualification were complied with.
- Special examination for USSA and/or international participants (Arrangement is in process to be reviewed)

Students who are participating in the University Sport South African (USSA) tournaments and/or international tournaments, but missed a second opportunity examination, may write the special examination, after recommendation of a permanent staff member in the campus' sport department. The sport department must verify the following:

- > That the scheduled date of the second opportunity paper was indeed in the duration of the tournament.
- ➤ That the student's name does appear on the USSA/2 nominative-entry-form before approval is granted.
- > That it is for one module only.

The recommended form must be sent to the Campus Faculty Administrator for final approval.

This special examination takes place on the same date and time as the Dean's concession examination but should not be considered as being a Dean's concession examination (a third opportunity).

#### Announcement and publication of results

Marks must be re-evaluated and finalised on the seventh day after the module's examination, including Saturdays but excluding Sundays.

After re-evaluation the marks must also be posted on the notice boards and/or eFundi.

Finalised marks will be available on the NWU website: <a href="http://jbossprd.nwu.ac.za/str-webclient/StudentWebCommand.do?sf=143647&lng=3#/top">http://jbossprd.nwu.ac.za/str-webclient/StudentWebCommand.do?sf=143647&lng=3#/top</a>

#### 4.10.3 Support to students with special needs

#### Students with special needs

- ➤ The NWU's Policy on Students with Disabilities indicates its aim, in keeping with the spirit and contents of the Constitution, to enable students with disabilities to acquire a culture of learning and full integration into the University, so that they can develop and extend their potential, and participate as equal members of the learning community.
- In this Policy's Guideline and Procedure, the NWU affirms its devotion to interact 'with our students and prospective students, (where) Student Counselling and Development Services subscribes to the vision, mission and values of the North-West University, ensuring that all clients/students are treated equally and fairly in a student-friendly environment, conducive to the maximum benefit of the client/student.
- > Student Counselling and Development Services offers the following services:
  - Career and Counselling Services
  - Psychological Services
  - Social Work Services
  - Unit for Students with Disabilities
  - HIV and Aids Services
- > Students who indicate that they need support or who are identified by lecturers or peers to receive support, are recommended to Student Counselling and Development Services.

# 4.11 Evaluation of teaching and learning and improvement of programmes

#### 4.11.1 Continuous evaluation and programme improvement

As part of their core tasks, school directors continuously evaluate the quality of programmes and apply improvements. Reports on various aspects of this appear on the agenda of the Faculty Management Committee for review. The quality coordinator of the Faculty provides support in this and makes submissions to the Faculty Management Committee on improvement of the quality processes concerning teaching and learning in the Faculty. A document providing guidance in this is Criteria for Programme Accreditation of the Higher Education Quality Committee, which is available on the website of the Institutional Quality

Office and of which the criteria are mirrored in the questionnaires for internal programme evaluations.

### 4.11.2 Student teaching and learning experience survey

The lecturer of every module must participate in an evaluation by students at least once during the semester the lecturer presents the module. The lecturer must make use of an instrument approved by the University (questionnaire for student feedback which appears on the website of Centre for Teaching and Learning) and ensures that the data of the evaluation are recorded. This is now an online process:

http://services.nwu.ac.za/student-teaching-and-learning-experience-survey/welcome-lecturers

Students are informed of the opening and closing dates of the questionnaires.

#### 4.11.3 Internal programme evaluations

The Faculty takes part in internal programme evaluations. School directors plan that all undergraduate and honours programmes in the school will be evaluated according to the schedule agreed by the university/quality office. In this way, school directors and deans make sure that all programmes that are offered in the schools, comply with minimum standards and - if necessary - are improved and developed further. The research directors, in consultation with the school directors, are responsible for the evaluation of the structured master's degrees.

Full details of the process of internal programme evaluation are contained in the document *Guide for internal programme evaluation* of Quality Enhancement and which is made available on the website of Quality Enhancement: https://intranet.nwu.ac.za/quality-academic-programmes

The preferred questionnaire for evaluating the general formative undergraduate and Honours programmes, is the questionnaire for "Subject-in-Programme Evaluation", prepared and regularly updated by Quality Enhancement of the University.

The Faculty approved the following steps in completing the report of an internal programme evaluation:

- The chairperson of the evaluation team is responsible for compiling the evaluation report and makes sure that the input of the representative of Centre for Teaching and Learning is included.
- The chairperson then circulates the report among the members of the team for comments.
- After the comments have been dealt with, each member of the evaluation team confirms in writing agreement with the report.
- The chairperson sends the report to the school/centre director/research director concerned (if he or she is not the chairperson himself), the Quality Coordinator of the Faculty and the Executive Dean.
- The Executive Dean, with the support of the Quality Coordinator, and in consultation with the school director/centre director/research director concerned, reads the report and requests alterations if necessary.
- After making the alterations, the chairperson sends the final report to the Quality Coordinator for further finalisation by the Executive Dean.

- The Executive Dean sends the report with comments, if any, to the DVC Teaching and Learning and to Quality Enhancement to be filed.
- The DVC reads every report from an overhead vantage point to make sure that the selfevaluation was done truly and thoroughly and that the shortcomings identified receive thorough attention in the action plan. The DVC discusses any comments with the Executive Dean and school director/centre director/research director concerned and files the report.
- Within six months, feedback must be given to the Quality coordinator, the Executive Dean and DVC about the progress of the action plan.

#### 4.11.4 External programme evaluations

Quality Enhancement together with the Faculty annually selects the programmes that will participate in an external programme evaluation (EPE) during the current year. These are coordinated in cooperation with Quality Enhancement. During external evaluation, the internal evaluation process is validated by experts from outside the University. As per requirements of the University Quality Office, if a programme is found not to comply with the minimum standards during the external programme evaluation, a post-EPE visit is undertaken to ensure that improvement plans are implemented to improve the grading of the programme to the minimum standards.

Full particulars of the process of external programme evaluation are contained in the document *Guide for External Programme Evaluation* of Quality Enhancement. This document is available on the website of Quality Enhancement: https://intranet.nwu.ac.za/quality-academic-programmes

The quality of academic programmes is also from time to time assessed by the Council on Higher Education's Higher Education Quality Committee (HEQC). Professional bodies play a supplementary role by focusing on the quality assessment of professional qualifications and programmes.

#### 5 ASSESSMENT OF TAUGHT MODULES

### 5.1 Approach to assessment

According to the Assessment and Moderation Policy, the assessment approach of the NWU is one of appropriate, continuous formative and summative assessment activities within an outcome- and programme-based higher education environment.

Formative or continuous assessment serves as a monitoring instrument to enable students to determine their progress in the learning process and to enable lecturers to determine the effectiveness of their teaching, in order that adjustments can be made in time to make the teaching and learning process more effective. Informal formative assessment opportunities are included in as many as possible contact sessions. Feedback from informal formative assessment opportunities in contact sessions are utilised by the lecturer for improvement of the teaching.

Summative assessment in all modules is regulated by the General Academic Rules.

## 5.2 Appointment of examiners and moderators

- The school director appoints one internal examiner and at least one internal moderator in time for each paper in each module, <u>up to honours and postgraduate diploma level</u> that has to be examined during a specific examination opportunity. For each exit-level module of first degrees and for honours and postgraduate diploma modules an external moderator is appointed every second year. External moderating occurs only for the first examination opportunity of the exit-level modules both on undergraduate honours and postgraduate diploma level.
- For each coursework module on a master's level one internal examiner plus an internal
  or external moderator is appointed. Every coursework module on a master's level is
  moderated externally at least every two years unless the module is examined externally.
- For each examination opportunity, the list of examiners and moderators of each paper in each module of a school must be available as part of the school's records. The Executive Dean may request a school director from time to time to make the school's list of examiners for a specific examination opportunity available.
- Procedures for the <u>appointment of examiners for Master's and Doctoral students</u> for the assessment of the research part as well as the course work modules, is found elsewhere in this Manual.

# 5.3 Managing undergraduate, honours degree and postgraduate diploma examination statement of results

The responsibility of managing examination results firstly rests on the shoulders of the lecturer who examines students, and then it shifts to the Subject group leader who has to verify and eventually to the school director. The latter finalises the results (in consultation with the Executive Dean, if necessary). Within seven days, the school director sends a report on the examination to the Executive Dean (See <u>APPENDIX 3.6.A: Throughput figures undergraduate</u>).

After the examination, the Senior Faculty administrator requests that the directors report all the throughput figures per module and submit the reports to the Deputy DeanTeaching & Learning to be discussed at the next Teaching and Leaning Committee meeting.

Every lecturer first manages the students' marks (if necessary, in consultation with the moderator of the examination paper) in the light of the pass norm for the relevant module. Most (if not all) marginal cases are considered and finalised at this point. Problem cases and the possible adjustment of marks must be discussed with the subject group leader.

If the lecturer is satisfied that the mark-sheet is in order he/she signs it and hands it over to the subject group leader. The subject group leader checks if deviations occur in respect of the normal expectations regarding the pass norm and averages in the specific module and if marginal cases have not slipped through. If deviations occur, the lecturer must report briefly on their nature and the attempts made to correct them.

If the Subject group leader is satisfied that the mark-sheet is in order, the Subject group leader signs it and sends it to the school director. The final responsibility rests with the school director, who will examine the mark-sheet. If a deviation of 10% or more from the pass norm occurs, the director must consult the Executive Dean/Deputy Dean, before

approving the results. After the school director has approved the results, the marks are transferred to SALA in the prescribed manner.

The school director makes sure that the target dates for finalisation of the examinations and for transfer of marks to SALA is adhered to. If anticipated, possible delays are discussed with SALA beforehand.

## Examination results and Faculty Examination Committee

After each examination opportunity the Faculty Administrator on each Campus receives the complete examination results of the Faculty on that campus. However, in the middle of the year, this is done only after the second opportunity. The respective subject group leaders/directors, together with the assistance of the specific Campus Faculty Administrator(s), verify the results to:

- identify students attaining degrees;
- identify students attaining degrees with distinction;
- identify students whose progress is not satisfactory;
- identify students who continuously perform poorly, with a view to termination of such students' studies and in some cases an interview is conducted with the student with a view to improve the student's achievement;
- determine if there are any significant tendencies in the examination results;
- report to the Executive Dean/Deputy Dean Teaching and Learning, on the outcome of the examinations as a whole by means of the Faculty Examination Committee (Academic and support staff members of the Teaching and Learning Committee).

## 5.4 Conferring a degree with distinction (A-rules: 2.6.2; 3.6.2)

The General Rules determine as follows for a student to be awarded an undergraduate, postgraduate diploma or honours qualification with distinction:

- To be awarded a qualification with distinction a student must achieve a weighted average of at least 75% for all the core modules identified as such in the faculty rules concerned, not taking additional modules taken by the student into account. (The faculty rules for this Faculty determine that, in the undergraduate case, the modules of the major subjects, designated by H in each curriculum, are taken to be the core modules).
- A full-time student enrolled in a contact programme must complete the programme within the minimum time specified in the faculty rules in order to qualify for the award of the qualification with distinction, except if failure to comply with the minimum time requirements is due to the interruption of the study on medical grounds, in which case the Executive Dean concerned may approve the award of the degree with distinction.
- A part-time student or a student enrolled in a distance programme must complete the programme within the maximum time specified in the faculty rules to qualify for the award of the qualification with distinction.
- The marks obtained in core modules completed at other institutions and recognised by the university, cannot be considered when caluculating the weighted average mark.

Marks are not caputured, only a result "Recognised". These students are therefore not considered to obtain a qualification with distinction.

## 5.5 Student appeals

#### Access to and review of marked examination work (A-rule 1.13.7)

The process of insight/view into marked examination work follows the same procedure as the process for a request for a remark, but without the payment of a fee.

Students have the right of access to and review of marked examination work and to view their marked examination scripts and the associated memoranda. A student can officially apply with the specific campus Faculty Administrator, within a maximum period of five working days after the marks have been made available following the first examination opportunity, within two working days following the second examination opportunity.

A distance student may apply, within the time frame stipulated in A-rule 1.13.7.3, namely 10 working days, to the school director, via the UODL call centre, to view the examination scripts and the memorandum in the presence of the lecturer and the subject chairperson concerned.

If approved the student may view the answer paper and memorandum in the presence of the lecturer and subject group leader concerned. Any bona fide errors can be corrected.

#### • Process to request for a remark (A-rule 1.13.7.6)

- Prescribed student request forms are available from the specific Campus Faculty Administrator.
- Student pays amount of R150-00 in the NWU account specified on the said request form.
- > Student returns completed student request form and ORIGINAL proof of payment to the specific Campus Faculty Administrator.
- The specific Faculty Administrator scans the form and emails it to the relevant lecturer (cc Subject group leader)
- Remark has to be completed within **5 working days** after receipt of marks (after the 2nd opportunity within **2 working days**). Take into consideration that the student will have to know the results before the 2nd opp is written.
- ➤ Lecturer returns signed form and mark amendment statement (if applicable) to specific Campus Faculty Administrator (remember to have the Director sign off the amendment form).
- The specific Campus Faculty Administrator contacts the student and relays results and submit a comprehensive spreadsheet to the finance department for the reconciliation of funds to the relevant programmes.

## 5.6 Undergraduate student complaints and grievances

A grievance may be defined as any dissatisfaction or feeling of unfairness or injustice
on the part of any student connected with a student's expectations of the
programme for which the student has registered, learning-teaching sessions,
assessment outcomes and other student-related activities.

- Such grievances must be formally brought to the attention of the School Director and Deputy Dean Teaching and Learning/Executive Dean or students can make use of the Academic Student Associations:
  - A protocol on ways to deal with problems and grievances ensures that well defined communication channels where students' grievances are available to receive prompt attention in order to avoid anger and frustration.
  - Class representatives for each academic year in every School are elected by the relevant Academic Student Association, and they liaise with an appointed year mentor in the particular School. Should the class representatives not be able to resolve a problem, designated Academic Student Association members evaluate and escalate the matter to the Faculty Management.
  - The Academic Student Association represents the students during meetings at a school committee structure where issues can be discussed. The Academic Student Association also has an official voting seat with regards to undergraduate matters as well as full voting in the Faculty Board.

#### • The following processes are applicable:

- If a group of students have a complaint or request, they must select one or two representatives.
- After selecting a representative(s) the same procedure is followed as by an individual with a complaint or request.
- ➤ A meeting is arranged between the individual/representatives and the lecturer.
- > The issue is discussed.
- ➤ If the issue is resolved, a resolution document is signed by the student/representative(s), lecturer and School Director. If the issue is not resolved, the complaint or request must be put in writing by the student/representative(s).
- > The School Director investigates the complaint or request and acts appropriately. This could involve mediation or recommending action steps.
- ➤ If the issue is resolved a resolution document is signed by all the parties. If the issue is not resolved, it is referred to the Deputy Dean Teaching and Learning.
- ➤ The Deputy Dean investigates the complaint or request and acts appropriately. This could involve mediation or recommending action steps.
- ➤ If the issue is resolved a resolution document is signed by all parties.

## 5.7 Internal and external moderating process

<u>Internal moderating</u> takes place for both the first and second examination opportunities of all undergraduate modules which are not subjected to external moderation.

<u>External moderating</u> takes place for the first examination opportunity of the exit-level modules. This arrangement is for exit-level modules at undergraduate, postgraduate diploma or honours level. The external moderating occurs interchangeably between the exit-level modules of the first semester and of the second semester from year to year. Each school director reports annually in February on the external moderation of the previous year by way of the required form (See Appendix 5.5.B). The report contains a list of the modules

which were externally moderated, the names and affiliations of the external moderators and a summary of the comments of the external moderators.

APPENDIX 5.5.A: <u>Procedure for the internal moderating of modules and external moderating</u> of exit level modules.

APPENDIX 5.5.B: Report form of director on external moderating of exit level modules.

## 5.8 Procedures and security during tests and examination papers.

#### 5.8.1 Security

The following aspects should receive attention throughout the assessment process to ensure security in assessment:

#### Handling of examination papers and answer sheets

- Hard copies: All Undergraduate papers will be submitted on the official NWU electronic examination submission system. Like in the instance of Honours examination papers which are handled internally, the following is important:
  - Locking of offices and cupboards where examination papers and answer sheets are handled. All hard copies must be locked away safely.
- ➤ Use of passwords for examination papers which are in electronic form. Ensure that the latest anti-virus applications are set-up on the computer and treat passwords with care. (This is only applicable for Hons and other higher degree papers. Undergraduate papers are uploaded electronically.)
- ➤ Papers sent via e-mail must be password protected. A SMS can be sent to provide the password to unlock the paper. (This is also only applicable to Hons papers if these exam papers are sent to the subject secretaries for copying or other lecturers on other campuses for input.)
- Save copies of papers on the P-drive as it is backed up daily. Avoid using external hard drives and flash drives as they may get lost or stolen. (Only applicable to Honours paper)
- > Destruction of paper copies of draft examination papers. (Only applicable to Honours paper)
- Examination papers (Honours and other Postgraduate papers) should be kept in a sealed envelope in a safe or lockable cupboard until the date and time of the examination. Then the envelope should be opened in the examination venue in the presence of the examiner and invigilator (or any other staff member).
- Always use network printers where possible. Add security passwords where the job will only print when the code is punched in at the printer. This will ensure that no paper lies unattended at the printer. Printing under proper supervision at other printers or at the examination department. (done by Honours examiner)
- > Storing and destroying answer books are handled according to the <u>procedure</u> for these purposes.

#### • Capturing and correctness of marks (also considering the POPI Act)

- > Ensure the capturing of marks on the system are finalized by deadlines set.
- Person who enters marks has access only to the module involved in the marks system. School directors regularly verify access in view of movement of staff.
- Control of marks list against answer sheets.
- Control that numbers shown on moderator reports are correct.
- Control of the correctness of pass and fail on marks lists.
- Adjustment of marks is done according to policy and procedure. When a mark is adjusted after the closing date of the finalization of marks, it must be done via a mark amendment sheet (hard copy or electronic copy). Delivery of paper copies of examination marks must be submitted in sealed envelopes to the administration offices and no student may submit any mark amendment sheet.
- > Distinguish marks of students with the same surname through use of student numbers.
- Control that calculation of participation marks agree with prescription in study guides.
- > It is the responsibility of the programme leader / subject group leader to verify the correctness of marks before the support staff finalize the marks on the system.

#### Problems concerning formative assessment (tests) to be attended to

- > Language editing of examination papers by the lecturer involved and with help of the internal moderator.
- Moderating semester tests.
- Security arrangements when tests are written.
- Control over the number of students writing a test through control with the number of answer sheets.
- Control over the accuracy of marks without depending on complaints of students as control.
- Control arrangements concerning remarking and disputes about marks by drawing in, e.g. the marker involved.
- Control arrangements concerning the marking of tests by markers, such as where they do the marking and under what conditions.

#### Academic dishonesty

Correct handling of all academic dishonesty and the following of <u>disciplinary</u> procedures by lecturers.

#### Internal moderating

- > There is a moderator's report for each examination paper.
- Moderator's reports are done using a standard form.

#### 5.8.2 Storing and disposing of old answer books of examinations

The disposal of examination answer books is done according to the Standard Operating Procedure (SOP) for disposal of NWU records which is available at the Registrar's Office. This SOP is in development and will be made available as soon as possible and will be available from the Registrar's office as well as on a website (to be developed).

Examination answer books must be retained for a period of at least 3 years and in order to achieve uniform handling of records throughout the NWU, they may not be retained for longer than the determined retention period as published in the NWU File plan and disposal schedule and made available to students. Since space for storing examination answer books is limited, the disposing of old answer books should be carried out every 6 months (end of each semester).

Complete the <u>web form</u> for applying for the destruction of NWU records. Use the preferred list (available from the mentioned/linked website to list all records to be destroyed. Use the file plan number 8.1.7.2.3, followed by the module code, e.g. 8.1.7.2.3-MTHS211 and the disposal instruction D3 (refer to the <u>NWU File plan and disposal schedule</u>). Choose and underline "Shredding" and indicate the contractor as "Technical Services". This can also be chosen as pulping on the website. Then it is not necessary to complete a reason for the destruction method. Send it to the Records, Archives and Museums division by submitting all the information on the website. Please note that only electronic submissions/requests will be accepted.

The Records, Archives and Museums division will (after a process on their side) provide an authorisation number and notes it in the Destruction Register of the NWU (this destruction register is a judicial document which indicates that the documents have been legitimately destroyed. The authorisation number gives permission for the records to be destroyed and no records may be destroyed without obtaining such a number. The Records, Archives and Museums division will include technical services in communication when providing the authorisation number. The priority method for the destruction is that the person who requests the destruction must then liaise with technical services to send a waste paper company to fetch the answer books and destroy them.

Destruction certificates will only be issued for shredded records; no certificate will be issued for records that were pulped. In the case of no certificate, the person who hands over the answer books to the waste paper company must indicate collection on the relevant website. In cases where records are shredded, the destruction certificate must be uploaded to the relevant website and submitted to the Records, Archives and Museums division.

It is mandatory that this procedure must be followed for all such destructions, since the lecturer and/or the administrative staff member could incur legal liability and be held responsible in terms of the NWU Record Management Policy if the records are not destroyed in accordance with this procedure and there should come a request for access to information in terms of the Promotion of Access to Information Act, 2 of 2002 (PAIA) as well as the Protection of Personal Information Act, 4 of 2013 (POPIA).

#### 5.8.3 Disciplinary matters students

• Two types of offences: The NWU distinguishes between two types of offences, namely academic dishonesty and misconduct:

- Academic dishonesty can be defined as any type of offence where a student tries to gain academic advantage, to which he/she is not entitled, i.e. plagiarism, possession of notes during test opportunities etc. Where a lecturer becomes aware of alleged instances of academic dishonesty, irrespective of the nature thereof, a disciplinary enquiry form, which can be requested from Student Judicial Services, should be completed for the case to be investigated.
- ➤ Misconduct is all other types of offences, i.e. drunk driving, assault and theft. Where a lecturer becomes aware of alleged instances of misconduct, it should be reported to Department Protection Services for investigation.

#### Disciplinary Rules and Disciplinary Office for Students

The Student Disciplinary Rules of the NWU is available on the NWU website.

The stipulation in 3 (1) reads as follows:

Except for cases involving less serious offences at residence level, any charge concerning the behaviour of a student as contemplated in paragraph 81 of the Statute is laid with the person designated by the Vice-Chancellor for that purpose.

The investigating officer compiles an investigation report and submits it to the student judicial officer. The student judicial officer and/or the pro forma prosecutor makes a determination on whether to conduct a disciplinary hearing or not and refers the matter to the correct forum.

#### > Way of laying charges in case of transgressions by students

- The agreement with the Legal Office is that transgressions of students are reported directly to the Disciplinary Office for Student Matters and that there will be no preliminary processes in the Faculty. An important advantage of such action is that all the reported cases are then handled in the same way and the necessary record keeping is done centrally. Another advantage is that the staff member concerned is involved as little as possible in the disciplinary process, which prevents that the relationship with the student is harmed too much.
- Even smaller transgressions such as copying of homework assignments or dishonesty during class tests can be reported without hesitation. Since the Disciplinary Office for Student Matters is prepared to also handle such smaller matters. It is often not necessary to convene a full disciplinary committee and an office hearing by a single expert person takes place, a suitable punishment is allocated and an inscription is made in the academic record of the student (According to paragraph 4 of the disciplinary rules mentioned above, a summary hearing follows in cases where the student pleads guilty. If the student pleads not guilty, a hearing by a disciplinary committee follows).
- Lecturers report transgressions as soon as possible directly to the Disciplinary Office for Student Matters with notification to the School Director involved (and to the Research director in case this also affects postgraduate research).
   Lecturers do not penalise the students themselves since this is the responsibility of the disciplinary office.
- Reporting is done using a form which is available from the Disciplinary Office. If applicable documentary evidence is submitted with the form and names of witnesses provided. The staff member who submitted the report, receives acknowledgement of receipt. Further feedback concerning the matter will

- be sent from the Disciplinary Office for Student Matters to the Faculty administrator, who will pass it on to the director and staff member concerned.
- o In cases of dishonesty during long tests, the supervisor takes the answer sheet from the student and gives the student another answer book, in which the student then completes the test. In case of a very short test, the student may complete the test on the same answer sheet. In all cases the answer book or sheet should be submitted together with the submission form.

#### Preventative action by staff

#### Discussion with students on dishonesty

- Staff should, especially at the beginning of a semester, discuss with students the importance of academic integrity and honesty with reference to the Policy on Plagiarism and other forms of Academic Dishonesty and Misconduct.
- During academic orientation of first year students, they will also be informed of this.
- o In a discussion with students, a staff member should explain the policy on dishonesty and provide examples of what will be cheating and which kind of cooperation between students will be allowed and not be allowed. Here there should be reference to different kinds of assignments and accompanied ways of assessment. It is also useful to discuss with students how to prepare for examinations and tests, so that they will not feel a need for cheating.
- Staff members also should explain the rules and procedures of the University in case of alleged dishonesty. Students should know that, in such cases, they will be subjected to disciplinary procedures, but that these procedures are just and that they will be protected against false or unjust allegations.
- It is also important that students know that education offered by universities, is scholarly in nature and that scholarly integrity is highly regarded. Students should simultaneously understand that, in future careers, dishonesty will not be tolerated and that they should prepare themselves for this while still at the university. Dishonesty at university level not only exposes the student, but also fellow students, future and past students, since dishonesty creates suspicion about the quality, credibility and recognition of degrees of the North-West University.

#### Program guidelines to reduce dishonesty during tests

The following can contribute to reduce opportunities for dishonesty during tests:

- Communicated clearly what students may bring with them to class during tests (pencil, pen, pocket calculator) and what they may not bring (headphones, cell phones, backpacks, pencil case).
- Provide clarity on allowable material in case of an open book test (textbook, with or without written remarks, class notes or not).
- Try to know the names and faces of students, but if the class is too big, arrange for identification of each student through the showing of a student card, especially when handing in an answer sheet.

- Arrange for students not to sit directly next to each other and if this is not possible try to arrange for a bigger room, or alternatively, assign seats randomly, so that friends do not sit next to each other. Try to use a room with a flat floor. Another option with the very large groups is that there are 2x different colours of paper. These are then distributed alternatively which can curb the chance of academic dishonesty.
- o Wearing caps or hats which can hide wandering eyes should not be allowed.
- Arrange for at least two different question papers in case of large classes. It can be useful to use different colours for the different question papers.
- Get help with supervision but ensure that the class lecturer is personally present.

Ensure that there is a culture that tests are fair and just, so that students do not become desperate and turn to dishonesty. To achieve this, it will be helpful if the class lecturer will work through the tests beforehand to check the feasibility of the questions as well as the allotted time.

#### APPENDIX 5.6.3.A: Student Disciplinary Rules of the NWU

http://www.nwu.ac.za/sites/www.nwu.ac.za/files/files/i-governance-management/policy/Policies%20-%202020%20Update/7P-7.8.3\_Student%20Dicplinary\_e.pdf

APPENDIX 5.6.3.B: <u>Policy on Plagiarism and other forms of Academic Dishonesty and Misconduct</u>

## 6 RESEARCH AND POSTGRADUATE STUDIES

## 6.1 Approach to research and postgraduate studies

The Faculty of Natural and Agricultural Sciences pursues the following through research:

- to add new knowledge to natural sciences and agriculture by publishing scientific articles in subject journals, to deliver talks at international and national congresses and to register patents;
  - to create opportunities for educating postgraduate students in the natural and agricultural sciences to contribute to enhancing the work force capacity in the country and providing men and women who can think independently by attracting motivated postgraduate students with good academic record;
- to enhance undergraduate education by exploring the relationship between teaching and research;
- to deliver service to research organisations and associations and contribute to development of policy in this area;
  - to conduct science in an ethically responsible manner and to reveal philosophical foundations of scientific research;
  - to conduct relevant research for the benefit of the people and the country including the establishing of rural development programmes for improving public health, promoting food security and alleviating poverty;

• to contribute to the economy of the country by means of joint projects with government and industry and simultaneously create the opportunity for third money stream income.

By achieving these aims, the Faculty contributes to enhancing the work force capacity in the country and educates men and women that are able to think independently when they plan and conduct projects and publish results.

Research and postgraduate studies at the NWU are governed by the <u>Research and Innovation</u> <u>Policy</u>.

## 6.2 Staff policy as regards research

- The Faculty expects academic staff to be active co-workers, preferably in approved research programmes within research entities.
- In staff appointments and promotions, attention is given to the research record and potential of candidates.
- The Faculty takes measures to encourage staff to deliver research outputs.
- Research leave is allocated to staff and they are expected to use it regularly and purposefully.
- Support and guidance are given to young researchers to achieve their full potential.

## 6.3 Financial policy as regards of research

The Faculty support staff financially to promote research by making provision for the following in the faculty budget:

#### 6.3.1 Staff support

In the budget, provision is made to support staff in respect of the following:

- visits abroad;
- attending conferences in South Africa and abroad;
- visits of experts from abroad to staff;
- nomination of replacement staff in support of research of staff members;
- master's and doctoral bursaries;
  - guidelines for the FNAS bursary allocations (in process)
  - ➤ the bursaries include International and National students (the ratio recommended is 85/15)
- post-doctoral staff bursaries;
- publication costs.

## 6.3.2 Research support

The Faculty gives support to research entities and elsewhere to supplement funds obtained from money streams 2, 3 and 5, mainly to send young researchers on their way as regards running project costs, travelling costs for projects and assistants for projects.

#### 6.3.3 Academic infrastructure support

The Faculty gives support to research entities and elsewhere for purchasing expensive specialised apparatus, smaller capital items and computer equipment and software.

#### 6.4 Research Entities

- Research in the Faculty is normally conducted in the programmes of the research entities and financial support from Faculty funds is mainly given to research done in this context.
- Identifying new research entities is a continuous process. A new research entity is established based on available expertise and demand:
  - > The above-mentioned aspects are evaluated externally before a proposed research entity is established.
  - > Establishing a new research entity takes place under leadership of the Executive Dean and Faculty Management in cooperation with the Director of Research Support.
  - ➤ A research programme planned for a new research entity is drawn up by the prospective fellow-researchers under leadership of the Executive Dean, who may make use of the services of an external expert in the field.
  - > Faculty Management approves the programme, in cooperation with other faculties if desired.
  - > A research director (director of a research entity) is appointed.
  - ➤ The research director draws up a five-year plan for research and postgraduate education. This plan will be subjected to a process of external peer evaluation.
- A research director is responsible for managing the research programme by
  - revising the research programme annually and adapt it for a period of five years;
  - managing the strategic funds of the research entity in such a way that the strategic aims are achieved;
  - coordinating the programmes in the research entity in such a way that the joint aims are pursued;
  - give guidance in accepting master's and doctoral students and to make sure that all research work of the students take place in approved programmes;
  - reflecting together with the Executive Dean and school directors on the appointment of new staff;
  - managing together with the Executive Dean the task agreements of staff involved in the programmes of the research entity;
  - reflecting together with the Executive Dean and school directors on granting research leave;
  - advising the Executive Dean and the school directors when appropriating funds for establishing an infrastructure in schools
  - helping with procurement of funds for research;

- encouraging staff to deliver service to subject associations, research bodies and journals;
- working closely with the directors of schools in which staff, who work in the research entity, also function;
- assigning master's and doctoral students to supervisors/promoters in the focus area/research unit and by forwarding the names of these supervisors/promoters in writing via the Research Committee to Faculty Council for general information;
- > making sure that master's and doctoral students register in time every year;
- making sure that titles and research proposals for mini-dissertation, dissertations and theses are submitted to the Executive Dean for approval;
- making sure that in consultation with the school director examiners for minidissertations, dissertations and theses are nominated in good time.
- Research of research entities are evaluated regularly by the Research Support Commission and a research entity can, if research aims are not achieved, be terminated on recommendation of the Commission.
- The research part of master's and doctoral education in the Faculty usually takes place in the approved research programmes of the research entities. Faculty Management must approve exceptions.

## 6.5 The Management of Research and Master's and Doctoral Studies

The <u>NWU Research and Innovation Policy</u> states: "It is the policy of NWU that Research be executed in identified Research Entities which promote innovative research and innovation for the economic development of the country, the continent and the world." In pursuance of this policy, research in the Faculty of Natural Sciences and Agriculture is conducted mostly in research entities. Research Directors, assisted by programme leaders, manage the entities.

Research master's and doctoral programmes are closely aligned with research programmes at the NWU and the Faculty. The research programmes are managed mostly through research entities and their directors, although there are some cases where research programmes are managed by a school director as the responsible manager. The substructures of the Faculty which are responsible for research and postgraduate education are, for simplicity, in what follows, designated collectively as "entities". These could be research entities, such as niche areas, focus areas, research units or centres of excellence, but in some cases they can also be schools. The manager involved is, again for simplicity, designated a "research director".

The basic point of departure in the managerial assignment of school directors and research directors with regard to education and research is the following: The school director manages the programmes in respect of undergraduate and honours studies, as well as the lectured sections of master's programmes, as applicable to the school. The research director manages the research programmes of the research entity, which includes the research parts of master's and doctoral students who work in the programmes of the research entity. In the Faculty of Natural and Agricultural Sciences, a basic managerial principle applies that the school director and research director concerned accept joint responsibility for the success of each other's programmes.

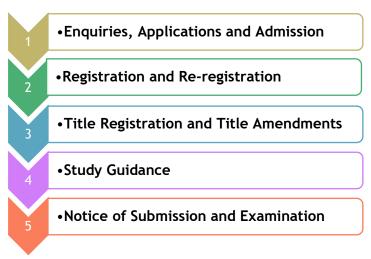
#### 6.6 Manual for Master's and Doctoral Studies

The Manual for Master's and Doctoral Studies, as approved and amended from time to time by the senate, regulates matters relating to the preparation for, progress, guidance, completion and termination of study towards a master's degree and a doctoral degree.

Every school director and research director must make sure that all academic staff in the school and research entity are thoroughly informed about the contents of the *Manual for Master's and Doctoral Studies*.

## 6.7 The Life Cycle of M and D Students

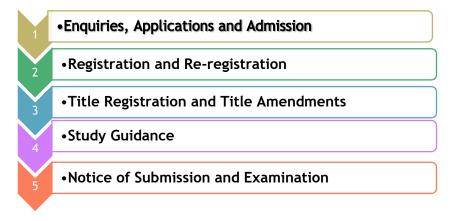
The life cycle of M and D students is presented in the table as designed by Higher Degrees Administration (HDA). The following paragraphs contain, for each of the life cycle steps, the faculty processes which are required to fulfil the full process in cooperation with HDA.



Higher Degree forms are available on the M-drive- HDA Toolbox. For access contact the HDA office.

## 6.8 Enquiries, Applications and Admission

The first step in the postgraduate cycle is enquiries, applications and admission.



#### 6.8.1 Enquiries

Enquiries for M and PhD studies have several origins and the following are examples:

- The Faculty engages in marketing endeavours and recruits' students who attend conferences, through publications, the website and by encouraging identified current students to further their studies.
- Marketing and Communications division advertises based on requests and advice from faculties.
- Students also enquire towards M and PhD studies on their own accord.

#### 6.8.2 Applications

All enquiries are referred to HDA, from where the application process commences. The Research Directors or Programme leaders / Subject group leaders (process differs per campus) receive the applications from HDA and are responsible for the evaluation and selection of applicants and to provide feedback to HDA, from where the applicant will receive a notification of the decision on admission.

#### 6.8.3 Evaluation, selection and appointment of supervisor or promoter

The purpose of evaluation and selection of students for a programme is to admit only those students who, on the basis of their academic record, and other proven appropriate prior learning have a realistic prospect of success, taking into account the background and potential of the students. The Research/ School Director, performs the selection taking into account the following procedure:

Under the leadership of the Research/ School Director, and the Subject group leader/Programme leader, they decide on a supervisor/promoter and research topic **or** the supervisor/promoter discusses the proposed research topic with the Research Director. The School Director then seeks approval of the Higher Degrees Committee.

#### Factors that are thoroughly considered include:

- availability of funds to finance the research;
- whether the research project may lead to a dissertation/thesis AND results suitable for publication within a realistic time;
- whether the proposed supervisor truly has the capacity to give constructive, expert guidance with regard to the research project - availability and accessibility of expert study guidance play a crucial role in selecting research topics - and in case of an inexperienced supervisor/promotor to insure that an experienced co-supervisor/copromotor is also appointed;
- the workload of the supervisor/promoter;
- whether the project ties in with the research entity programme or with another approved research programme.

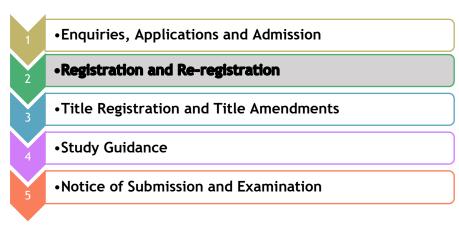
Late applications are considered if there is still space for an additional student in the relevant programme.

## 6.9 Registration and Re-registration

The second step in the postgraduate cycle is about Registration and Re-registration.

#### 6.9.1 Registration

The prospective student receives notification from HDA of approval to enrol for M or D studies. The student will register for first year of M and D studies. Students who are already in the system as M or D students must re-register annually, and it is the responsibility of HDA to assist these students to do so. These students receive a re-registration notification supplemented with re-registration information at the end of each year. The Guidelines for first year registration and the Guidelines for re-registration are made available to students.



#### 6.9.2 Use of facilities

According to the General Rules, only registered students are entitled to utilise the university's facilities. In view of this rule, it is important to note that a student is only admitted commencing with studies after completion of registration.

#### 6.9.3 HDA Blocks for students not to re-register without permission

At the end of each year students will be blocked for registration for a number of reasons. Some of the reasons are listed below (See also the <u>process for monitoring the progress of postgraduate students</u>):

- Exceeding the period of study as approved by the Study Leader and Research or School Director.
- Study progress block: A list of students who failed to submit the required progress
  reports is compiled at the Faculty and sent to HDA to block for the next year of
  registration. Students who are blocked for this reason should get in contact with their
  research directors to complete the progress report.
- Blocking for registration after warning letters: Based on the progress reports received, research directors recommend warning letters to students based on unsatisfactory progress. The warning letters are sent to the identified students, by the campus Higher Degree Faculty Administrator. A list is sent to HDA of the students who received letters and an official decision that a warning letter was issued, is captured on the students' records. These students are required to complete a student request form to be submitted to the research director.

## 6.9.4 The upgrading of master's degree study to doctoral study (A-Rule 4.13)

The General Rules provide that a student who is registered for a master's degree and who, in the opinion of the supervisor and the research director concerned, has achieved outcomes the quality and extent of which are acceptable for a doctoral degree, may apply to the Executive Dean to change the registration for the master's degree to a doctoral degree. The upgrade is considered a registration activity at HDA and an official decision is captured there. The application is done in accordance with the approved procedure. According to the General Rules the upgrading requires the following:

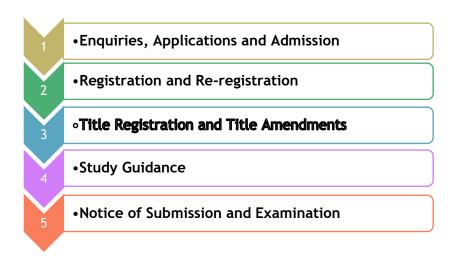
• The supervisor of a master's degree candidate may, with the concurrence of the candidate, submit a comprehensive motivation to the Executive Dean concerned for the conversion of the study to a study for a general doctoral degree.

The Faculty requires the following documentation to be submitted:

- Request and motivation of the supervisor for upgrading (letter to Executive Dean).
- Research proposal written by the student which includes amongst others the title, problem statement/hypothesis, literature, motivation, planned methodology, processing of results, structure of the planned thesis and possibly all collaborators, budget, etc. In other words, the usual motivational document (research proposal) which is expected of all doctoral students.
- Articles already published or manuscripts submitted for publication.
- Proposed promoter, co-promoters and assistant promoters as well as examiners on the required forms.
- The Executive Dean must obtain the advice of an assessment panel consisting of at least one external disciplinary expert, the academic director concerned, and at least one full professor in the faculty concerned before submitting the application to the Faculty Management.
- Approval of the conversion of a master's degree study to a doctoral study must be based on a significant change in the scope of the research project and its potential impact on knowledge production in the field of enquiry and can only be granted
  - before the research product of the master's degree study is submitted for examination:
  - > if the candidate has completed at least one year of registration for the master's degree;
  - if the intended study complies with all the rules and requirements of these rules regarding a doctoral degree, and
  - > if the candidate registers for at least one additional year as a doctoral candidate.

## 6.10 Title registration and title amendments (A-rules 4.9 & 5.9)

The third step in the postgraduate cycle is title registration and title amendments. A student enrolled for a master's or doctoral degree must, within six months after the final date of registration for these degrees determined in the annual university calendar, presents a research proposal and proposed title for the dissertation for approval and registration.



#### The procedure is as follows:

- The student formulates a title for the mini-dissertation/dissertation/thesis in collaboration with the supervisor/promoter and compiles a research proposal on the prescribed form and considering the guidelines of the Manual for Master's and Doctoral Studies. The proposal for a PhD should not be longer than 7 pages and for an MSc not more than 4 pages.
- The student then submits the title and research proposal to the Research / School Director to be considered. The School Director in turn seeks approval of the Higher Degrees Committee (which consists of directors).
- The School/Research Director submits the title and research proposal in the prescribed format of the Faculty and properly signed to Faculty Management for approval, before submitting the titles to the HDA.

#### Other aspects to consider are:

- If a title is amended substantially, a new research proposal must accompany the submission.
- The title registration document is a very important source document and should be treated in that fashion by the Faculty as well as by HDA. Therefore, all information about the student, the title, programme and functionaries should be absolutely correct and up to date.
- The title registration form: After the faculty approved the research proposal and the title of the student, HDA receives the title registration document. The Faculty thus registered the title and it must be made available to the NEXUS database of the National Research Foundation (NRF).

- The NRF database requirements: Since the title is now officially registered, HDA will capture the data of the students' title and research proposal on the NEXUS database which is a National database. It can also be accessed internationally by students or interested parties.
- APPENDIX 6.7.A: Research Proposal form for M or D study

## 6.11 Ethics application process

The process is still under discussion and will be amended after consensus is reached.

**Notes:** Students should apply for ethics after the title has been approved on the appropriate Ethics form.

It is also important that both the proposal and the ethics application be considered simultaneously by the scientific committees, so that both documents come before the FNAS R&I or the FNAS-FMC or the FNAS-Faculty Board as the case may be, or whichever meeting occurs first, after the approval of both scientific proposal and ethics application by the scientific committees.

Ethics application in the student lifecycle:



This process should be streamlined so that the student only submit their documentation once to the scientific committee. From there, the application will flow through the system, with feedback to the student and maybe requests for additional documents, all the way to approval by the Faculty. This would lighten the load of researchers in the Faculty and simplify the process. Once we have the InfoEd system operational, it would be a seamless transition.

#### 6.11.1 Faculty of Natural and Agricultural Sciences Research Ethics Committee

The Faculty has a Research Ethics Committee which functions according to the following guidelines:

#### **Purpose**

The role of the FNAS Ethics committee is to ensure the well-being, safety and protection of persons and communities who participates in research and to limit any potential impact on the environment. The committee implements the research ethics policy of the NWU for the Faculty (Policy document reference number 9P/9.1.5). It performs the operational management of the ethics process on behalf of the Senate Committee for Research Ethics (SCRE). It is responsible to oversee and manage compliance with the requirements of ethical research of minimal risk studies and is subject to the oversight of the Faculty Board.

The definition of no or low risk research is outlined in the risk level descriptors.

- No risk studies are those where there is no possible risk that the research may lead to any undesirable effects or unexpected negative consequences as no participants are directly involved and there are no potential impact on the environment.
- Low or negligible risk projects are those where the probability, magnitude or seriousness of unexpected negative consequences, harm or discomfort anticipated in the research is negligible and not greater than that ordinary encountered in daily life.

#### Membership

Members of the FNAS Ethics committee are recommended to, and approved by, the Faculty Board for a period of **five** years. Membership of the committee reflects in and count towards the annual task agreement of the staff member.

The committee consist of at least the following:

- At least 7 members, with a quorum being a simple a simple majority.
- Where the number of members is more than 15, the guorum may be 33%.
- A chairperson, being an academic staff member with appropriate experience, expertise and leadership skills.
- Representation of the different disciplines in the Faculty.
- At least one member that is an expert in the field of statistics.
- At least one member who is not a staff member of the NWU, that acts as a community representative.

Faculty management, in consultation with the Ethics Committee, suggests possible candidates for chairperson. The Faculty Board appoints the chairperson. The Vice-chairperson is selected and appointed by the Committee.

#### Meetings

A minimum of four meetings are held per annum. Extraordinary meetings are held if and when necessary. A quorum of the meeting will be at least half of all members, or 33% if there are more than 15 members. Notice are given at least 14 days before normal or 2 days before extraordinary meetings. Agendas are given at least 5 days prior to the meeting. Activities are reported to the Faculty Board and the SCREE. Meetings are held in coordination with the prescribed arrangements of the NWU research ethics policy.

#### **Functions**

The Research Ethics Committee handles matters as stated in its purpose above and, more specifically, the following matters:

- Developing the policies, rules and guidelines for the Committee to perform its function, including:
  - A terms of reference that outlines its responsibilities towards SCRE, members, researchers and the faculty.
  - o A standard operating procedure that outlines the functioning of the Committee.
  - $\circ$   $\;$  Reporting templates for application, monitoring and approval to facilitate the functioning of the Committee.
- Ensure that researchers in the Faculty have a proper understanding of research ethics as it applies to natural and agricultural sciences through appropriate training.
- Ensure that all researchers in the Faculty sign the NWU research ethics code of conduct.
- Formulate and seek approval from the SCRE for operational rules for ethics applications of no and low risk, within the Faculty.
- Provide feedback to the Faculty Board and the SCRE as required.
- Receive and process applications for research ethics approval from researchers in the Faculty for no and low risk projects.

## 6.12 Study guidance

The fourth and major part of the study, concerns the execution of the research under the guidance of the supervisor/promoter.

1	•Enquiries, Applications and Admission
2	•Registration and Re-registration
3	Title Registration and Title     Amendments
4	•Study Guidance
5	Notice of Submission and Examination

#### 6.12.1 Responsibilities of supervisors and promoters

The student is guided by the supervisor/promoter in his study from day one under the supervision of the research director in accordance with the *Code of conduct for supervisors and promoters* in the *Manual for Master's and Doctoral Studies*. The requirements for minidissertations, dissertations and theses are found in the General Rules and in the *Manual mentioned*.

Except for guidance in research and report writing, the following managerial tasks of the supervisor/promoter are included in guiding a student:

- Ensure that the student registers before study is commenced and that the student reregisters every year.
- Ensure that the student <u>submits a title and research proposal</u> within six months after registration or completion of the last exam to the Faculty Management, which usually meets once per month, on the prescribed forms.
- Submit the names of examiners to the Research/School Director well in advance (at least three months before submission). The School Director gets approval of the Higher Degrees Committee. The Research/School Director will in turn submit the names of the examiners on the prescribed form to Faculty Management for approval, before submission to the HDA office.
- Be aware of the target dates for submission of dissertations/ theses for the different graduation ceremonies and must manage the completion of the student's study with these dates in mind.
- Ensure the student give notice of intention to submit the dissertation/thesis at least three months in advance.
- Ensure the student complies with the requirements of language editing and technical care.

Every school director and research director ensure that all academic staff in the school and research entity are well informed about the contents of the *Manual for Master's and Doctoral Studies*. The entire registration, research and examination process is set out in this *Manual*.

#### 6.12.2 Monitoring the progress of postgraduate students

- A process to obtain progress reports with respect to the study of postgraduate students, starts annually in August. The respective Faculty Administrator sends out the necessary forms before the end of August to hand them over to the research directors. (Since the M students in Business Mathematics and Informatics complete their mini dissertations within a period of 6 months, through a well-controlled process, the procedure is not applicable there).
- The supervisor/promoter reports on the studies of each master's and doctoral student to the Research/School Director on a prescribed form in September.
- The student also delivers a report at this time and completes the student form.
- Each research director delivers a report to the Executive Dean on the way problems emerging from the forms have been managed. This takes place in writing on a form before the end of November.

- Requests for termination of studies must be approved by the end of November so that students can be notified in time.
- The Quality Coordinator reports to the first meeting of the Faculty Management Committee, in the new academic year, on
  - the number of progress reports which were not received by the Research/School Directors.
  - > the number of problem cases which were handled,
  - the number of warning letters which was sent out and
  - on the decision taken about every postgraduate student who exceeds the study period.
- APPENDIX 6.11.2.A: <u>Procedure and Forms for Progress Reports Postgraduate Students</u>

#### 6.12.3 Article format

The General Rules allow a dissertation or thesis to be submitted in article format. The *Manual for Master's and Doctoral Studies* contains extensive guidelines to be followed. The Faculty is, however, of the opinion that it is important that master's students must acquire the skills to write an extensive research report, which is the essence of a dissertation. In view of this, an M student judges together with the supervisor and in consultation with the research director on the use of the article format in the specific study.

#### APPENDIX 6.12.3: Notes on the article model

The following is a summary of the requirements of the General Rules:

- Where a candidate is allowed to submit the research product in the form of a research
  article or articles, such research product must be presented for examination purposes
  as an integrated unit, supplemented with a problem statement, an introduction and a
  synoptic conclusion as prescribed by the manuscript submission guidelines of the journal
  or journals concerned.
- The candidate must obtain a written statement from each co-author of an article used, in which it is stated that such co-author grants permission for the research article to be used for the stated purpose, and in which it is further indicated what each co-author's academic contribution to the research article concerned was.
- Where co-authors as mentioned above were involved in the development of a research
  article used, the candidate must mention this fact in the preface, and must include the
  statement of each co-author immediately following the preface to the research product.

In the following paragraphs, the most important matters that are mentioned in the formal prescriptions are discussed and motivated somewhat more extensively.

- Minimum guideline: In addition to the guidelines that appear in the General Rules and the Manual for Master's and Doctoral Studies, the Faculty of Natural and Agricultural Sciences also formulated a guideline that at least one of the articles must ALREADY have been APPROVED for publication by an accredited journal on the day that the dissertation or thesis is submitted for examination.
- Number of articles: As the style and extent of research articles differ considerably from subject field to subject field and from journal to journal within a subject field, the

Faculty of Natural and Agricultural Sciences does not pose further prescriptions for the number of articles that ought to be bound.

- Articles that may be submitted: In addition to other requirements that are stated in
  the formal prescriptions, only articles that flow forth directly from the student's
  research after registration for the master's or doctoral degree at NWU, for a dissertation
  or thesis, under supervision of his supervisor/promoter, may be submitted in article
  format.
- Quantity and quality: The number of articles submitted must convince the examiners in terms of the number and/or extent that the candidate has truly complied with the requirements for a master's or doctoral degree. The quality, nature and extent of the research that is described in the articles may not differ from that of a traditional dissertation/thesis. The difference is only found in the presentation of the results.
- Students who ought to be permitted to use the article format: Only students who are capable to write the final copies of the articles that are submitted for publication or are going to be submitted for publication, ought to be permitted to make use of this format. A student who still has to rely on his supervisor/promoter to finalise his article(s) for publication, ought not to be permitted to make use of this format.
- Methods: Many writers define scientific knowledge as knowledge that has been acquired through appropriate methods. Expert examiners of dissertations/theses therefore give meticulous attention to the candidate's description of the research method(s) used. They also examine whether the method(s) is (are) stereotyped and standard methods in the relevant field or new methods. In the case of standard methods, only a brief reference will probably be made to the methodology in the articles. In such cases the candidate must describe the standard method(s) sufficiently and discuss and motivate its (their) appropriateness to his problem to such an extent that the examiners are able to decide if the candidate understands and used the method(s) correctly.
- Literature: The literature review that is presented in an article is less comprehensive than in a traditional dissertation. However, it must still be considered that especially in a dissertation the student must provide proof of familiarity with and in control of the appropriate subject literature. A focussed literature analysis must form part of the dissertation. Such a review may also be in the form of a review article.
- Style differences: The style in which a research article is written differs (sometimes drastically) from the style in which a traditional dissertation is written. Long descriptions of measuring instruments and other methodological aspects, for example, or the presentation of definitions is largely avoided. It is important to realise that an article is written for the informed specialist, which makes such descriptions and definitions unnecessary. Students and their supervisors, however, must be aware that the examiner must not get the impression that the concise style of an article may be a disguise or try to be a disguise of a lack of knowledge and insight of the student. Especially in the case where a master's student presents an article he has written together with more experienced scientific co-workers, the degree of difficulty of the article may easily create doubt in the mind of the examiner if the student has truly been in control of every aspect of the research described in the article. Just like a referee of a research article, the examiner of a dissertation does not allow the author or student the benefit of the doubt.
- Suitable for publication: In presenting a dissertation in article format the question whether it is suitable for publication involuntarily arises. An important focus in evaluating a dissertation in article format will therefore be if the article(s) that has

- (have) not yet been accepted for publication will indeed be suitable or ready for publication. Students and supervisors must therefore avoid to present research results of a dissertation in article format if they do not really intend to publish such articles.
- **Finishing off articles:** When an article is included before publication in a journal, it must be in the form in which it will be published, if accepted for publication. This means that tables, diagrams pictures, etc. which, according to requirements of some journals are placed at the end of a manuscript on submission or are sent in separately, must be moved to the correct places in the article.
- **Not a shortcut:** Writing a compact research article is a much more advanced skill than writing a traditional dissertation. It is therefore no shortcut! Only experienced supervisors/promoters ought to guide master's or doctoral students on this road.

Examiners for dissertations and theses receive, together with the standard guidelines, in addition an explanatory document in this regard.

#### 6.12.4 Joint international doctoral degrees

The NWU approved a "Policy on joint and double degrees at master's and doctoral level with foreign universities" (Cotutelle). The Faculty has specific rules for these degrees.

- **NWU Policy:** The NWU approved a "Policy on joint and double degrees at master's and doctoral level with foreign universities" (Cotutelle). The next paragraphs contain a short explanation of the kind of training and the most important aspects in the approved policy with focus on the doctoral degree of two collaborating universities, as well as specific arrangements of the Faculty of Natural and Agricultural Sciences.
- What is meant by a joint doctoral degree: A joint doctoral degree is a qualification awarded to a candidate after completion of a collaborative programme in partnership between two universities in different countries. The French word "Cotutelle" is used here because this practice apparently originated in France. Characteristics of this are as follows:
  - Compliance with the legal requirements of both countries;
  - The existence of a collaboration agreement between the two universities involved;
  - > Compliance with the academic requirements of both universities.
  - Joint supervision for each candidate as agreed;
  - Awarding of a doctoral degree based on a single thesis with the right to use the corresponding title in both countries;
  - > Each of the two universities issues an own degree certificate, which indicates that there was joint supervision thus making clear that two degrees were not awarded.
- Written agreement: Such study of each specific student is done in terms of an official
  written agreement between the two collaborating universities, between which there
  already exists a general collaboration agreement. The specific agreement for a specific
  student normally states the following:
  - > That the student must satisfy the admission requirements and academic requirements of both universities;

- Arrangements about finances, visas, accommodation and related matters for each student separately;
- > The study is done under the supervision of a promoter from each of the two universities, appointed according to the requirements of each. They must support each other and have regular discussions;
- ➤ That the two universities state as target to provide approximately equal inputs to the study;
- > The target is that the student spends approximately equal periods of time at the two universities and that these periods will be lengthy. The promoters jointly determine these periods of time;
- > Arrangements concerning joint authorship;
- ➤ The two universities will normally be equal partners with respect to intellectual property that derives from the study;
- The two universities appoint, after the necessary negotiations, a joint examining committee which satisfies the requirements of both universities. A full professor from a related subject area which is a member of the committee acts as chairperson. The applicable academic bodies of both universities approve the composition of the committee. The joint committee is responsible for the examination process and the preparation of a recommendation which will serve at the Senates (or equivalent academic bodies) of the participating universities.
- Faculty arrangements: The following arrangements are applicable in the Faculty of Natural and Agricultural Sciences:
  - Negotiations between the two universities lead to an official agreement for the study of each specific student, which is supported by the international offices of both the universities. The framework of such an agreement is contained in the approved policy of the NWU as an appendix.
  - The process for registration of title, appointment of promoter and appointment of examiners is as usual for doctoral students in the Faculty.
  - > The language of the thesis is English, with summaries in the other relevant languages as applicable.
  - The front page of the thesis contains the names of the two collaborating universities and the names of both promoters. An example appears below.
  - Examination must satisfy the requirements of each of the two universities as stated in the NWU policy. The examiners, as appointed by the NWU, form part of the examination committee (at some overseas universities it is usual to appoint an examination committee for an oral examination, consisting of usually 6 to 8 members) and written reports of these examiners, with a summative report by the promoter, are submitted to the Faculty postgraduate examination committee.

#### Example of front page of thesis for a joint doctoral degree:

#### PARASITE DIVERSITY WITHIN NATIVE AND

INVASIVE TERRAPINS: IMPLICATIONS FOR CONSERVATION

Ву

Leon Nicolaas Meyer

**THESIS** 

submitted in fulfillment of the requirements for the degree

Doctor of Philosophy (Ph.D.)

in

ZOOLOGY

as a cotutelle study between the of

the North-West University and the University of Perpignan, France

Promoter: Prof. Louis du Preez

Co-promoter: Prof. Olivier Verneau

August 2014

#### 6.13 Notice of submission and examination

Step five concerns the finalization of the study through submission and examination. Once the study nears completion, it is of high importance to ensure that the necessary steps are taken to ensure smooth submission and examination.

#### 6.13.1 Notice of submission

The dates to give notice: The dates are connected to the first graduation ceremony after the of submission notice and examination period. The Notice of Submission document guides a student to give notice three months before the student intends submit to for The period of examination. three months is needed in the Higher Degrees Administration

•Enquiries, Applications and Admission

•Registration and Re-registration

 Title Registration and Title Amendments

Study Guidance

 Notice of Submission and Examination

office to complete the administrative tasks related to the Notice form.

- The process for the student: To give notice that a student is ready for an examination, the Notice of Submission form is used. The student should then, three months before submission for examination, request this form from HDA.
- The process of the supervisor/promoter: The supervisor/promoter should not sign the form unless there is a logical possibility that the student will be ready for examination in three months. The supervisor/promoter should make sure of the following:
  - > The title was registered at a Faculty Management meeting, with an approved ethics number or ethics clearance:
  - the title on the Notice of Submission is correct (as registered);
  - that examiners have been appointed;
  - if examiners have been appointed long ago, their contact details and availability should be confirmed;
  - > in case an examiner would request a paper copy (due to medical reasons) it is indicated on the form.
- The supervisor, each respective campus faculty administrator or the student will submit the signed form to the Higher Degree offices.

#### 6.13.2 Submission for examination

- The student submits the mini-dissertation, dissertation, or thesis for examination in electronic format on eFundi as indicated on the Letter of Submission. The norm would be: one electronic copy in Word, and one electronic copy in pdf format. In the case where an examiner will expect to be sent a paper copy, the student will submit a ring bound/soft bound copy.
- The documents the student needs to submit for examination:
  - > The examination copy, number and format as indicated earlier;
  - A Solemn declaration form. On this form the student declares that the submission is own work for examination and the supervisor/promotor confirms that permission is granted to the student to participate in an examination process and that the copy submitted for examination complies with the requirements of the NWU as set out in the General Rules and the Manual for M and D studies. Also, that the work has been put through the Turnitln similarity test programme and that the result was acceptable to the supervisor/promoter;
  - > A personal particulars form (only for PhD Students);
  - > ID document.

#### 6.13.3 Appointment of examiners

- Appointment of examiners for the research component of a master's degree (A-rule 4.11.1):
  - According to the General Rules, there must be appointed at least two examiners, of which at least one must be an external examiner, for the examination of the research product of every master's degree study.
  - > The name of an examiner is not made known to the candidate before or during the examination, and after the examination only with the permission of the examiner concerned.

A person who was involved in any manner in the supervision of a master's degree student may not be appointed as an examiner.

#### • Examination of course work modules of a master's degree (A-Rule 4.11.2):

- The examination of a coursework module of a master's degree is moderated externally unless the module is examined externally (A-Rule 4.11.2.1).
- ➤ Every coursework module is moderated externally at least every two years by a person with the required qualifications, which should be at least at NQF level 9 (e.g. a Master's degree), provided that such a person may not be a staff member or otherwise connected to the university by way of an extraordinary appointment (A-Rule 4.11.2.2).

#### Appointment of examiners for the research component of a doctoral degree (A-Rule 5.11):

- According to the General Rules, there must be appointed at least three examiners, of which the majority must be external examiners, for the examination of the research product of every doctoral degree study.
- > The name of an examiner is not made known to the candidate before or during the examination, and after the examination only with the permission of the examiner concerned.
- A person who was involved in any manner in the supervision of a doctoral degree candidate may not be appointed as an examiner.

## Additional Faculty rules for the appointment of examiners (A-Rule 4.11.1.1 & 5.11.1.1)

- > To allow the Faculty Management to judge recommendations for external examiners, a recent CV of a nominated external examiner is required together with the nomination for a first appointment. After 3 years since a first appointment, an updated CV is required for other appointments as examiner of the same person.
- Examiners ought to be experienced, active academics/scientists.
- Examiners must be familiar with the field of study and the topic of the dissertation or thesis and must be able to assess the dissertation/thesis thoroughly. Examiners must be nominated on the grounds of their specialist knowledge of the topic of a dissertation/thesis.
- > Retired staff of North-West University are not nominated as external examiners.
- Retired staff of other universities may be used as external examiners if they are still academically (i.e. in research) active.
- Retired staff of North-West University may be used as internal examiners if they are still active researchers.
- If a staff member of another institution than North-West University is involved with the supervision of a student, another staff member of that University does not qualify to be nominated as an external examiner.
- External examiners from practice, i.e. people who do not act as supervisors regularly, can sometimes deliver unilateral reports that may disrupt the examination process. Being a good examiner does not only require sound subject knowledge and/or practical experience, but also recent knowledge of and recent experience in research practices and training of master's and doctoral students. One must therefore be careful when nominating persons as examiners if they are not involved

in active research careers, or if they have not published in subject journals of good standing during the previous five years.

#### Practices that ought to be avoided in the appointment of examiners

- ➤ The same examiner(s) ought not to be nominated twice in a row for the students of the same supervisor/promoter.
- > The repeated use of the same external examiner ought to be avoided.
- Discretion ought to be exercised when ex-students of a supervisor/promoter are nominated as examiners.
- A staff member of North-West University who has resigned during the previous five years ought not to be nominated as external examiner.
- External examiners who have not achieved a PhD themselves ought only to be nominated as external examiners in highly exceptional cases - also for master's students.
- Even the slightest semblance of intimidation in the examination process must be avoided.

#### 6.13.4 Guidelines to examiners

The guidelines for the examiners for the masters' degree and the doctoral degree, together with the recommendation forms for the examiners, are contained in the following documents:

APPENDIX 6.12.4.A: <u>Guidelines to examiners for evaluating a dissertation or mini-dissertation for the master's degree</u>

APPENDIX 6.12.4.B: Recommendations of examiners regarding master's dissertation/minidissertation

APPENDIX 6.12.4.C: Guidelines for the examination of a thesis for a doctoral degree

APPENDIX 6.12.4.D: <u>Explanatory notes on the article model for master's dissertations, minidissertations and doctoral theses</u>

APPENDIX 6.12.4.E: Recommendation of examiner regarding a doctoral thesis

# 6.13.5 Arrangements for managing master's and doctoral examination reports

- After all the reports on a candidate's dissertation/thesis have been received, i.e. as soon as the last report has been received, HDA sends copies of ALL examiners' reports to the Research/School Director (through the faculty Higher Degrees Administrator) involved. The Research/School Director then transmits the reports to the supervisor or promoter.
- The supervisor/promoter writes a summative report and completes the summative report form for a dissertation or thesis in which the results of the examination are recommended. This summative report and the summative report form are handed over to the research director.
  - In the case of the summative report for master's degrees, the supervisor has to fill in the summative results form only if the dissertation is unanimously accepted

by the examiners and if such a procedure is acceptable to the research director. When the examiners do not agree, the supervisor must submit a written summative report. For a doctoral summative report, the promoter must submit a written summative report in all cases.

- A summative report must be more than a mere summary (synopsis) of the different examiners' reports in the case of diverse recommendations. The supervisor/promoter must argue the differences of the examiners briefly (give an objective evaluation of the differences) to guide the research director in consultation with the school director to deal with the differences. Eventually, the supervisor/promoter is the expert on the topic of the dissertation/thesis.
- The research director deals with the results and decides according to the prescriptions of the General Rules in consultation with the school director (and the Executive Dean, if necessary). By signing the results form, the research director in consultation with the school director declare that they have studied the reports of all the examiners thoroughly and that the summative report is a just representation of the reports and viewpoints of the different examiners. Thus, they also put their decision in writing for presentation to Faculty Management.
- After a decision on the results has been made by the research director in consultation
  with the school director (and the Executive Dean, if applicable), the research director
  completes the final results form. The research director sends this properly signed form
  and the full file to the Faculty Administrator for submission to the Postgraduate
  Examination Committee (consisting of the Executive Dean and research directors) and
  confirmation by Faculty Management.
- The results are made known by HDA after confirmation by Faculty Management.

The research director must ensure that the required brief CV and the brief summary of the thesis are already in the file of the candidate on presenting the results to Faculty Management. This is required once the student's marks have been captured and the brief CV and summary of thesis for the PHD are needed, inorder to be included in the gradauation programme. This brief CV and summary are submitted to the Research & Innovation Deputy Dean, before finally being submitted to the ceremonies department

The following forms are used for the reporting phase after receiving the reports of the examiners:

Forms: Faculty final mark template is available on the M-drive – Toolbox – Pdf fillable forms

APPENDIX 6.12.5.A: <u>Summative report to the research director regarding a master's dissertation/mini-dissertation and oral and/or written examination.</u>

APPENDIX 6.12.5.B: Summative report to the research director regarding a doctoral thesis.

APPENDIX 6.12.5.C: Results of the master's examination

APPENDIX 6.12.5.D: Results of the doctoral examination

A special administrative process was approved for the examination of mini-dissertations for Business Mathematics and Informatics. (See APPENDIX 6.12.5.E).

APPENDIX 6.12.5.E: <u>Administrative process for the examination of mini-dissertations for Business Mathematics and Informatics</u>

## 6.13.6 Guidelines for decision making and finalizing master's and doctoral examination results

- According to the General Rules, an examiner for a dissertation, mini-dissertation or a thesis (the research product), may recommend one of the following 5 options, namely that it
  - 1. be accepted unconditionally;
  - 2. be accepted on condition that specified revisions be made to the satisfaction of the supervisor;
  - 3. be accepted on condition that specified revisions of a substantive nature be made to the satisfaction of the examiners or the academic director concerned;
  - 4. not be accepted in its current format, in which case it is referred to the candidate for revision, elaboration or amendment and resubmission for re-examination, or
  - 5. not be accepted at all, in which case the candidate fails.
- The Postgraduate Examination Committee, in accordance with the report from the research director, discussed in the previous paragraph, takes a decision on which one of the 5 options above to accept.
- In the case of vagueness or differences between examiners regarding examination results, the General Rules determine the following course of action (A-Rule 4.11.8):
  - Where, in the case of a coursework module, the examiners or moderators are not unanimous about whether a student should pass a module, or pass a module with distinction, or where, in the case of a research product, the comments received by members of the university community differ materially from the recommendations of the examiners, the Executive Dean concerned must follow the procedures provided for in the General Rules, before taking the final decision regarding the outcome. (A-Rule 4.11.8)
  - A material difference regarding the examination of a research product is deemed to exist if
    - a. the reports of the examiners differ on the question whether the research product may be accepted, with or without revisions, should be referred back for revision, or should be rejected; (A-Rule 4.11.8.2.1)
    - b. the marks awarded by the examiners differ by more than 15%, or (A-Rule 4.11.8.2.2)
    - c. comments that arise from the release of the research product for inspection by the university community differ materially from the recommendations of the examiners. (A-Rule 4.11.8.2.3)
  - The Executive Dean may, in consultation with the academic director concerned, seek clarification from the examiners or members of the university community who have submitted comments on the research product regarding anything that is not clear in their reports or comments relating to a coursework module or research product. (A-Rule 4.11.8.3) Any such clarification process MUST take place through the Executive Dean, who may involve the research director or other staff member as appropriate.

- The Executive Dean concerned must take steps to resolve the outcome of an examination where a material difference arises, which may include (A-Rule 4.11.8.4)
  - a. inviting a knowledgeable external expert to participate in the deliberations of the faculty postgraduate examination committee; (A-Rule 4.11.8.4.1)
  - b. the appointment of an additional external examiner to assess the research product, and to make a recommendation on the assessment result, (A-Rule 4.11.8.4.2) and
  - c. the appointment of an independent arbitrator to consider the various examiner's reports to make a recommendation regarding the assessment result. (A-Rule 4.11.8.4.3)
- The faculty board concerned approves the final outcome of an examination after consideration of the recommendation of the faculty higher degrees committee or similar structure on the assessment result based on the outcome of the steps taken by the Executive Dean and, if the faculty board is unable to resolve the matter, the Executive Dean must take a final decision. (A-Rule 4.11.8.5)
- If the recommendation of every examiner is option 1 or 2 above, the supervisor/promoter may continue to have any mistakes corrected without consulting the directors.
- If the recommendations of the examiners do not agree and one or more of them
  recommend option 3 above, the supervisor/promoter must first submit the summative
  report to the research director BEFORE a list of recommended corrections are handed
  over to the student.
- If some of the examiners have recommended option 3 above and the Postgraduate Examination Committee on recommendation of the research director in consultation with the school director accepts this option, the research director must ensure that a revised copy of the dissertation/thesis is submitted and the research director must inform the Higher Degree Administrator concerned, when the corrections have been made to the satisfaction of the research director. (In cases where the corrections are required to be to the satisfaction of the examiners, a separate procedure must be followed.)
- If the Postgraduate Examination Committee on recommendation of the research director
  in consultation with the school director decides to refer the dissertation/thesis back to
  the student, and that it must be re-submitted and examined (option 4), the examiners
  who were appointed for the original examination are deemed also to have been
  appointed for the re-examination, but if considered necessary or expedient, other or
  additional examiners may be appointed.

#### 6.13.7 Communication to the student

After the result is finalised on faculty level, it is sent to HDA. HDA will now send to the student the following via email:

- Results letter
- An example of the title page as prepared for compliance to the NRF
- Academic record (if requested by the student)
- A preliminary proof of registration (if requested by the student)

HDA will send a copy of an amendment and permission to bind to the supervisor/promoter.

#### 6.13.8 Distinctions for master's degrees (A-Rule 4.15.2)

- A master's degree by research is awarded with a distinction where an average mark of 75% is obtained for a research product.
- A master's degree by coursework is awarded with distinction where a weighted average of 75% is obtained for the coursework modules and the research component prescribed in faculty rules, and all coursework modules are passed on the first attempt. Additional modules taken by the student are not considered.
- If the examiners refer a research product back, the final mark allocated may not exceed 70%.

#### 6.14 Student complaints and grievances

- If a student is not satisfied with the study guidance, the student must bring this to the attention of the Research/School Director concerned.
- A Master's or Doctoral student may before submitting a research product for examination, raise dissatisfaction with any aspect of the guidance provided by a supervisor or co-supervisor or promotor or co-promoters in writing to the Executive Dean concerned, who in consultation with an independent arbitrator (Quality coordinator), must respond in writing to the student, before the research product is submitted for examination.
- Also, according to the General Rules, an M or D degree student who raises a substantive objection to the manner in which the examination of a research product was conducted, may declare, by means of a written notice lodged with the registrar within 14 days after communication to the student of the final decision regarding the assessment outcome, a dispute with the university. The General Rules provide a full procedure for the resolution of the dispute.

#### 6.15 Plagiarism

- According to the NWU Policy on Plagiarism and other forms of Academic Dishonesty and Misconduct, dishonest academic conduct constitutes serious misconduct, whether it occurs orally, by conduct or in writing, during examinations or in the context of other forms of assessment such as assignments, theses, as well as in reports and publications. Therefore it is the policy of the North-West University that no form of academic dishonesty shall be tolerated, and if any of such conduct is reported or detected, the perpetrator upon being found guilty shall be punishable in terms of the University's disciplinary policies, rules and procedures. The University has the responsibility to inculcate integrity and its corollary of academic honesty in all students and staff, especially those in academic positions.
- Plagiarism means the presentation, without consent or reference to the source, of another person's text or other published intellectual product by creating the impression that it is the original work of the person attempting to gain advantage from it or as the Oxford and The Essential English Dictionaries describe plagiarise as "(t) take the work or an idea of somebody else and pass it off as its own" and "to present the ideas or words of another as one's own". Infringement of copyright is a statutory offence which can lead to criminal prosecution and fines. The perpetrator may also be sued for

damages in a civil action by the copyright owner, whilst plagiarism may amount to unlawful conduct in terms of common law, which may also lead to lawsuits against the perpetrator. Apart from the legal consequences, it is axiomatic that plagiarism and copyright infringement compromise the integrity of academicism and is contrary to scientific ethics and society's perception of moral values. It should therefore be forbidden and, where it does occur, should be punished by the University as unlawful practices.

APPENDIX 6.11.A: <u>Policy on Plagiarism and other forms of Academic Dishonesty and Misconduct</u>

#### 6.16 Nominations for the S<sub>2</sub>A<sub>3</sub> medal and the vice-chancellor's medal

• The Faculty participates annually in the nomination of graduates who received their M degree with distinction for the S<sub>2</sub>A<sub>3</sub> medal and the Vice-Chancellor's medal, which are prestige awards and of which the selection is done by a selection committee of the University. The Faculty has its own selection process for this purpose.

#### Procedure for nominations for the S2A3 medal and the vice-chancellor's medal;

- i. The Faculty may, according to the rules for the awarding of the medal, submit one nomination for each of the two medals. Proposals for nominations should be subjected to this selection process and may not be sent in directly to Research Support.
- ii. After the graduation ceremony in September, the appointed designated Faculty Administrator invites each of the research/school directors to submit one nomination for the medals. The letter is accompanied by the following:
  - ❖ A list of graduates who received an M degree in the Faculty with distinction at the May and September graduation ceremonies.
  - The rules for the awarding of the medals.
  - The nomination form as provided by Research Support.
- iii. Each research/school director considers the graduates who received the M degree with distinction according to the list that was provided and decides whether there is a suitable candidate to nominate for the medals and if so, which one. The research director ensures that the supervisor involved prepare the nomination form and supporting documentation and send it to the designated Faculty administrator.
- iv. During the April meeting of the Faculty Management Committee part of the meeting is spent on the selection of a single candidate for each of the two medals from the side of the Faculty. For this part of the meeting, the supervisors of those nominated are invited in turn to explain the nomination of the nominated candidate involved and members of the meeting may then pose questions. The supervisor then leaves the meeting each time. A vote then takes place during which each member of the meeting completes a ballot paper by placing all the candidates in order of preference. The result of this vote determines the nomination of the Faculty as follows: The candidate who comes first in the voting is the candidate for the S<sub>2</sub>A<sub>3</sub> medal and the one who comes second is the candidate for the vice-chancellor's medal.
- v. After the selection meeting the supervisors of the nominated candidates can finalize the documentation, taking into account the discussions during the meeting.

- vi. The designated Faculty Administrator ensures that the Faculty nominations together with the required documentation are sent in on time.
- Guidelines for the compilation of the nomination documents for the S2A3 medal and the vice-chancellor's medal:
  - i. The rules for the awarding of the medals require the following documentation:
    - the completed nomination form
    - examiner's reports
    - copies of research outputs and
    - other supporting documentation
  - ii. Since the full study history of the nominated graduate often plays a role, it is necessary that the full study record from the first undergraduate study year up to the completion of the M degree be attached as supporting documentation.
- iii. In the designated space on the nomination form the statements by the examiners in short summary form, highlighting key words from their reports and with emphasis on the external examiners.
- iv. In the motivation of maximum 500 words on the nomination form, give a summary of the strong points provided in the remainder of the form, as well as an own view of the achievements of the student.
- v. Since the selection committee has representatives from all campuses, it is necessary that the documentation will be in English.

### 6.17 Requirements for postdoctoral fellows

#### 6.17.1 Specific requirements of the Faculty of Natural Sciences

From the amount of money allocated to the Faculty, awards are made regularly by the Executive Dean and research directors to possible postdoctoral fellows. The following criteria are in accordance with the criteria of the NWU and the NRF (which are also considered) below and the Faculty's own needs:

- Scientific merit of the candidate:
  - Candidate's expertise and training for successful execution of the proposed research.
  - Research record of the candidate including publications, conference proceedings and research prizes.
- Availability of research funds and research facilities for use by the candidate.
- Scientific quality of the proposed research and the intended outputs.
- Role which the fellow will play in the research entity, in addition to own research, including
  - assistance and support to postgraduate students (as part of the pyramid in the training),
  - application of special and scarce skills in the research programmes,

- support in establishing new programmes,
- involvement for the execution of strategic developments.

#### 6.17.2 General requirements of the NWU

In the NWU document *Guidelines and Procedures for Post-doctoral Fellows*, certain requirements appear:

- A doctorate not acquired more than 5 years before the appointment as postdoctoral fellow.
- The candidate must pursue a full-time academic career.
- Appointments are merit-driven and in accordance with the University's equity policy for employment. This includes:
  - The fellow must bring new and stimulating ideas and therefore there are preferences for candidates who have obtained doctorates at other universities.
  - The candidate's publication record must be considered as there is a prospect that the candidate will bring a noticeable increase in publications.
  - The candidate's ability to act as co-supervisor for postgraduate students must be considered, as a fellow should contribute to postgraduate education.

#### 6.17.3 Requirements for an NRF scholarship for postdoctoral work

In the NRF's document *DST-NRF FREE-STANDING POSTDOCTORAL FELLOWSHIPS*, the following criteria appear:

- Preferred candidates who work with a new project, in another department and another institution. Special consideration for candidates with strong motivation who want to continue working with the same mentor.
- Guest institution must contribute R15 000 and provide a suitable work environment.
- Record of the candidate:
  - > Candidate's expertise and training for successful execution of the proposed research.
  - Research record of the candidate including publications, conference proceedings and research prizes.
- Scientific and technical quality of the proposed research:
  - Literature review, meaning of the research and objectives. Scientific contribution and originality.
  - Research design and methodology. Work plan with achievable target dates.
  - alignment with national and institutional research priorities
- University Support:
  - Support through infrastructure and facilities.
- Potential research outputs and impact of the research:
  - Details of intended realistic outputs such as publications, conference proceedings, tool kits and policy documents.

- Skills development of the candidate in a priority research area.
- Potential for the socio-economic impact of research in South Africa.

#### 6.18 Evaluation of research and postgraduate education

#### 6.18.1 Continuous evaluation of research and postgraduate education

As part of their core tasks the research directors evaluate on a continuous basis, the quality of programmes and implement improvements. Reports in this regard serve at the Faculty Management Committee for review. The quality coordinator of the Faculty provides support in this and makes submissions to the Faculty Management Committee on improvement of the quality processes especially concerning postgraduate education within the Faculty.

#### 6.18.2 Internal evaluation of research and postgraduate education

The Faculty ties in with the university-wide internal evaluation of research and postgraduate education that take place according to a fixed schedule. Internal evaluations are the task of the Research Support Commission and the arrangements are the responsibility of the Director of Research Support. Reports of these evaluations appear in the agendas of the Committee for Research and Innovation and the Research Directors together with the Executive Dean are responsible for the handling of the recommendations.

#### 6.18.3 External evaluation of research and postgraduate education

External evaluations take place by external peer panels at an international level according to a fixed schedule. The Director of Research Support is responsible for organising these evaluations. Reports of the evaluations appear in the agendas of the Committee for Research and Innovation and the Research Directors together with the Executive Dean are responsible for the handling of the recommendations.

#### 6.18.4 Internal and external evaluation of postgraduate education

The quality of the master's and doctoral programmes are strongly dependent on the quality of the research programmes with which they are associated and in the evaluations of the research programmes this aspect receives attention. However, the delivery of the postgraduate programmes themselves, requires various processes which should also be subjected to quality evaluation. These processes are not concerned so much with the content of the research projects, but more with aspects such as admission, supervision and assessment. For internal and external evaluation of these and related processes, there are questionnaires and accompanying guidelines available on the web site of the Institutional Quality Office. The Faculty participates in these evaluations.

## 7 IMPLEMENTATION OF EXPERTISE AND COMMUNITY ENGAGEMENT

#### 7.1 Community Engagement

According to the *Community Engagement Policy*, the University is keenly aware of its social responsibility and, therefore, endeavours to engage with all relevant communities within the ambit of its activities, but does this primarily through that which emanates from the pursuit of knowledge and innovation, thereby bringing the results stemming from the process of research/innovation and teaching-learning to the engaged communities in a more direct manner.

APPENDIX 7.1.A: Community engagement policy

#### 7.2 Short courses

The Faculty offers short courses of which the aims are as follows:

- to facilitate access to learning in a structured manner in terms of cost, time, energy and support;
- to contribute to continuous professional development; and
- to contribute to upgrading of skills and knowledge that will ensure success in a specific learning area.

The University distinguishes between credit-bearing and non-credit-bearing short courses, but all short courses must be registered at the University and conform to the quality requirements of the University. All applications for new courses serve for approval at the Faculty Management Committee, which then submits them to higher bodies.

Full particulars may be found in the *Policy for the Presentation of Short Courses at the NWU*, which describes the central policy of the University and which is available on the website of the NWU.

APPENDIX 7.1.A: Policy for the Presentation of Short Courses at the NWU

#### 7.3 Commercialising of research and external projects

The Faculty strives after a culture of entrepreneurial attitudes and therefore promotes cooperation with external parties. In this regard, the Faculty makes sure that intellectual property is protected and that formal cooperative agreements are concluded. The research

directors of the Faculty are responsible for managing these agreements on projects within the research entities and the Director Technology Transfer and Innovation Support offers support. See also the central *Policy for the Management of Research and Innovation Contracts and External Investment / Stakeholding* which is available on the website of the University.

APPENDIX 7.2.A: <u>Policy for the Management of Research and Innovation Contracts and External Investment / Stakeholding</u>

#### 7.4 Continuous evaluation and improvement

As part of their core tasks, school directors and research directors continuously evaluate the quality of short courses and external projects as under their supervision and implement improvements.

## **8 QUALITY SCHEDULE**

In the table below, several procedures that have to be completed regularly are indicated in the first column. In the second column, the frequency and target dates are indicated and in the third column the responsible person. The paragraph numbers in the third column refer to paragraphs in this *Quality Manual*.

PROCEDURE	FREQUENCY/TARGET DATE	RESPONSIBLE PERSON	PARAGRAPH
Rule changes	Before 7 June annually	Directors	4.4
Nomination of examiners and moderators for module examinations	Before each examination	School directors	<u>5.2</u>
Examination report	Within 7 days after completion of each examination	School directors	<u>5.3</u>
Evaluation of throughput figures	February and August annually	Coordinate: Faculty Administrator	<u>3.6</u>
External peer moderating of exit modules	Exit-level modules annually taking turns for modules of the first and second semesters	School Directors	<u>5.5</u>
Report of external moderating	February yearly	School directors	<u>5.5</u>
Student evaluation of lecturer	During each semester	Lecturers	<u>4.10.2</u>

PROCEDURE	FREQUENCY/TARGET DATE	RESPONSIBLE PERSON	PARAGRAPH
Internal programme evaluation	Every four years	Quality coordinator	4.10.3
Reporting by supervisors/promoters and master's and doctoral students on progress	August annually	Research/School Directors	<u>6.11.2</u>
Report by research directors to Executive Dean on progress of master's and doctoral	November annually	Research/School Directors	<u>6.11.2</u>
Report on master's and doctoral students who exceed the maximum duration of study	February annually (first FM meeting)	Quality coordinator	6.11.2
Nomination of examiners for dissertations, minidissertations and theses	At least three months before the student submits. Through a submission to the Faculty Management Committee	Research Directors	6.12.3

## 9 APPENDICES

## > 3.6.A THROUGHPUT FIGURES UNDERGRADUATE

See next page.



DATE/DATUM

## FACULTY OF NATURAL AND AGRICULTURAL SCIENCES: THROUGHPUT FIGURES UNDERGRADUATE FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE: DEURVLOEISYFERS VOORGRAADS

				GELEENTHEID: (Eg. July 2020 / Bv. Julie 2020)					
Module code/ Module- kode	Number of students registered on the official counting day (15March/15Maart - 22 September) Available with the Faculty Administrator/ Beskikbaar by die Fakulteits-administrateur	Number of students passed in first examination opportunity/ Aantal studente ge- slaag in die eerste eksamen- geleentheid	Number of students passed in second examination opportunity/ Aantal studente ge- slaag in die tweede eksamen- geleentheid	Number of students passed - Total of first and second opportunities*/ Aantal studente geslaag – Totaal van eerste en tweede eksamengeleenthede**	Pass figure % (% passed after the second opportunity out of all enrolled on the official counting day / % geslaag na die tweede geleentheid uit almal ingeskryf op die amptelike teldag)	Pass norm % First year / Eerste jaar: 70% Second year / Tweede jaar:75% Third year / Derde jaar: 80%	Deviation from norm / Afwyking van norm (Indicate + or – in front of the figure / Dui aan + of – voor die syfer)	Marks adjusted (YES or NO/ JA OF NEE) (If YES give details in the next column / Indien JA gee be- sonder- hede in die volgende kolom )	Comments / Kommentaar  Explain negative deviations (-) and positive deviations greater than 10%. / Verduidelik negatiewe afwykings (-) sowel as positiewe afwykings (+) groter as 10%  In case of adjustment of marks indicate why and by how much) / By aanpassings van punte gee aan waarom en met hoeveel.  Other relevant comments / Ander tersaaklike kommentaar
	student wrote the exanent die eksamen in beid	le geleenthede ge	eskryf het, word s	legs die tweede gelee	entheid getel. Bereke			IDTEKENIN	G:

DATE/DATUM



# > 4.4.B PROCEDURES TO BE FOLLOWED TO CHANGE A FACULTY RULE/PROGRAMME

#### 1. General

- **Programmes:** Every rule change must be approved by Faculty Management and by SCAS (Senate Committee for Academic Standards) before they may be included in the yearbook.
- Admission changes/Faculty rules wrt an A-Rule: Every rule change must be approved by Faculty Management and by ARC (Admissions Requirements Committee)/Senate before they may be included in the yearbook.
- Directors must submit the proposed rule changes in such good time to Faculty Management that the latter is able to approve the proposed changes, before they submit them to ARC/SCAS/Senate.
- Submission to ARC/SCAS/Senate must be made on the prescribed forms according to the procedures prescribed by ARC/SCAS/Senate.
- Programmes: The whole process must be completed by the end of May, because the yearbooks have to be handed in on 30 June to be checked by SALA. The last scheduled SCAS dates in May/June, will have to be considered.

#### 2. Procedures for submissions to Faculty Management

- Changes on a specific page of the yearbook must be made by means of "Track Changes" on an electronic copy of that page in a WORD document. The yearbook is electronically available from the Faculty Administrator.
- Changes on different pages of the yearbook may be submitted in one WORD document, provided each relevant page of the yearbook is found on a new page in the WORD document.
- Changes that refer to different qualifications, e.g. BSc and BSc in IT, must be submitted in different WORD documents.
- Undergraduate and postgraduate rule changes must be submitted in different WORD documents.
- A specific change occurring on several pages of the yearbook only must be submitted once. It is made on the page where it occurs the first time as described in 1 above. Together with the document indicating the change by way of "Track changes", the school director submits a list containing the page numbers on which the change has be made every time, as well as the different programme numbers in which the change occurs. Example: If module NPHY111 would be replaced by module FSKN113, the change must be submitted by indicating it on the page of the yearbook where the change is made the first time, as explained in 1 above. A list containing the page numbers on which the change must be made every time, as well as the programme numbers in which

this change occurs, is submitted together with the document indicating the change by way of "Track changes".

- All the different rule changes that a school wishes to submit in a specific year, must be submitted simultaneously. If changes at any other time can truly not be avoided, they must be very clearly indicated in a later submission.
- The manuscript of the yearbook, in which all the changes approved by Faculty Management and SCAS/Senate appear, will be submitted for control to all school directors, centre directors and research directors involved. It remains the responsibility of all these directors to make sure that the rule changes that they have made and that have been approved, appear in the correct changed version in the yearbook.

#### 3. Afrikaans and English copies

As the yearbooks of the Faculty are published in Afrikaans and English, each change, as described in paragraph 2, must be submitted in Afrikaans and English.

#### 4. Formatting

The Faculty Administrator is responsible for formatting the manuscript before it is submitted, to the directors for control. In the submitted documents, the directors do not have to spend time on formatting, provided the submitted documents are unambiguous and not susceptible to different interpretations.

## > 4.10.1.A. APPEAL AGAINST EXCLUSION

This form will be attached as soon as it becomes available.



# > 5.5.A. PROCEDURES FOR THE INTERNAL MODERATING OF MODULES AND EXTERNAL MODERATING OF EXIT LEVEL MODULES

#### 1. Guidelines for the internal moderating of undergraduate modules

#### • Stipulations of the General rules

According to the General Rules, there is, for each module which is not on exit level, at least one internal examiner and at least one internal moderator.

#### Procedures for the appointment of internal moderators

- ➤ The School Director appoints on time for each examination paper of each module which is examined during a specific examination opportunity, in addition to at least one internal examiner, also at least one internal moderator.
- For modules on the first level of which corresponding modules are presented at other campuses, the School Director appoints additionally, for each such campus, an internal moderator from that campus. The moderators from other campuses moderate only the examination papers and not the answer papers.
- For each examination, the list of the examiners and moderators of each examination paper of each module of the school involved, must be available as part of the records of the school.
- > The Executive Dean may, from time to time, request the list of examiners and moderators of a school.

#### · Availability of documentation

For each module to be moderated the lecturer must provide the internal moderators with the information / documentation listed below. This must be done in such good time that the examination papers may be handed in on time at the examination section. The documents are:

- a study guide of the relevant module;
- supporting study material only if necessary (e.g. name of prescribed textbook, CD/DVD etc.);
- copies of the examination papers;
- > copies of the memorandums;
- the date on which the reports (I and II separately) ought to be submitted.

#### Moderation process

- Internal moderation occurs at both the first and second examination opportunities.
- The moderation of answer papers must be completed within the 7 working days which are available for marking. Special permission must be obtained from the



administration of the Faculty of Natural and Agricultural Sciences in cases where the marks will not be available within the 7 days after the examination.

Examination results are not finalised or made known before the internal moderation has not been completed.

#### Guidelines/prescriptions to internal moderators

#### The examination papers

It is expected from the moderator -

- to comment on the extent to which an examination paper is a fair, just, representative and adequate test of the learning contents of the module;
- to determine whether the examination questions conform to the outcomes set in the study guide (and the level descriptor);
- to make certain that an examination paper is of such a length that it may be reasonably expected from the candidates to complete the examination paper within the allocated time;
- > to make certain that the examination questions are clear and unambiguous;
- > to make certain that the examination questions reflect the required standard;
- > to evaluate the marks-value of the examination questions;
- > to evaluate whether the memorandum correlates with the examination questions and the syllabus; and
- > to complete internal moderator's report I, which covers the above points, and return it to the lecturer involved.

#### Answer papers

It is expected from the moderator -

- > to mark a sample of the answer sets (at least 10 for small groups and at least 10% for larger groups) in full, including all borderline cases for pass or fail and for the achievement of a distinction;
- > to compare the performance of the group in the examination with the participation marks of the group and to make recommendations;
- > to consider the faculty pass norms based on both examination opportunities of 70% for first year modules, 75% for second year modules and 80% for third year modules.
- > to comment on the fairness, precision and consistency of the marking of the examination answers by completing the Internal Moderator's Report II.

#### Moderator's report

After possible corrections as recommended by the internal moderators, the completed reports I and II of the moderators are provided to the school director. The lecturer places copies of all documents in the module file.



## 2. Interne Moderatorsverslag I / Internal Moderator's Report I

Moderering van vraestel en memorandum	Moderation of examination paper and memorandum
Vir voltooiing deur NWU interne eksaminator/ To	be completed by NWU internal examiner:
Titel en naam van interne eksaminator / Title and name of internal examiner	
Titel en naam van interne moderator / Title and name of internal moderator	
Naam van module / Module name	
Modulekode / Module code  Eksamendatum / Examination date	
Dokumentasie vir die interne moderator aangeheg met die oog op verslagdoening soos volg. Interne eksaminator merk met X waar van toepassing:	Documents attached for the attention of internal moderator with a view to reporting as follows. Internal examiner marks with an X where applicable:
Eksamenvraestel / Examination paper	
Nasienskema of memorandum / Marking scheme	or memorandum
Studiegids / Study guide	
Interne moderator antwoord asseblief die volgende vrae deur 'n kruisie ( <b>x</b> ) in die gepaste blokkie te trek	Internal moderator please answer the following questions by making a cross $(\mathbf{x})$ in the appropriate box.
	Ja/Yes Nee/No
Vrae in die vraestel assesseer die module-ui gestel/ The questions in the paper assess that the study guide.	
Opmerkings / Remarks:	
	Ja/Yes Nee/No
Die vrae in die vraestel assesseer kennis er universiteitsvlak. (Die moeilikheidsgraad is	



kennis en 20% hoërvlak denke op eerstejaarsvlak, 60 % kennis en 40% hoërvlak denke op tweedejaarsvlak en 40% kennis en 60% hoërvlak denke op derdejaarsvlak) / The questions in the paper assess knowledge and skills at the appropriate university level. (The degree of difficulty is appropriate: assessment of 80% knowledge and 20% higher level thinking on first year level, 60 % knowledge and 40% higher level thinking on second year level and 40% knowledge and 60% higher order thinking on third year level).

n	nerkings / Remarks:	_	
		Ja/Yes	Nee/N
	Die puntetoekennings is gepas, die punte is duidelik sigbaar op die vraestel en is korrek opgetel. / The allocation of marks is appropriate; the marks are clearly visible on the examination paper and added correctly.		
	Opmerkings / Remarks:		,
		Ja/Yes	Nee/N
	Die tydsduur van die vraestel is gepas. / The time duration of the examination paper is appropriate.		
n	nerkings / Remarks:		
			T
	Die vrae is duidelik geformuleer en die taalgebruik en vertaling	Ja/Yes	Nee/N
	(korrektheid van spelling en grammatika asook duidelikheid van betekenis) is gepas. / The questions are clearly formulated and the language use and translation (correct spelling and grammar as well as clarity of meaning) are appropriate.		
1	nerkings / Remarks:		
		Ja/Yes	Nee/N
	Die memorandum is voldoende en sluit voorgestelde antwoorde / assesseringskriteria vir alle vrae in. /The memorandum is sufficient and includes suggested answers / assessment criteria for all questions.		
1	nerkings / Remarks:		



7	Is daar enige ander opmerkings wat u die vraestel en/of memorandum wil		ou would like aper and/or	
•••••		•		•
	derator se voorletters en van itials and surname of moderator		kening van moderator/ re of moderator	Datum/ Date



## 3. Interne Moderatorsverslag II /Internal Moderator's Report II

Moderering van antwoordstelle	Moderation of answer papers
Vir voltooiing deur NWU interne eksaminator/Tto	be completed by NWU internal examiner:
Titel en naam van interne eksaminator / Title and name of internal examiner	
Titel en naam van interne moderator / Title and name of internal moderator	
Naam van module / Module name	
Modulekode / Module code	
Eksamendatum / Examination date	
Dokumentasie vir die interne moderator aangeheg met die oog op verslagdoening soos volg. Interne eksaminator merk met X waar van toepassing:	Documents attached for the attention of internal moderator with a view to reporting as follows. Internal examiner marks with an X where applicable:
Al die antwoordstelle / All the answer papers	
Eksamenvraestel / Examination question paper	
Nasienskema of memorandum / Marking scheme	or memorandum
'n Puntestaat (met name van studente, deelname gemiddelde punte behaal in die module, aantal met onderskeiding slaag) / A mark-sheet (v participation marks, examination marks and f obtained in the module, number of candidates th distinction)	kandidate wat sak en aantal wat with names of students, their inal marks, plus average marks
Interne Moderator antwoord asseblief die volgende vrae deur 'n kruisie ( <b>x</b> ) in die gepaste blokkie te trek.	Internal Moderator please answer the following questions by making a cross ( <b>x</b> ) in the appropriate box.
	Ja/Yes Nee/No
Die punte is korrek opgetel en verdere berel 1 are added correctly and further calculations	
Opmerkings / Remarks:	1 1



Ja/Yes Nee/No Die merker gebruik die memorandum/nasienskema gepas (diskresie word gebruik wanneer van toepassing) en daarom is die merkwerk konsekwent en billik. / The marker uses the memorandum/marking scheme appropriately (discretion is used when applicable), and therefore the marking is consistent and reasonable. Opmerkings / Remarks: Ja/Yes Nee/No Dit is duidelik hoe die merker die punte toeken uit wat die merker op die antwoordstelle aanteken/ It is clear how the marker assigns the marks from what the marker writes on the answer papers. Opmerkings / Remarks: Ja/Yes Nee/No Die punteverspreiding vir die vraestel is gepas./The distribution of marks for the examination paper is suitable. Opmerkings / Remarks: Aantal/ Number Dui asseblief aan hoeveel antwoordstelle en/of vrae u gemodereer het / Please indicate the number of answer papers and/or questions you have moderated Enige verdere opmerkings: Any further remarks: ..... ..... Moderator se voorletters en van / Handtekening van moderator/ Datum/ Date

Signature of moderator

Initials and surname of moderator



#### 4. Guidelines for the external moderation of exit level modules

#### Point of departure

According to the General Rules, each exit level module is externally moderated at least once in two years by a person or persons who have the applicable qualifications and with the understanding that the person or persons may not be a staff member and may also not be connected to the University through an extraordinary appointment.

#### Requirements set regarding the appointment of external moderators

An external moderator (from outside NWU) must be a senior academic, i.e. at least a senior lecturer with an appropriate D degree, or a person from the public sector / private sector / industry, with an appropriate qualification.

Moderators must at least be able to read and understand the language of instruction in the module to be moderated well. With a view to the preference of having the external moderator on campus, it is recommended that the moderator should be connected to a nearby university/institution.

#### Procedures for appointing external moderators

Every lecturer involved approaches an appropriate external moderator. As soon as this person agrees to officiate as moderator, the lecturer forwards the person's details to the director. Directors present a list of appropriate external moderators to the Executive Committee of the relevant school. This name list must also contain the postal address, email address and telephone number(s) of each of the nominated external moderators.

For each module to be moderated the lecturer must provide the external moderators with the information / documentation listed below. This must be done in such good time that the examination papers may be handed in on time at the examination section. The documents are:

- > a letter with detail about the requirements of the moderation process;
- a study guide of the relevant module;
- supporting study material only if necessary (e.g. name of prescribed textbook, CD/DVD etc.);
- > a copy of the examination paper;
- a copy of the memorandum;
- > the date on which the examination will take place;
- > the date on which the reports (I and II separately) ought to be submitted; and
- > an honorarium form HC106 to be completed and signed by the external moderator.

#### Moderation process

External moderation of a module takes place at the first examination opportunity of the exit level modules at undergraduate, postgraduate diploma and honours level.



The moderation process may take place in one of two ways, either on campus or offcampus. If possible, moderation should be done on campus. Presently, it seems to be the most functional and obvious option.

External moderation preferably takes place on the NWU campus during the course of one day. The lecturer concerned establishes cooperation with the moderators. An effort must be made to finalise the examination marks (and therefore complete the moderation) within seven days after the examination. Should the marks not be ready within seven days after completion of the examination, special permission must be obtained from the Administration of the Faculty of Natural and Agricultural Sciences to postpone the date on which the marks will be available.

Examination results are not finalised or made known before the external moderation has been completed.

#### Guidelines / Prescriptions to external moderators

#### The examination papers

It is expected from the moderator -

- > to comment on the extent to which an examination paper is a fair, just, representative and adequate test of the learning contents of the module;
- > to determine whether the examination questions conform to the outcomes set in the study guide (and the level descriptor);
- to make certain that an examination paper is of such a length that it may be reasonably expected from the candidates to complete the examination paper within the allocated time;
- > to make certain that the examination questions are clear and unambiguous;
- > to make certain that the examination questions reflect the required standard;
- to evaluate the marks-value of the examination guestions; and
- ➤ to complete the External Moderator's Report I and return it to the lecturer concerned, as well as to complete and return the honorarium form 13A and the signed form 13B.

#### Answer papers

It is expected from the moderator -

- to mark a sample of the answer sets (at least 10%) in full;
- to evaluate whether the memorandum correlates with the examination questions and the syllabus; and
- > to comment on the fairness, precision and consistency of the marking of the examination answers by completing the External Moderator's Report II.

#### ❖ Moderator's report and honorarium form

After the lecturer has made corrections that may have been recommended by the moderator, he/she submits the completed Moderator's Report I and II to the school director. The lecturer also completes the honorarium form 13B (only sections 1 to 2.1.1) and forwards the signed (moderator) form 13B (completed further by the lecturer) and honorarium form



13 A (completed by the external moderator) to the school director. The lecturer files copies of the documents in the module file. The school director forwards forms 13A and 13B to the Administration of the Faculty of Natural and Agricultural Sciences to be finalised.

#### Target date

After completion of the examination, all documentation with which the external moderator has been provided, together with his or her report, must be returned to the school director at the earliest possible opportunity.

#### • Report on external moderation

The school director compiles a synoptic report for the administration of the Faculty of Natural and Agricultural Sciences. Where necessary the Executive Dean discusses the reports with the director. The evaluation report and the comments of the director are then presented to Faculty Management and preserved centrally by the Faculty administrator with a view to quality management.



## 5. Eksterne Moderatorsverslag I /External Moderator's Report I

Moderering van vraestel en memorandu	m	Moderation of examination po memorandum	per and
Vir voltooiing deur NWU interne eksami	nator/ To	be completed by NWU interna	l examiner:
Titel en naam van eksterne moderator/			
Title and name of external moderator  Werkgewer van eksterne moderator /			
Employer of external moderator			
Kontakbesonderhede van eksterne moderator / Contact details of external moderator:  • Posadres / Postal address  • Werkstelefoonnr. / Work			
telephone no.  • Selnr. / Mobile no.			
E-posadres / Email address			
Naam van module / Module name			
Modulekode / Module code			
Dokumentasie ter insae vir die eksterne	,	Documents attached for the a	ittention of
moderator met die oog op verslagdoeni volg (merk met <b>X</b> waar van toepassing):	ng soos	external moderator with a vie follows (mark with <b>X</b> where a	ew to reporting as
Brief aan moderator / Letter to modera	itor		
Eksamenvraestel / Examination paper			
Nasienskema of memorandum / Marking	scheme (	or memorandum	
Studiegids / Study guide			
Honorariumvorm MH/ADM 13A / Honor	arium for	m MH/ADM 13A	
			1
Eksterne moderator antwoord assebly volgende vrae deur 'n kruisie ( 🗷 ) in die blokkie te trek	,	External moderator please and questions by making a crappropriate box.	,
1			Ja/Yes Nee/No



	Vrae in die vraestel assesseer die module-uitkomste soos in die studiegids gestel/ The questions in the paper assess the module outcomes as set in the study guide.		
Opn	nerkings / Remarks:		
		Ja/Yes	Nee/No
	Die vrae in die vraestel assesseer kennis en vaardighede op die gepaste universiteitsvlak. (Die moeilikheidsgraad is gepas: assessering van 80% kennis en 20% hoërvlak denke op eerstejaarsvlak, 60 % kennis en 40%		
2	hoërvlak denke op tweedejaarsvlak en 40% kennis en 60% hoërvlak denke op derdejaarsvlak) / The questions in the paper assess knowledge and skills at the appropriate university level. (The degree of difficulty is appropriate: assessment of 80% knowledge and 20% higher level thinking on first year level, 60 % knowledge and 40% higher level thinking on second year level and 40% knowledge and 60% higher order thinking on third year level).		
Opn	nerkings / Remarks:	1	
		Ja/Yes	Nee/No
3	Die puntetoekennings is gepas, die punte is duidelik sigbaar op die vraestel en is korrek opgetel. / The allocation of marks is appropriate; the marks are clearly visible on the examination paper and added correctly.		
	Opmerkings / Remarks:		•
		Ja/Yes	Nee/No
4	Die tydsduur van die vraestel is gepas. / The time duration of the examination paper is appropriate.		
Opm	nerkings / Remarks:		
		Ja/Yes	Nee/No
5	Die vrae is duidelik geformuleer en die taalgebruik en vertaling (korrektheid van spelling en grammatika asook duidelikheid van betekenis) is gepas. / The questions are clearly formulated and the language use and translation (correct spelling and grammar as well as clarity of meaning) are appropriate.		
Opn	nerkings / Remarks:		<u> </u>



Die memorandum is voldoende en sluit voorgestelde antwoorde / assesseringskriteria vir alle vrae in. /The memorandum is sufficient and includes suggested answers / assessment criteria for all questions.

Opm	nerkings / Remarks:			
i				
7	Is daar enige ander opmerkings wat u die vraestel en/of memorandum wil		Are there any other remarks yo to make on the examination pamemorandum?	
'				
 • Eks	sterne moderator se voorletters en		kening van eksterne	
	r /Initials and surname of external derator	modera modera	tor/ Signature of external tor	



## 6. Eksterne Moderatorsverslag II/External Moderator's Report II

Moderering van antwoordstelle		Moderation of answer papers	
Vir voltooiing deur NWU interne eksam	ninator / T	o be completed by NWU internal e	xaminer:
Titel en naam van eksterne moderator/ Title and name of external moderator			
Werkgewer van eksterne moderator / Employer of external moderator			
Kontakbesonderhede van eksterne moderator / Contact details of external moderator:  Posadres / Postal address  Werkstelefoonnr. / Work			
telephone no.  • Selnr. / Mobile no.			
E-posadres / Email address			
Naam van module / Module name			
Modulekode / Module code			
Eksamendatum / Examination date			
	I		
Dokumentasie vir die eksterne m aangeheg met die oog op verslagdoe volg. Interne eksaminator merk met X toepassing:		Documents attached for the external moderator with a view of follows. Internal examiner mawhere applicable:	to reporting as
Al die antwoordstelle / All the answer	papers		
Eksamenvraestel / Examination question	on paper		
Nasienskema of memorandum / Markin	ng scheme	or memorandum	
'n Puntestaat (met name van studente, gemiddelde punte behaal in die modu met onderskeiding slaag) / A mar participation marks, examination ma obtained in the module, number of can distinction)	le, aantal k-sheet (v arks and f	kandidate wat sak en aantal wat with names of students, their inal marks, plus average marks	



Eksterne Moderator antwoord asseblief die volgende vrae deur 'n kruisie ( $\boldsymbol{x}$ ) in die gepaste blokkie te trek.

External Moderator please answer the following questions by making a cross (**x**) in the appropriate box.

Die punte is korrek opgetel en verdere berekenings is korrek. / The marks are added correctly and further calculations are correct.  erkings / Remarks:		
erkings / Remarks:		l
rkings / Remarks:		
	Ja/Yes	Nee/No
Die merker gebruik die memorandum/nasienskema gepas (diskresie word gebruik wanneer van toepassing) en daarom is die merkwerk konsekwent		
en billik. / The marker uses the memorandum/marking scheme appropriately (discretion is used when applicable), and therefore the marking is consistent and reasonable.		
erkings / Remarks:	_	
	Ja/Yes	Nee/No
Dit is duidelik hoe die merker die punte toeken uit wat die merker op die antwoordstelle aanteken/ It is clear how the marker assigns the marks from what the marker writes on the answer papers.		
erkings / Remarks:		
	Ja/Yes	Nee/No
Die punteverspreiding vir die vraestel is gepas./The distribution of marks for the examination paper is suitable.		
erkings / Remarks:		



5	Geen student of groep studente word deur die nasienwerk bevoordeel of benadeel nie. / No student or group of students are favoured or put at a disadvantage by the marking.								
Эpm	nerkings / Remarks:		·	<u>.</u>					
				Aantal/ Number					
6	Dui asseblief aan hoeveel antwoordstelle en/of vrae u gemodereer het / Please indicate the number of answer papers and/or questions you have moderated								
7	Enige verdere opmerkings:								
				•••••					
•		•		•					
var Init	Eksterne Moderator se voorletters en van / Initials and surname of external moderator		Handtekening van eksterne Damoderator/ Signature of external moderator						



## > 5.5.B REPORT FORM OF DIRECTOR ON EXTERNAL MODERATING OF EXIT LEVEL MODULES

# FACULTY OF NATURAL AND AGRICULTURAL SCIENCES / FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

#### REPORT OF DIRECTOR ON EXTERNAL MODERATING OF EXIT LEVEL MODULES/ VERSLAG VAN DIREKTEUR VAN EKSTERNE MODERERING VAN UITTREEVLAKMODULES

Year of reporting / Jaar van verslag:
School / Skool:

Undergradua	ate modules /	Voorgraadse modules								
Module	Module Name / Module- naam	Responsible lecturer / Verantwoordelike dosent	Moderator		Recommendations and	Actions / Aksies				
code / Module- kode			Name / Naam	Employer / Werkgewer	comments of the moderator/ Aanbevelings en opmerkings van die moderator					
Honours mo	Honours modules / Honneursmodules									
Module	Module	Responsible	Moderator		Recommendations and	Actions / Aksies				
code Module- kode	Name / Module- naam	lecturer / Verantwoordelike dosent	Name /Naam	Employer / Werkgewer	comments of the moderator/ Aanbevelings en opmerkings van die moderator					
i										



### > 6.7.A: RESEARCH PROPOSAL FORM FOR M OR D STUDY

See next page.



## FACULTY OF NATURAL AND AGRICULTURAL SCIENCES/FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

#### Research Proposal for M or D study/ Navorsingsvoorstel vir M- of Dstudie

If a new title is registered or if a title is changed substantially, a research proposal must accompany the submission. The student and the supervisor/promoter must consult the Manual for Master's and Doctoral Studies, as well as the Faculty policy regarding the Management of M and PhD students, prior to writing the research proposal. The Manual for Master's and Doctoral Studies explains in detail what is expected at each of the subheadings below. The proposal for a PhD should not be longer than 7 pages and for a MSc not more than 4 pages.

The Faculty requires that the research proposal will be submitted through the use of this form and in the format below. Please complete using a computer. As 'n nuwe titel geregistreer word of as 'n titel wesenlik gewysig word, moet 'n navorsingsvoorstel die voorlegging daarvan vergesel. Die student en die studieleier/promotor moet die Handleiding vir Meester- en Doktorale Studie saam met die Fakulteit se beleidstuk, Bestuur van M- en PhD-studente, raadpleeg voordat die navorsingsvoorstel geskryf word. Die Handleiding vir Meester- en Doktorale Studie verduidelik in besonderhede wat by elk van die onderstaande subopskrifte verwag word. Die navorsingsvoorstel vir 'n Ph.D.-studie behoort nie langer as 7 bladsye te wees nie. In die geval van 'n M.Sc. word 'n beperking van 4 bladsye gestel.

Die Fakulteit vereis dat die navorsingsvoorstel deur die gebruik van hierdie vorm en in onderstaande formaat ingedien sal word. Voltooi asseblief rekenaarmatig.

1. Student initials studentenomm	s, surname and student ner	number/ Stu	dent se voorletters, va	n en
Initials/Voorletters	Surname/Van		Student numl Studentenom	
2. Degree for whi	ch student is registered	d/ Graad waa	r <b>voor student ingeskr</b> y PhD	´ <del></del>
-	visors or promoters/Na s /Voorletters en vanne	ame van studi	eleiers of promotors	
Title (preferably no (verkieslik nie meer	•		telling en motivering	
Frovide the theme and link with gaps in the literature and recent research in the area. Indicate the research question, its actuality and how the research will endeavour to answer the question. Avoid the inserting of definitions.  Gee die tema en verbind dit met leemtes in de literatuur en onlangse navorsing daaroor. Dui de navorsingsvraag aan, waarom dit aktueel is en het die navorsing sal poog om die vraag te beantwoord Vermy die gee van definisies.				



#### 6. Research aims and objectives/ Navorsingsdoelstellings en -doelwitte

Provide the different general as well as the specific	
aspects which will form part of the research.	aspekte wat in die navorsing aan die orde sal kom.
L	
7. Basic hypothesis (where applicable)/ Basiese h	ipotese (waar van toepassing)
	F
8. Method of investigation/ Metode van ondersoel	k
_	
9. Literature study	
Indicate which literature will be used in the study and	Dui aan hoe en watter literatuur in die studie gebruik
how. Provide a summary of the literature as required	gaan word. Gee 'n literatuuropsomming soos benodig vir
for ethics approval. However, in cases of "no risk" a	etiekgoedkeuring. In gevalle van die etiekkategorie "geen
summary of the literature is not required, but only a short list of key publications.	risiko", word 'n opsomming van die literatuur egter nie verwag nie, maar slegs 'n kort lys van sleutelpublikasies.
short tist of key publications.	verwag nie, maar siegs n kort tys van sieutetpuotikasies.
9.1. Methods of investigation $/$ Ondersoekmetodes	
F=	· · · · · · · · · · · · · · · · · · ·
Die proposed design, data acquisition, procedures, data processing, funding sources (but not a budget),	Die beoogde ontwerp, dataverkryging, apparatuur, prosedures, dataverwerking, bronne van befondsing
mathematical methods, computer methods, etc.	(maar nie 'n begroting nie), wiskundige metodes,
1	0 0 // 0 //
10. Provisional chapter division/ Voorlopige hoofs	tukindeling
10. I Tovisional enapter division, voortopige noois	tumintening
Here it should be clear that there was proper reflection	Hier moet blyk dat daar behoorlike nadenke was oor hoe
on the appearance of the final product (dissertation,	die uiteindelike produk (verhandeling/skripsie/proefskrif)
mini dissertation, thesis). Provide provisional titles of the various chapters, with a brief outline of the planned	daar sal uitsien. Gee voorlopige titels van die verskillende hoofstukke, met 'n kort uiteensetting van die

M NWU®		
		_
11. Literature references/ Literatuurverwysings		
Provide complete references to the literature referenced	Gee volledige verwysings slegs na die literatuur	waarna
to in this proposal only.	in hierdie voorlegging verwys is.	
Research ethics / Navorsingsetiek		
Each research proposal must be accompanied by:	Elke navorsingsvoorstel moet vergesel word van.	
A completed form of the scientific committee involved. The recommendation in the form is marked in the applicable block below.	'n voltooide vorm van die betrokke wetenskaplike Die aanbeveling in die vorm is in die toepaslike hieronder gemerk.	
No Bigle (ND) / Coop Bigiles (CD)		
No Risk (NR) / Geen Risiko (GR)  Refer to Natural Sciences Research Ethics Committee / Verwys na G	dia Natuurwatanskanna Navorsingsatiakkomitaa (NS-PFC)	
Refer to the Committee for Animal Care / Verwys na die Komitee v	., .	
Refer to Committee for Health Care / Verwys na die Komitee vir Ge		
• Statistical Advice (Mark the applicable block) / St		
Statistical Advice (Mark the applicable block) / St		7 1 37
		es No a Ne
Statistical advice must be obtained from the Statistical Consulting Konsultasiediens verkry word.	g Service / Statistiese advies moet van die Statistiese	
		••••
Supervisors or promoters / Research Director / Navorsi		



# > 6.8.2.A: PROCEDURE AND FORMS FOR PROGRESS REPORTS POSTGRADUATE STUDENTS

### 1. Procedure Progress Reports Postgraduate Students

Procedure Progress Reports Postgraduate Students						
Date	Faculty Administrator	Research/School Directors	Dean			
21 July-31 July	Obtains the details of all M and D students per research entity from the computer system.					
July-August	Sends the forms for the progress reports to the M and D students and also to the supervisors and promotors in each research entity for return to the respective campus faculty administrator before the end of August. Clearly states that students for whom both forms are not received back on time will be refused reregistration for the next year.					
September	Hands over all the report forms received per research entity to the research/school director concerned. Ensures that students of whom the progress report from either the student or the supervisor/promotor has not been received by the research/school director, is system wise not allowed to register at the registration opportunity in the next academic year. Reregistration will only be allowed after both reports have been received and checked to the satisfaction of the research/school director and the deputy dean R&I.	Receive the progress reports of the supervisors and promotors and the M and D students in the research entity from the respective campus faculty administrator.				
October		Check the list of postgraduate students who exceed their study period as provided by the faculty administrator and consider this together with the progress reports.				
15 November		Ensure that the progress reports which are not returned to the faculty administrator before the end of August are indeed obtained. Students for whom both forms are not received on time will be refused reregistration for the next year.				



30 November		Provide a report on the relevant	Ensures that each
30 November		<ul> <li>Provide a report on the relevant form to the deputy dean on each M and D student:</li> <li>Which progress reports of students were received and which not,</li> <li>Which progress reports from supervisors or promotors were received and which not,</li> <li>Which progress reports indicated problems,</li> <li>How the problems were handled,</li> <li>Which students should receive a warning letter before the registration opportunity in the next academic year about possible termination of study.</li> <li>In order to ensure that students will confirm the receipt of the warning letter, the campus respective faculty administrator requests a block on the reregistration system and their registration is only allowed after approval of a request form by the research/school director.</li> </ul>	Ensures that each research/school director submits a report.
December	Sends, via Postgraduate Administration, a warning letter on possible termination of study to the students who have been identified for this by the research/school directors in their November report on grounds of unsatisfactory progress or exceeding the study period. This letter is necessary documentation in case of termination of study at a later stage. Ensures that the registration of such students is blocked by the system.		Checks whether the problem cases named in the reports were handled in a satisfactory way. Contacts research/school directors on the handling of specific problem cases if necessary.
February			Reports per research entity by form to the Faculty management Committee on the number of progress reports not received by the research directors, the number of problem cases handled and the number of warning letters which were sent out.
31 March Rule 4.14 & 5.13	Reports to the first meeting of the Faculty Board in the new academic year on the decision taken about every postgraduate student who exceeds the study period (as reported to the Faculty Board of August in the previous year), or who received a warning letter based on the progress reports.	To be included in the quality report.	



#### 2. Progress report from student on M or PhD study

# FACULTY OF NATURAL AND AGRICULTURAL SCIENCES / FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

# Student progress report on M or D study/ Student se vorderingsverslag insake M- of D-studie

Year of Report / Jaartal van verslag	
Date of completion of this report / Datum van voltooiing van hierdie verslag	

- The office of the dean sends out forms to all M and PhD students for completion at the beginning of August. Please complete the form electronically. Type your full comments in the spaces provided. The form may be lengthened to further pages as needed.
- Send the completed form before the end of August by email to the dean at (email adress)
- The dean and the research director undertake to handle your report form as confidential and it will not be disclosed to your supervisor/promoter.
- If this form is not completed and submitted, the student will not be allowed to reregister.
- Die dekaanskantoor stuur begin Augustus aan alle M- en PhD-studente vorms vir voltooiing. Vul die vorm asseblief elektronies in. Tik u volledige kommentaar in die blokke wat daarvoor bedoel is. Die vorm kan gerus na volgende bladsye oorloop.
- Stuur die voltooide vorm voor einde Augustus per e-pos aan die dekaan by (e-posadres)
- Die dekaan en die navorsingsdirekteur onderneem om u verslagvorm vertroulik te hanteer teenoor u studieleier/promotor.
- As hierdie vorm nie ingevul en ingehandig word nie, sal die student nie toegelaat word om te herregistreer nie.

#### **SECTION 1/AFDELING 1**

1	Name and initial van student	s of stud	ent / Naam en v		
2	Student number	/ Studen	tenommer		
3	Research entity	/ Navors	ingsentiteit		
4	Degree registere	ed for / G	raad waarvoor ii	ngeskryf	
5	Programme code	e / Progra	amkode		
6	Date of first r registrasie	egistratio	on / Datum va	an eerste	
7	Full-time / Voltyds		Part-time / Deeltyds		
8	Supervisor/Prom	noter			
	Studieleier/Prom	otor			
9	Co-supervisor/C	o-promot	er (if applicable)	)	
	Medestudieleier/ toepassing)	'Medepro	motor (indie	en van	



10	Assistant supervisor(s) / Assistant promoter(s) (if applicable)			
	Hulpleier(s) / Hulppromotors (indien van toepassing)			
11	Is your title registered and has your supervisor/pron	noter been appointed?		
	(Must be done within 6 months after first registering	Yes/	No/	
	Is u titel geregistreer en is u studieleier / promotor b	Ja	Nee	
	(Moet binne 6 maande na eerste registrasie vir die	graad gedoen word)		
12	Have you already given notice that you inten dissertation/dissertation/thesis? (Notice must be g advance)		Yes/ - Ja	No/
	Het u al kennis gegee dat u u skripsie/verhandelin (Moet 3 maande voor inhandiging geskied)	g/proefskrif gaan indien?		Nee
		let u die hele Handleidir oktorale Studie waarin		
con	duct (role and responsibilities) of v	erantwoordelikhede) van	studi	eleiers/promotors
sup	ervisors/promoters is also described?	ok beskryf word, met aand	dag gele	?es? 
ΥF	S /JA NO / NEE			
SEC	CTION 2/AFDELING 2			
1.	Which of the following situations is applicable to your M/D programme?	Watter van die volgend program van toepassing		sies is op u M-/D-
	A. There are no coursework modules in the	A. Daar is nie vraestelm	odules i	in die program nie.
	B. The coursework modules must be completed before the research part commences.	B. Die vraestelmodule voordat daar met die word.		
	C. The coursework modules and the research part run simultaneously.	C. Die vraestelmodules gelyktydig afgehan-del.	s en di	ie navorsing word
		•		
Α	В С			
2.	Are you doing coursework only at Loop u op die oo the moment (in other words, the (m.a.w.	omblik net klas die YES/JA		NO/NEE
	research part of the programme navorsings¬gedenas not yet started)?	eelte van die		110/1122
	p. cg. s			
	If you answer NO on any of the	ndien op enige van die		
	following questions, you should volument further in the indicated g	olgende vrae NEE eantwoord word, lewer lan kortliks kommentaar.		



3.	How frequently do you have formal contact (lectures, seminars, etc.) with the lectures of the coursework modules? (If applicable)	Hoe dikwels het u formele kontak (lesings, seminare, ens.) met dosente wat die vraestelmodules aanbied? (Indien van toepassing.)			
We	ekly/Weekliks Fortnightly/Tweeweekliks Me	onthly/Maandeliks Other)/Ander			
If O	ther above, please specify/Indien Ander hierbo, spesifis	seer asssblief:			
4.	How frequently do you have formal contact	Hoe dikwels het u formele kontak (besprekings,			
	(discussions, meetings, correspondence, etc.) with your <u>supervisor/promoter?</u> (If applicable)	vergaderings, korrespondensie, ens.) met u studieleier/promotor? (Indien van toepassing.)			
We	ekly/Weekliks Fortnightly/Tweeweekliks Me	onthly/Maandeliks Other)/Ander			
If O	ther above, please specify/Indien Ander hierbo, spesifis	eer asssblief:			
5.	Do you consider this contact Beskou u frequency to be satisfactory? kontakfrekwensie voldoende?				
If N	O, please comment/Kommentaar indien NEE				
6.	Are you satisfied with the standard of supervision (or die studieleiding lecturing in the case of coursework) you are receiving?	(of lesings in YES/JA NO/NEE			
If N	O, please comment/Kommentaar indien NEE				
7.	How would you describe your progress this past six months? Mark below	Hoe was u vordering gedurende die afgelope ses maande? Merk een van die blokkies.			
Sati	sfactory/Bevredigend Unsatisfactory/Onbevred	digend None/Geen			
Con	nments/Kommentaar:				
8.	Have you had any personal, Het u van enige	e persoonlike			
0.		demiese, of YES/JA NO/NEE e¬me ervaar			
If YI	ES, please comment/Indien JA, lewer kommentaar asso	eblief:			



9. If you are studying on campus, do you have adequate access to library, computing, laboratory and other campus facilities?  Indien u op die kampus YES/JA NO/NEE toegang tot die biblioteek, rekenaars, laboratorium- en ander geriewe op die kampus?							
If NO, please comment/Indien NEE, lewer asseblief kommentaar:							
10. Off-campus students: Please comment on the general level of support from your research entity.  Studente wat nie op die kampus navorsing doen nie: Wat dink u van die ondersteuning wat u vanuit die navorsingsentiteit ontvang het?							
Comments/Kommentaar:							
11. Please indicate the number (if any) of papers which originated directly from your study that have been published or have been accepted for publication (in press)  Dui asseblief aan hoeveel artikels wat direkt studie voortgevloei het reeds gepubliseer of publikasie aanvaar is							
Published/Gepubliseer: Accepted/Aanvaar: N/A / NVT							
Comments/Kommentaar							
12. National or international conferences/seminars/workshops attended. Provide name, place and date and give involvement (lecture/poster, attendance only)  Nasionale of internasionale konferensies/seminare/werkwinkels wat u reeds bygewoon het. Verstrek naam, plek en datum er dui betrokkenheid aan (lesing/plakkaat, slegs bywoning).							
Details/Besonderhede:							
13. What is your anticipated minidissertation/dissertation/thesis completion date?  Wat is die doeldatum vir die voltooiing van u skripsie/verhandeling/proefskrif?							
Completion date/Doeldatum							
14. Other comments such as on activities/meetings of your research entity which directly support your research (or the lack of such activities)  Ander kommentaar soos oor aktiwiteite/byeenkomste van u navorsingsentiteit wat u navorsing direk ondersteun (of die gebrek daaraan)							
Comments/Kommentaar:							



# 3. Progress report on master's or doctoral studies (supervisor/promoter)

# FACULTY OF NATURAL AND AGRICULTURAL SCIENCES / FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

Supervisor's/Promoter's progress report on M or D studies/ Studieleier/Promotor se vorderingsverslag insake M- of D-studie

Year of Report / Jaartal van verslag	
Date of completion of this report / Datum van voltooiing van hierdie verslag	

- The office of the dean sends out forms to all M and PhD students for completion at the beginning of August. Please complete the form electronically. Type your full comments in the spaces provided. The form may be lengthened to further pages as needed.
- Send the completed form <u>before the end of August</u> by email to the dean at (email adress)
- If this form is not completed and submitted, the student will not be allowed to reregister.
- Die dekaanskantoor stuur begin Augustus aan alle M- en PhD-studente vorms vir voltooiing. Vul die vorm asseblief elektronies in. Tik u volledige kommentaar in die blokke wat daarvoor bedoel is. Die vorm kan gerus na volgende bladsye oorloop.
- Stuur die voltooide vorm voor einde Augustus per e-pos aan die dekaan by (e-posadres)
- As hierdie vorm nie ingevul en ingehandig word nie, sal die student nie toegelaat word om te herregistreer nie.

#### **SECTION 1/AFDELING 1**

1	Name and initials of student / Naam en voorletters van student							
2	Student number	/ Studen	tenommer					
3	Research entity	/ Navors	ingsentiteit					
4	Degree registere	d for / G	raad waarvoor ir	ngeskryf				
5	Programme code	e / Progra	amkode					
6	Date of first registration / Datum van eerste registrasie							
7	Full-time / Part-time / Deeltyds							
8	8 Supervisor/Promoter							
	Studieleier/Promotor							
9	Co-supervisor/C							
	Medestudieleier/Medepromotor (indien van toepassing)			ii vaii				
10	Assistant supervisor(s) / Assistant promoter(s) (if							
	applicable) Hulpleier(s) / Hulppromotors (indien van							
	toepassing)							
11	Are the student's (Must be done w					Yes/	No/	
					egistreer? (Moet geskied	Ja	Nee	
	binne 6 maande na aanvang van navorsing vir graad.)			d.)				



12	Have the examiners already been appointed for (Must take place six months before submission. Is die student se eksaminatore al aangewys?(Moinhandiging.)	et geskied 6 maande voordat   Yes/   No/   Nee						
13	Has the student given notice that the student dissertation/dissertation/thesis? (Must take psubmission.)/ Het die student kennis gegee skripsie/verhandeling/proefskrif gaan ingee? (Ninhandiging.)	lace three months before Yes/ dat die studentdie Ja  Yes/ Ja						
app DO cod	re you (and the co-supervisor/co-promoter, if licable) read the MANUAL FOR MASTER'S AND CTORAL STUDIES AND taken cognisance of the e of conduct for supervisors/promoters described ne manual?	Het u (en die medeleier/-promotor indien van toepassing) die HANDLEIDING VIR MEESTERSGRAAD- EN DOKTORALE STUDIE gelees EN kennis geneem van die gedragskode vir studieleiers/promotors wat daarin beskryf word?						
ΥE	S /JA NO / NEE							
If no	ot, please supply a reason/Indien nie, verskaf asseb	lief 'n rede:						
Ignoi Ignoi besta	re this section if your programme consists only reer hierdie afdeling indien die program sle	of a dissertation/thesis without examination papers. gs uit 'n verhandeling/proefskrif sonder vraestelle						
1.	<ol> <li>Which of the following situations is applicable to this student?</li> <li>A. There are no coursework modules in the programme.</li> <li>B. The coursework modules must be completed before the research part commences.</li> <li>C. The coursework modules and the research part</li> <li>Watter van die volgende situasies is op hierdi student van toepassing van toepassing?</li> <li>A. Daar is nie vraestelmodules word eers afgehande voordat daar met die navorsingsgedeelte begi word.</li> <li>C. Die vraestelmodules en die navorsing word.</li> </ol>							
A	B C	gelyktydig afgehandel.						
2.	classes at the moment (i.e. the net klas research section has not navorsings -g	lent op die oomblik (m.a.w. die nedeelte van die nog nie begin nie).						
	If you answer NO on any of the following questions, you should comment further in the indicated spaces.	Indien op enige van die volgende vrae NEE geantwoord word, lewer dan kortliks kommentaar.						
3.	Was the progress satisfactory in Was daal the examination paper module vordering	bevredigende in die YES/JA NO/NEE						



4.	(lectures, seminars, discussions, meetings, (lecturespondence etc.) with you or other lecturers who	oe dikwels het die student formele kontak esings, seminare, besprekings, vergaderings, orrespondensie, ensovoorts) met u of ander osente wat die vraestelmodules aanbied gehad?
Wee	eekly/Weekliks Fortnightly/Tweeweekliks Month	nly/Maandeliks Other)/Ander
If O	Other above, please specify/Indien Ander hierbo, spesifiseer	asssblief:
5.	Do you consider this contact Beskou u kontakfrekwensie(s) voldoende?	hierdie as YES/JA NO/NEE
Con	omments/Kommentaar:	
6.		eskryf die student se vordering gedurende die igelope ses maande:
Sati	atisfactory/Bevredigend Unsatisfactory/Onbevredige	nd
Con	omments/Kommentaar:	
Ignor		_
Mini diss		Thesis/ In article format/ In artikelformaat
2.	(discussions, meetings, correspondence etc.) with (b	oe dikwels het die student formele kontak besprekings, vergaderings, korrespondensie, ns.) met u of die medeleier/-promotor gehad?
Wee	eekly/Weekliks Fortnightly/Tweeweekliks Month	nly/Maandeliks Other)/Ander
3.	Do you consider this contact frequency to be satisfactory?  Beskou u kontakfrekwensie(s) voldoende?	hierdie as YES/JA NO/NEE
Con	omments/Kommentaar:	
4.		eskryf die student se vordering gedurende die gelope ses maande:
Sati	atisfactory/Bevredigend Unsatisfactory/Onbevredigen	nd



Con	nments/Kommentaar:								
5.	Are you aware of any personal, financial, academic or research		demiese, of	YES/JA	NO/NE	E			
	problems that could have had an adverse effect on the student's progress?	navorsings-proble wat u vordering het?							
	p. og. ood.	,,,,,,		I					
If Y	ES, please comment/Indien JA, lewe	r kommentaar asse	eblief:						
6.	What is the target date for completic	on of the student's	Wat is die d	oeldatum	vir die voltooiing	ı van	die		
0.	mini-dissertation/dissertation/thesis				andeling/proefski		aic		
Targ	get date/Doeldatum:								
7.	What do you recommend with continuation of this student's studion the following):								
Con	Completes studies/ Continues/ Continues conditionally/ Terminate studies/								
	Voltooi studie  Gaan voort  Gaan voorwaardelik voort  Termineer studie								
8.	Other comments/ Ander kommenta	aar:							



4. Report of the research director to the dean on the progress of master's and doctoral students

See next page.



# FACULTY OF NATURAL AND AGRICULTURAL SCIENCES: DIRECTOR'S REPORT TO THE DEAN ON THE PROGRESS OF M AND D STUDENTS FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE: DIREKTEUR SE VERSLAG AAN DIE DEKAAN OOR VORDERING VAN M- EN D-STUDENTE

Research Entity/Navorsingsentiteit  Name of Director/Naam van Direkteur  Direkteur  Date of Signature/Datum van Handtekening	Year of report/Jaartal van Verslag	Signat	re o	of (	director/Handtekening	van	
Name of Director/Naam van Direkteur	Research Entity/Navorsingsentiteit	Direkte	ur				
Traine of Birocoliff vair Vair Vair Vair Vair Vair Vair Vair V	Name of Director/Naam van Direkteur	Date of	Signa	ature	/Datum van Handteken	ing	

- Receive annually, before 31 August, the progress reports from the supervisors and promotors and the M and D students in the research entity from the faculty administrator. Ensure that the progress reports which were not submitted to the faculty administrator before the end of August, are indeed obtained. Students for whom both forms are not received on time will be refused reregistration in the next year.
- Check the list of postgraduate students who exceed the study period and is made available by the faculty administrator annually in August and consider this together with the progress reports.
- Provide <u>before 30 November</u> through THIS FORM (please send electronically) a report to the dean on every M and D student.
- o Which progress reports from students were received and which were not received,
- o Which progress reports from supervisors and promotors were received and which were not received.
- o Which progress reports indicated problems and how the problems were handled?
- Which students should receive a warning letter on possible termination of study before the registration opportunity in the next academic year.
- Which students exceed the study period.

To ensure that students will confirm the receipt of a warning letter, the faculty administrator blocks the reregistration of such students system wise and their registration is only allowed after conversation and approval of a request from by the research director.

- Ontvang jaarliks, voor 31 Augustus, die vorderingsverslae van die leiers en promotors en die M- en Dstudente in die navorsingsentiteit vanaf die fakulteitsadministrateur. Sien toe dat die vorderingsverslae wat nie by die fakulteitsadministrateur voor die einde van Augustus ingedien is nie, wel verkry word. Studente vir wie beide vorms nie betyds terugontvang word nie, se herregistrasie vir die volgende jaar sal geweier word.
- Gaan die lys van nagraadse studente wat hulle studietydperk oorskry en deur die fakulteitsadministrateur jaarliks in Augustus voorsien word, na en oorweeg dit tesame met die vorderingsverslae.
- Lewer voor 30 November deur HIERDIE VORM (stuur asseblief elektronies) verslag aan die dekaan oor elke M- en D-student:
- o watter vorderingsverslae van studente ontvang is en watter nie,
- o watter vorderingsverslae van leiers of promotors ontvang is en watter nie,
- o watter vorderingsverslae op probleme gedui het en hoe die probleme hanteer is,
- watter studente, voor die registrasiegeleentheid in die volgende akademiese jaar, 'n waarskuwingsbrief oor moontlike terminering van studie weens swak vordering moet ontvang.
- watter studente die studietydperk oorskry.

Ten einde te verseker dat studente ontvangs van die waarskuwingsbrief sal bevestig, blokkeer die fakulteitsadministrateur die herregistrasie van sulke studente stelselgewys en word hulle registrasie eers na gesprek en goedkeuring van 'n versoekvorm deur die navorsingsdirekteur toegelaat.

#### M STUDENTS/M-STUDENTE

Student surname and initials (Alphabeti-cally)/ Student se van en voorletters (Alfabeties)	First registration date of student/ Eerste registrasie- datum van student	Report form from student received (Yes/No)/ Verslagvorm van student ontvang (Ja/Nee)	Report from supervisor received (Yes/No)/ Verslagvorm van leier ontvang (Ja/Nee)	Problem emerged? (Yes/No)/ Probleem na vore gekom? (Ja/Nee)	Way the Director handled the problem (Short description. Use more space as needed or attach a more detailed report)/ Wyse van Direkteur se hantering van probleem (Kort beskrywing. Gebruik meer spasie soos benodig of heg 'n breedvoeriger verslag aan)	Warning letter because of unsatisfactory progress (Yes/No)/ Waarskuwings- brief weens swak vordering (Ja/Nee)	Exceeds the study period (Yes/No)/ Oorskry studietyd- perk (Ja/Nee)



#### D STUDENTS/D-STUDENTE

Student surname and initials (Alphabeti- cally)/ Student se van en voorletters (Alfabeties)	First registration date of student/ Eerste registrasie- datum van student	Report form from student received (Yes/No)/ Verslagvorm van student ontvang (Ja/Nee)	Report from promoter received (Yes/No)/ Verslagvorm van promotor ontvang (Ja/Nee)	Problem emerged? (Yes/No)/ Probleem na vore gekom? (Ja/Nee)	Way the Director handled the problem (Short description. Use more space as needed or attach a more detailed report)/ Wyse van Direkteur se hantering van probleem (Kort beskrywing. Gebruik meer spasie soos benodig of heg 'n breedvoeriger verslag aan)	Warning letter because of unsatisfactory progress (Yes/No)/ Waarskuwings- brief weens swak vordering (Ja/Nee)	Exceeds the study period (Yes/No)/ Oorskry studietyd- perk (Ja/Nee)



#### 5. Progress report of postgraduate students: report form for the dean to faculty management committee

#### FACULTY OF NATURAL AND AGRICULTURAL SCIENCES / FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

Progress Report of Postgraduate Students: Report form for the Dean to Faculty Management Committee/ Vorderingsverslae van Nagraadse Studente: Verslagvorm vir Dekaan aan Fakulteitsbestuur

#### Master's students / Meestersgraadstudente

Research Entity/ Navorsingsentiteit	Number of students in the report / Aantal studente in die verslag	whom the student report was not received / Aantal studente	whom the supervisor's report was not received /	Number of students where a problem emerged / Aantal studente by wie 'n problem ontstaan het	
TOTAL / TOTAAL					



### FACULTY OF NATURAL AND AGRICULTURAL SCIENCES / FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

Progress Report of Postgraduate Students: Report form for the Dean to Faculty Management Committee/ Vorderingsverslae van Nagraadse Studente: Verslagvorm vir Dekaan aan Fakulteitsbestuur

#### Doctoral students /Doktorsgraadstudente

Research Entity/ Navorsingsentiteit	Number of students in the report / Aantal studente in die verslag	whom the student report was not received / Aantal studente	Number of students from whom the promoter's report was not received / Aantal studente van wie die promotor se verslag nie ontvang is nie	where a problem emerged / Aantal	Number of students who receive a warning letter / Aantal studente wat 'n waarskuwingsbrief ontvang
TOTAL / TOTAAL					



# ➤ 6.12.4.A: GUIDELINES TO EXAMINERS FOR EVALUATING A DISSERTATION OR MINI-DISSERTATION FOR THE MASTER'S DEGREE / RIGLYNE VIR EKSAMINATORE VIR DIE EVALUERING VAN 'N VERHANDELING OF SKRIPSIE VIR DIE MEESTERSGRAAD

#### 1 General

#### 1.1 Contents of master's studies

Master's studies usually follow upon an honours degree and comprise research for a dissertation or mini-dissertation under the guidance of a supervisor. In some cases, passing examination papers is required as well. The required number of credits to be obtained is 180, which is in accordance with 1800 study hours.

On the recommendation form to be completed by examiners, the number of credits for the dissertation or mini-dissertation is indicated, as well as the number of credits for the examination papers, if applicable. The allocation of credits indicates the scope of the dissertation or mini-dissertation relative to the examination papers. A mini-dissertation must comply with the same requirements than those set for a dissertation, except that it is of smaller scope.

### 1.2 Appointment and role of examiners

The Dean appoints at least two examiners of whom at least one must be external to the University. None of the examiners may have been involved with the studies and the external examiners may not be from the same institution. Examiners must be experienced and active academics or other scientists, and preferably have a PhD. They must evaluate the dissertation or mini-dissertation according to international scientific standards.

#### 1 Algemeen

#### 1.1 Inhoud van M-studie

Die M-studie volg normaalweg op die verkryging van 'n Honneursgraad en behels navorsing vir 'n verhandeling of skripsie onder leiding van 'n studieleier. In sommige gevalle word vraestelle addisioneel vereis. Vir die studie word die verwerwing van 180 kredietpunte vereis, wat ooreenstem met 1800 studie-ure.

Op die aanbevelingsvorm wat eksaminatore voltooi, verskyn die aantal kredietpunte vir die verhandeling of skripsie, asook die aantal kredietpunte vir die vraestelle, indien enige. Hierdie toekenning van kredietpunte gee 'n aanduiding van die omvang van die verhandeling of skripsie relatief tot die vraestelle. 'n Skripsie moet voldoen aan dieselfde vereistes as 'n verhandeling, behalwe dat dit van kleiner omvang is.

### 1.2 Benoeming en rol van eksaminatore

dekaan benoem minstens twee eksaminatore, waarvan minstens een van buite die Universiteit moet wees. Geen eksaminator mag by die studie betrokke gewees het nie en die eksterne eksaminatore mag nie aan dieselfde instelling verbonde wees Eksaminatore moet ervare en aktiewe akademici of ander wetenskaplikes wees en moet verkieslik oor 'n PhD beskik. Hulle moet 'n beoordeling van die verhandeling of skripsie doen, gebaseer op internasionale wetenskaplike standaarde.



#### 1.3 Confidentiality

In order to ensure the independence of the examiners in writing the reports, they may not discuss the dissertation or mini-dissertation with each other. After the dissertation or mini-dissertation has been submitted, no communication may take place between the examiners and the supervisor, except through the Dean or his delegated.

### 1.4 Postgraduate Examination Committee

On receiving the examiners' reports, the supervisor compiles a synoptic report and passes it on to the research director concerned, who presents a recommendation with regard to the result to the Postgraduate Examination Committee of the Faculty of Natural and Agricultural Sciences. The recommendation of this committee is submitted to Faculty Management, who has final decision authority in this regard. Should the examiners not be unanimous of opinion regarding the evaluation of the dissertation or mini-dissertation, the Dean takes the steps he deems necessary to get a result.

# 2 Excerpts from the General Academic Rules for the master's degree

- Whereas a general master's degree must be aimed at educating and training researchers who can contribute to the development of knowledge at an advanced level, the professional master's degree must be aimed at educating and training graduates for advanced and specialised professional employment with the ability to contribute to the development of knowledge at an advanced level.
- A-Rule 4.11.7.4: A research product may only be referred back to a candidate once and, after revision, be submitted once for re-examination.
- Dissertation: Refers to a manuscript prepared for examination purposes, including a single published research article or set of published research articles or unpublished manuscript(s) in article format, in accordance with the prescripts of documentation, argumentation,

#### 1.3 Vertroulikheid

Ten einde die onafhanklikheid van die verslae van die eksaminatore te verseker, mag die eksaminatore nie onderling die verhandeling of skripsie bespreek nie. Nadat die verhandeling of skripsie ingedien is, mag daar nie kommunikasie tussen die eksaminatore en die studieleier te wees nie, behalwe via die dekaan of sy gedelegeerde.

#### 1.4 Nagraadse Eksamenkomitee

Na ontvangs van die eksaminatorsverslae, stel die studieleier 'n samevattende verslag op en gee dit deur aan die betrokke navorsingsdirekteur, wat 'n aanbeveling oor die uitslag aan die nagraadse eksamenkomitee van die Fakulteit Natuur- en Landbouwetenskappe Die aanbeveling van die nagraadse eksamenkomitee dien by die Fakulteitsbestuur, wat finale besluitnemingsbevoegdheid hieroor het. Waar die eksaminatore ten opsigte van die evaluering van 'n verhandeling of skripsie nie eenparig is nie, doen die dekaan wat nodig is om 'n uitslag te verkry.

#### 2 Uittreksels uit die Algemene Akademiese Reëls vir die Mgraad

- Terwyl 'n algemene meestersgraad gerig moet wees op onderwys en opleiding van navorsers wat tot die ontwikkeling van kennis op 'n gevorderde vlak kan bydra, moet die professionele meestersgraad gerig wees op onderwys en opleiding van gegradueerdes vir gevorderde en gespesialiseerde professionele indiensneming om in staat te wees om by te dra tot die ontwikkeling van kennis op 'n gevorderde vlak.
- A-Reël 4.117.4: 'n Navorsingsproduk mag slegs eenmalig na 'n kandidaat terugverwys word en, na hersiening, eenkeer vir hereksaminering ingedien word.
- Verhandeling: Verwys na 'n manuskrip voorberei vir eksaminering, ingesluit 'n enkele gepubliseerde navorsingsartikel of 'n versameling van gepubliseerde navorsingsartikels of ongepubliseerde manuskrip(te) in artikelformaat in ooreenstemming met die voorskrifte van dokumentasie, argumentasie, taal en styl waarin die student bewys moet verskaf dat



language and style in which the student must provide proof that he/she is conversant with the method of research, and which is presented in partial or full compliance with the requirements for the prescribed outcomes for a masters' degree from the University

#### 3 Guidelines for examination

### 3.1 Requirements for dissertation/mini-dissertation

To have his/her dissertation or mini-dissertation approved the candidate must provide proof of compliance with the requirements listed in 4.1 below.

A master's study is essentially a training course to equip the candidate with skills for employment in the relevant field or for further independent research. Therefore, the dissertation or mini-dissertation does not need to be an original contribution to the field of research.

The scope and duration of master's studies tend to expand beyond the expectations for the degree. Based on the point of view that the PhD degree is the most appropriate opportunity for more in-depth research, the Faculty makes a concerted attempt to narrow down the scope of master's studies.

In terms of the general academic rules of the University, candidates are allowed to submit a dissertation/mini-dissertation in article format. In addition to the general guidelines in this document, there also appear further explanatory guidelines for this case in the appendix below.

### 3.2 Requirements for awarding distinction (A-Rule 4.11.6)

A candidate must obtain at least 75% for a dissertation or mini-dissertation to pass it with distinction. Conferring a distinction comprises that the examiner must be convinced of the outstanding quality of the dissertation or mini-dissertation at master's level, taking into account the available time, the complexity of the methodology and the degree of difficulty of the relevant subject material.

Compliance with the following criteria may serve as a guideline:

• The subject content is of high quality.

hy/sy met die metode van navorsing vertroud is en wat en aangebied word vir gedeeltelike of volle voldoening aan die vereistes vir die voorgeskrewe uitkomste vir 'n meestersgraad van die Universiteit.

#### 3 Riglyne vir eksaminering

### 3.1 Vereistes vir 'n verhandeling/skripsie

Vir die aanvaarding van 'n verhandeling of skripsie, moet die kandidaat bewys lewer van voldoening aan die vereistes in 4.1 hieronder gelys.

Die M-studie is in wese 'n opleidingskursus om die kandidaat toe te rus met vaardighede vir indiensneming in die bepaalde veld of vir verdere onafhanklike navorsing. Daarom hoef die verhandeling of skripsie nie 'n oorspronklike bydrae tot die veld van ondersoek te lewer nie.

Omdat die omvang en duur van die M-studie geneig is om buite verhouding tot die verwagtinge van die graad toe te neem, probeer die Fakulteit doelbewus om die omvang daarvan te verminder, met die siening dat die PhD-graad die plek vir meer in-diepte navorsing is.

Ingevolge die algemene reëls van die Universiteit, word kandidate toegelaat om 'n verhandeling/skripsie in artikelformaat in te dien. Benewens die algemene riglyne in hierdie dokument, verskyn daar ook verdere verduidelikende riglyne hieroor in die aanhangsel hieronder

### 3.2 Vereistes vir toekenning van 'n onderskeiding (A-Reël 4.11.6)

Die toekenning van 'n onderskeiding van minstens 75% vir 'n verhandeling of skripsie hou in dat die eksaminator oortuig is dat dit uitstaande op M-vlak is, met inagneming van die beskikbare tyd, die kompleksiteit van die metodologie en die moeilikheidsgraad van die betrokke vakmateriaal. Voldoening aan die volgende kriteria kan as riglyn dien:

- Die vakkundige inhoud getuig van hoë kwaliteit.
- Die struktuur van die dokument voldoen aan hoë standaarde.
- Die aanbieding is uitstekend. Kleiner redaksionele foutjies soos betreffende



- The structure of the document complies with high standards.
- The presentation is excellent. Less significant editorial errors regarding typing or spelling do not need to be a disqualification, but repeated errors indicating carelessness and a lack of accuracy may contribute to disqualification of a distinction.

Although an original contribution to the subject area is not a requirement, it may be taken into consideration in awarding a distinction.

#### 4 Examiner's report

The examiner is requested to submit a general, written examiner's report and to submit it together with the synoptic report form. Guidelines for the written report follow below.

### 4.1 Explanation of the extent of compliance with requirements

The examiner is required to comment in detail on compliance or non-compliance of the candidate to the following criteria:

- 4.1.1 Understanding the nature and objectives of the study, as well as the scientific principles that form the basis of the study
- 4.1.2 Sufficient knowledge of related literature
- 4.1.3 Demonstrating mastery of the appropriate techniques and analytical methods
- 4.1.4 Thorough, logical and coherent evaluation of the meaningfulness of the findings
- 4.1.5 Critical and independent thought demonstrating insight
- 4.1.6 Report writing on the studies and on the attainment of the objectives in an acceptable scientific format that is systematic, logical and persuasive
- 4.1.7 An original contribution to the field of study (not a requirement to pass)

#### 4.2 Unacceptable aspects

Comment on unacceptable aspects or sections of the dissertation or mini-dissertation, the nature of these shortcomings and what the candidate could do to rectify the shortcomings.

'n tikwerk of hoef spelling nie diskwalifikasie te wees nie, maar algemeen voorkomende foute wat dui onversigtigheid en gebrek aan noukeurigheid, kan meewerk om nie 'n onderskeiding toe te ken nie.

Ofskoon 'n oorspronklike bydrae tot die vakgebied nie 'n vereiste is nie, kan so 'n bydrae in ag geneem word in die toekenning van 'n onderskeiding

#### 4 Die eksaminator se verslag

Die eksaminator word gevra om 'n algemene geskrewe eksaminatorsverslag en die aangehegte opsommende verslagvorm in te dien. Die volgende dien as riglyne vir die geskrewe verslag.

### 4.1 Verduideliking van mate van voldoening aan vereistes

Gee in besonderhede kommentaar oor die voldoening al dan nie van die kandidaat aan die volgende kriteria:

- 4.1.1 Begrip van die aard en doelstellings van die studie asook die wetenskaplike beginsels wat die studie onderlê
- 4.1.2 Voldoende bekendheid met die verbandhoudende literatuur
- 4.1.3 Bemeestering van die toepaslike tegnieke en analitiese metodes
- 4.1.4 Deeglike, logiese en samehangende beoordeling van die betekenisvolheid van die bevindinge
- 4.1.5 Kritiese en onafhanklike denke wat van insig getuig
- 4.1.6 Verslaggewing van die studie en bereiking van die doelstellings in 'n aanvaarbare wetenskaplike formaat, wat sistematies, logies en oorredend is.
- 4.1.7 Die lewer van 'n oorspronklike bydrae tot die studieveld (nie 'n vereiste om te slaag nie).

#### 4.2 Onaanvaarbare aspekte

Lewer kommentaar oor aspekte of afdelings van die verhandeling of skripsie wat nie aanvaarbaar is nie, die aard van hierdie tekortkomings en wat die kandidaat sou kon doen om hierdie tekortkomings te oorkom.



#### 5 Recommendation of examiner

Write the recommendation on the result of the examination, as well as the marks allocated, on the attached synoptic report form.

#### 6 Submission of the report

Email the signed report together with the form, Recommendation of examiner regarding master's dissertation/mini-dissertation to the responsible officer. (The person who sent you the request). The report must reach the University within four weeks in the case of a Masters dissertation/mini-dissertation.

#### 7 Feedback to candidate

After the final decision on the result, the adjustments required in the reports by the examiners are supplied to the candidate without revealing the identities of the examiners.

If it is decided that the degree will be conferred, the names of the examiners are usually also revealed to the candidate, provided the examiners give their permission.

#### 8 Acknowledgement

The Faculty of Natural and Agricultural Sciences puts a high value on the opinion of examiners of the master's dissertations and minidissertations and appreciates the time and energy the examiners spend towards maintaining and improving the standard of the master's degree.

#### 5 Aanbeveling van eksaminator

Bring die aanbeveling oor die uitslag van die eksaminering, sowel as die punt toegeken op die aangehegte opsommende verslagvorm aan.

#### 6 Indiening van die verslag

E-pos die ondertekende verslag saam met die Aanbeveling van eksaminator insake Magisterverhandeling/-skripsie aan die verantwoordelike beampte. (Die persoon van wie u die versoek ontvang het). Die verslag moet die Universiteit bereik binne vier weke in die geval van 'n verhandeling/skripsie vir die Magistergraad

#### 7 Terugvoer aan die kandidaat

Na 'n finale besluit oor die uitslag, word korreksies soos vereis uit die verslae van die eksaminatore anoniem aan die kandidaat bekendgemaak.

Indien die besluit is dat die graad toegeken word, word die name van die eksaminatore ook normaalweg aan die kandidaat bekendgemaak, op voorwaarde dat die eksaminatore hiertoe instem.

#### 8 Erkenning

Die Fakulteit Natuur- en Landbouwetenskappe heg groot waarde aan die menings van die eksaminatore vir die M-verhandelings en skripsies en waardeer die tyd en energie bestee om die standaard van die M-graad te handhaaf en te verbeter.



### ▶ 6.12.3 EXPLANATORY NOTES ON THE ARTICLE MODEL FOR MASTER'S DISSERTATIONS, MINI-DISSERTATIONS AND DOCTORAL THESES IN THE FACULTY OF NATURAL AND AGRICULTURAL SCIENCES /

VERDUIDELIKENDE AANTEKENINGE OOR DIE ARTIKELMODEL VIR MEESTERSVERHANDELINGS, SKRIPSIES EN DOKTORALE PROEFSKRIFTE IN DIE FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

#### BACKGROUND

The Faculty of Natural and Agricultural Sciences adopted the article model for the submission of the research component of postgraduate studies in terms of the general rules of the North-West University, which make provision for this model. Advantages are that this encourages publication of the research results in scientific journals and also that students are trained in article writing in the course of their postgraduate studies.

This note provides a short explanation of the requirements, rules and guidelines for the use of this model.

### REQUIREMENTS OF MASTER'S AND DOCTORAL TRAINING

The basic quality and scientific requirements for Master's and Doctoral students, who prefer the article format, are the same as for the traditional model concerning completion of a dissertation, mini-dissertation or a thesis.

The General Rules of the University contain the following requirements for dissertations and mini-dissertations in article format:

- Where a candidate is allowed to submit the research product in the form of a research article or articles, such research product must be presented for examination purposes as an integrated unit, supplemented with a problem statement, an introduction and a synoptic conclusion as prescribed by faculty rules and the manuscript submission guidelines, or the url link to the manuscript guidelines, of the journal or journals concerned.
- Where any research article or internationally examined patent to which the candidate for a master's degree and other authors or inventors have contributed

#### AGTERGROND

Ingevolge die Algemene Reëls van die Noordwes-Universiteit, wat vir die artikelmodel vir indiening van die navorsingskomponent van nagraadse studies voorsiening maak, het die Fakulteit Natuur- en Landbouwetenskappe hierdie model aanvaar. Die voordele is dat dit publikasie van die navorsingsresultate in vaktydskrifte aanmoedig en ook dat studente in die loop van hul nagraadse studie in die skryf van artikels opgelei word.

Hierdie aantekeninge voorsien 'n bondige verduideliking van die vereistes, reëls en riglyne vir die gebruik van hierdie model.

#### VEREISTES VAN MEESTERS- EN DOKTORALE OPLEIDING

Die basiese gehalte van en wetenskaplike vereistes vir meesters- en doktorale studente wat die artikelformaat verkies, is dieselfde as vir die tradisionele model wat betref afhandeling van 'n verhandeling, skripsie en proefskrif.

Die Algemene Akademiese Reëls van die Universiteit bevat die volgende vereistes vir verhandelings en skripsies in artikelformaat:

Waar 'n kandidaat toegelaat word om 'n navorsingsproduk in die vorm van 'n navorsingsproduk in die vorm van 'n navorsingsartikel of artikels in te dien, moet so 'n navorsingsproduk, vir eksamineringsdoeleindes, as 'n geïntegreerde eenheid, aangevul met 'n probleemstelling, 'n inleiding en 'n samevattende slot, soos voorgeskryf deur fakulteitsreëls en die riglyne vir die indiening van die manuskrip, of die webskakel vir die manuskripriglyne van die betrokke tydskrif of tydskrifte, aangebied word.



is submitted as the research product of a master's degree programme, the candidate must obtain a written statement from each co-author and co-inventor in which it is stated that such co-author or co-inventor grants permission for the research product to be used for the stated purpose, and in which it is further indicated what each co-author's or co-inventor's academic contribution to the research product concerned was.

 Where co-authors or co-inventors .... were involved in the development of the research product, the candidate must mention this fact in the preface, and must include the statement of each co-author or co-inventor immediately following the preface to the research product.

The General Academic Rules contain the same requirements for a thesis for a doctoral degree.

#### STRUCTURE AND CHARACTERISTICS OF THE ARTICLE MODEL

#### Structure

Typically, the structure of the document will include the following (from a description in the University's Manual for Master's and Doctoral Studies):

- Title page
- An abstract
- Acknowledgements
- Table of contents
- A preface comprising the following:
  - A statement that the article format has been selected
  - The student's share in the research in the case of co-authors for the article(s)/manuscript(s)
  - For each article which was submitted, but not yet published, the name of the journal concerned.
  - Permission from co-authors that the article(s)/manuscript(s) can be submitted for degree purposes
  - Permission from the editor of the journal if any copyright is involved
- Literature review.
- Methods (optional, depending on the type of articles/manuscripts)
- Manuscripts
  - Unpublished manuscripts or
  - Published articles

- Waar enige navorsingsartikel of internasionaalerkende patent, waartoe die kandidaat vir 'n meestersgraad en ander skrywers of uitvinders bygedra het, ingedien word as die navorsingsproduk van moet meestersgraadprogram, kandidaat 'n geskrewe verklaring van elke medeskrywer of mede-uitvinder verkry, waarin gestel word dat so'n medeskrywer of mede-uitvinder toestemming verleen dat die navorsingsproduk gebruik word vir die gestelde doel en waarin verder aangedui word wat elke medeskrywer of medeuitvinder se akademiese bydrae tot die betrokke navorsingsproduk was.
- Waar medeskrywers of mede-uitvinders ...
  in die ontwikkeling van die
  navorsingsproduk betrokke was, moet die
  kandidaat dit in die voorwoord noem en die
  verklaring van elke medeskrywer of medeuitvinder direk na die voorwoord tot die
  navorsingsproduk insluit.

Die Algemene Akademiese Reëls bevat dieselfde vereistes vir 'n proefskrif vir 'n doktorsgraad.

#### STRUKTUUR EN KENMERKE VAN DIE ARTIKELMODEL

#### Struktuur

Die struktuur van die dokument sal tipies die volgende insluit (uit 'n beskrywing in die Universiteit se Handleiding vir Meesters en Doktorale Studie):

- Titelblad
- 'n Opsomming
- Dankbetuigings
- Inhoudsopgawe
- 'n Voorwoord wat uit die volgende bestaan:
  - 'n Verklaring dat die artikelformaat gekies is
  - Die student se aandeel in die navorsing in die geval van mede-outeurs vir die artikel(s)/manuskrip(te)
  - Vir elke artikel wat ingedien word maar nog nie gepubliseer is nie, die naam van die betrokke vaktydskrif.
  - Toestemming van die redakteur van die vaktydskrif indien enige outeursreg betrokke is
  - Toestemming van die mede-outeurs dat die artikel(s)/manuskrip(te) vir graaddoeleindes ingedien mag word
- Literatuuroorsig
- Metodes (opsioneel, na gelang van die tipe artikel(s)/manuskrip(te)



- Each article must be preceded by a copy of the guidelines for authors for the journal concerned.
- Conclusion.
- Bibliography.
- Addenda.

#### Literature review and introduction

The literature review that is presented in an article is less comprehensive than in a traditional dissertation or thesis. However, it must still be taken into account that in a dissertation or thesis the student must provide proof of being familiar with and in control of the appropriate subject literature. A focussed literature analysis must be included. Such a review may also be in the form of a review article.

The introduction can be integrated with the literature review, depending on the nature of the research subject. It will, amongst others, give some brief background and motivation of the research, the questions asked and will explain the structure of the document to the reader. The introduction has to contextualise the research in a logical and coherent manner.

#### Conclusion

The conclusion at the end of the document is written specifically to provide an integrated summary and discussion of the relevant conclusions and should contain specific recommendations for practice and/or further research. Some of the content in the conclusion could be repetition of what has been discussed in the individual manuscripts.

#### • ARTICLES THAT MAY BE USED

In addition to other requirements that are stated in the formal prescriptions, unless the student provides an acceptable motivation, only articles that flow forth directly from the student's research after registration for the master's or doctoral degree at NWU, for a dissertation or thesis, under supervision of the appointed supervisor/promoter, may be submitted in article format.

#### • QUANTITY AND QUALITY

There is no prescribed number of articles in this model. However, the number of articles submitted must convince the examiners in terms of the number and/or extent that the candidate

- Manuskripte
  - o Ongepubliseerde manuskripte of
  - Gepubliseerde artikels
- Elke artikel moet voorafgegaan word deur 'n afskrif van die riglyne vir die betrokke vaktydskrif
- Slot
- Bibliografie
- Bylaes

#### > Literatuuroorsig en inleiding

Die literatuuroorsig wat in 'n artikel aangebied word, is minder omvattend as in 'n tradisionele verhandeling of proefskrif. Daar moet egter steeds in aanmerking geneem word dat in 'n verhandeling of proefskrif studente bewys moet lewer dat hulle bekend is met en in beheer is van die toepaslike vakliteratuur. 'n Gefokusde literatuurontleding moet ingesluit word. So 'n oorsig kan ook in die vorm van 'n oorsigartikel wees.

Die inleiding kan met die literatuuroorsig geïntegreer wees, na gelang van die aard van die navorsingsonderwerp. Dit sal onder andere 'n kort agtergrond tot en motivering vir die navorsing en die vrae wat gestel word, gee en sal die struktuur van die dokument aan die leser verduidelik. Die inleiding moet die navorsing op 'n logiese en samehangende wyse kontekstualiseer.

#### > Slot

Die slot aan die einde van die dokument word spesifiek geskryf om 'n geïntegreerde opsomming en bespreking van die toepaslike gevolgtrekkings te gee en moet spesifieke aanbevelings vir die praktyk en/of verdere navorsing bevat. Van die inhoud van die slot kan 'n herhaling wees van wat in die individuele manuskripte bespreek is.

#### ARTIKELS WAT GEBRUIK MAG WORD

Benewens die ander vereistes wat in die formele voorskrifte gestel word, mag slegs artikels wat regstreeks voortvloei uit die student se navorsing ná registrasie vir die meesters- of doktorsgraad aan die NWU, vir 'n verhandeling of proefskrif, onder toesig van die aangestelde studieleier/promotor, in artikelformaat ingedien word, tensy die student 'n aanvaarbare motivering voorsien.

#### GEHALTE EN HOEVEELHEID

Daar is geen voorgeskrewe hoeveelheid artikels in hierdie model nie. Die getal artikels wat ingedien word, moet egter die eksaminatore wat betref getal en/of omvang oortuig dat die



has truly complied with the requirements for a master's or doctoral degree.

The quality, nature and extent of the research that is described in the articles may not differ from that of a traditional dissertation or thesis. The difference is only found in the presentation of the results.

#### MANUSCRIPTS VERSUS PUBLISHED ARTICLES

- Students must indicate to which peer reviewed journal they intend to submit any unsubmitted manuscripts. In the case of submitted publications, students must indicate to which journal it was sent.
- The publication of the manuscripts that are included in the document is not a prerequisite for the examination of the document. However, the Faculty requires that, in case of a master's dissertation or a mini-dissertation, at least one of the manuscripts should have been submitted for publication, and in the case of a doctoral thesis, that at least one of manuscripts should have been accepted for publication, before submission of the document for examination.
- The submission of the manuscript(s) for publication will be left to the discretion of the study leader / supervisor to determine readiness.
- A guideline for students and supervisors is to avoid presenting research results in article format if they do not really intend to publish such articles.

#### CO-AUTHORSHIP

In some cases, students participate in research conducted by teams. Most of the articles from this kind of research are co-authored. Students, who are part of these research teams, must therefore indicate what their own contribution to the research was, and also include the permission that was obtained from the co-authors to use an article as part of their document.

kandidaat werklik aan die vereistes vir die meesters- of doktorsgraad voldoen het.

Die gehalte, aard en omvang van die navorsing wat in die artikels beskryf word, mag nie van dié van 'n tradisionele verhandeling of proefskrif verskil nie. Die verskil word slegs in die aanbieding van die resultate aangetref.

### MANUSKRIPTE TEENOOR GEPUBLISEERDE ARTIKELS

- Studente moet aandui aan watter vaktydskrif, wat aan eweknie-evaluering onderwerp is, hulle voornemens is om onvoorgelegde manuskripte voor te lê. In die geval van voorgelegde publikasies moet studente aandui aan watter vaktydskrif dit gestuur is.
- Die publisering van die manuskripte wat in die dokument ingesluit is, is nie 'n voorvereiste vir die eksaminering van die dokument nie. Die Fakulteit vereis egter dat. die geval van meestersverhandeling of skripsie, 'n minstens een van die manuskripte vir publikasie voorgelê moes gewees het en in die geval van 'n doktorale proefskrif, dat minstens een van die manuskripte vir publikasie aanvaar moes gewees het, voordat die dokument vir eksaminering ingedien word.
- Die voorlegging van die manuskrip(te) vir publikasie sal, wat betref gereedheid, aan die goeddunke van die studieleier/promotor oorgelaat word.
- 'n Riglyn vir studente en studieleiers is om aanbieding van navorsingsresultate in artikelformaat te vermy indien hulle nie werklik van plan is om sodanige artikels te publiseer nie.

#### MEDESKRYWERS

In sommige gevalle neem studente deel aan navorsing wat deur spanne gedoen is. Die meeste van die artikels uit hierdie soort navorsing word deur mede-outeurs geskryf. Studente wat deel van hierdie navorsingspanne uitmaak, moet dus aandui wat hul eie bydrae tot die navorsing was en moet ook die toestemming insluit wat van mede-outeurs verkry is om 'n artikel as deel van hul dokument te gebruik.



# > 6.12.4.B: RECOMMENDATIONS OF EXAMINERS REGARDING MASTER'S DISSERTATION/MINI-DISSERTATION

### FACULTY OF NATURAL AND AGRICULTURAL SCIENCES/ FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

# Recommendation of examiner regarding Master's dissertation/mini-dissertation / Aanbeveling van Eksaminator insake M-Verhandeling/-skripsie

(To be completed by the Facult before dispatching)	y Officer	(Moet deur die Fakulteitsbeampte voor afsending voltooi word)				
Dissertation / Mini-dissertation		Verhandeling / Skrips	sie			
(Delete that which is not applicable)		(Skrap wat nie van to	epassing is nie)			
Candidate /		Examiner /				
Kandidaat:		Eksaminator:				
Degree /		Programme code /				
Graad:		Programkode:				
Title / Titel:						
Total of credits for examination papers / Kredietpunttotaal vir vraestelle:	mini-disse Kredietpu		Number of examination papers / Aantal vraestelle:			

#### **Evaluation / Evaluering**

Assess the extent to which the candidate has complied with each of the criteria below by marking the appropriate box with an "X" every time. Furthermore, you are also requested to submit a general, written examiner's report.	Beoordeel die mate waarin die kandidaat aan elk van die kriteria hieronder voldoen het, deur telkens die toepaslike blokkie met 'n kruisie te merk. Hierbenewens word u gevra om ook 'n algemene, geskrewe eksaminatorsverslag in te dien.
--	--



Criterion/Kriterium	Insufficient/ Onvoldoende	Acceptable/ Aanvaarbaar	GoodGoed	Outstanding/ Uitnemend
<ul> <li>Understanding the aim and objectives of the study as well as the principles on which it is based/ Begrip van die aard en doelstellings van die studie, asook die wetenskaplike beginsels wat die studie onderlê</li> </ul>				
Sufficient knowledge of the relevant literature/ Voldoende bekendheid met die verbandhoudende literatuur				
Demonstrating mastery of the appropriate techniques and analytical methods/ Bemeestering van die toepaslike tegnieke en analitiese metodes				
Thorough, logical and coherent assessment of the significance of the findings/ Deeglike, logiese en samehangende beoordeling van die betekenisvolheid van die bevindinge				
Critical and independent thought that demonstrates insight/ Kritiese en onafhanklike denke wat van insig getuig				
<ul> <li>Reporting on the study and achievement of the objectives in an acceptable scientific format that is systematic, logical and persuasive/ Verslaggewing van die studie en bereiking van die doelstellings in 'n aanvaarbare wetenskaplike formaat, wat sistematies, logies en oorredend is.</li> </ul>				

### Making known the examiner's identity / Bekendmaking van die identiteit van die eksaminator

Do you agree that, if the outcome would be that
the candidate passes, your name may be made
known to the candidate? (Except for the
adjustments you recommend, your report will
not be made known to the candidate.)

Stem u in dat, indien daar besluit word dat die kandidaat slaag, u naam aan die kandidaat bekendgemaak mag word? (Behalwe vir korreksies wat u aanbeveel, word u verslag nie bekendgemaak nie.)

Yes/Ja	
No/Nee	



#### **Recommendation / Aanbeveling**

disse recoi	e examined the above mentioned ertation/mini-dissertation and my mmendation agrees with the option ated by an "X" in the appropriate box.	Ek het die bogenoemde verhandeling/skripsie geëksamineer en ek beveel die opsie aan wat deur "X" in die toepaslike blokkie hieronder aangedui word.		
1.	The dissertation/mini-dissertation pass	ses unconditionally/		
	Die verhandeling/skripsie slaag onvoo	orwaardelik		
2	The dissertation/mini-dissertation passes on condition that specified revisions be made to the satisfaction of the supervisor. (If you mark this option, please attach to this form a complete list of the errors to be corrected.)/			
		porwaarde dat spesifieke hersienings tot bevrediging erdie opsie merk, heg by hierdie vorm 'n volledig rd, aan)		
The dissertation/mini-dissertation passes on condition that specified revisions of a sun nature be made to the satisfaction of the examiners or the academic director concerned mark this option, please attach to this form a complete list of the errors to be con				
	substantiewe aard tot die bevredigii	voorwaarde dat gespesifiseerde hersienings van die eksaminatore of die betrokke akadere opsie merk, heg by hierdie vorm 'n volledige lysan)	miese	
4.	The dissertation/mini-dissertation does not pass in its current format, in which case it is referred back to the candidate for revision, elaboration or amendment and resubmission for reexamination( If you mark this option, the aspects which need attention are described in detail in the attached written report.)/			
	terugverwys word vir hersiening, uitbre	die huidige formaat nie, in welke geval dit na die kand eiding of wysiging en herindiening vir hereksaminering spekte wat aandag moet kry in besonderhede i kryf).	g. <b>(As</b>	
5.	The dissertation/mini-dissertation does	s not pass and the candidate fails./		
	Die verhandeling/skripsie slaag nie en	n die kandidaat druip.		
Mark	for dissertation/mini-dissertation			
(Award a mark in agreement with your recommendation above.)		%		
Punt	vir die verhandeling/skripsie			
	'n punt toe in ooreenstemming met u eveling oor die uitslag hierbo.)			
	ature of examiner/ Itekening van eksaminator	Date/ Datum		



# ➤ 6.12.4.C: GUIDELINES FOR THE EXAMINATION OF A THESIS FOR A DOCTORAL DEGREE /

# RIGLYNE VIR DIE EKSAMINERING VAN 'N PROEFSKRIF VIR 'N DOKTERSGRAAD

#### 1 General

#### 1.1 Contents of PhD studies

PhD studies usually follow upon a master's degree and comprise research for a thesis under the guidance of a promoter with a view to obtaining 360 credits in accordance with 3600 hours of study.

### 1.2 Appointment and role of examiners

The Dean appoints at least three examiners of whom the majority must be external to the University. None of the examiners may have been involved with the studies and the external examiners may not be from the same institution. Examiners must be experienced and active academics or other scientists, and must, except for exceptional cases, have a PhD. They must evaluate the thesis according to international scientific standards.

#### 1 Algemeen

#### 1.1 Inhoud van die PhD-studie

Die PhD-studie volg normaalweg op die verkryging van 'n M-graad en behels navorsing vir 'n proefskrif onder leiding van 'n promotor ten einde 360 kredietpunte, wat ooreenstem met studietyd van 3600 uur, te verwerf.

### 1.2 Benoeming en rol van eksaminatore

Die Dekaan benoem minstens drie eksaminatore, waarvan die meerderheid van buite die Universiteit moet wees. Geen eksaminator mag by die studie betrokke gewees het nie en die eksterne eksaminatore mag nie aan dieselfde instelling verbonde wees nie. Eksaminatore moet ervare en akademici of ander wetenskaplikes wees en moet, behalwe in uitsonderlike gevalle, oor 'n PhD beskik. Hulle moet die proefskrif beoordeel volgens internasionale wetenskaplike standaarde.



#### 1.3 Confidentiality

In order to ensure the independence of the examiners in writing their reports, they may not discuss the thesis with each other. After the thesis has been submitted, no communication may take place between the examiners and the promoter, except through the Dean or his delegated.

### 1.4 Procedures on receiving the reports of the examiners

On receiving the examiners' reports, the promoter compiles a synoptic report and passes it on to the research director concerned, who presents a recommendation with regard to the result to the Postgraduate Examination Committee of the Faculty of Natural and Agricultural Sciences. The recommendation of this committee is submitted to Faculty Management, who has final decision ability in this regard.

Should the examiners not be unanimous of opinion regarding the evaluation of the thesis, the Dean takes the steps deemed necessary to get a result.

#### 1.3 Vertroulikheid

Ten einde die onafhanklikheid van die verslae van die eksaminatore te verseker, mag die eksaminatore die proefskrif nie onderling bespreek nie. Nadat die proefskrif ingedien is, mag daar nie kommunikasie tussen die eksaminatore en die promotor wees nie, behalwe via die dekaan of sy gedelegeerde.

### 1.4 Prosedures na die ontvang van die verslae van die eksaminatore

Na ontvangs van die eksaminatorsverslae, stel die promotor 'n samevattende verslag op en gee dit deur aan die betrokke navorsingsdirekteur, wat 'n aanbeveling oor die uitslag aan die Nagraadse Eksamenkomitee van die Fakulteit Natuur- en Landbouwetenskappe voorlê. Die aanbeveling van die Nagraadse Eksamenkomitee dien by die Fakulteitsbestuur, wat finale besluitnemingsbevoegdheid hieroor het.

Waar die eksaminatore ten opsigte van die evaluering van 'n proefskrif nie eenparig is nie, doen die Dekaan wat nodig is om 'n uitslag te verkry.



#### 2 Excerpts from the General Academic Rules for the PhD degree

- The examiners of a thesis, mini-thesis or any other research product are required to provide an assessment of the question whether the research contains proof that the candidate demonstrates insight into the field and has made a distinct and original scholarly contribution to the knowledge base of the field, either by way of the pronouncement and dissemination of new facts or insights, or by means of the exercise of independent critical skills.
- A research product may only be referred back to a candidate once and, after revision, be submitted once for reexamination. (A-Rule 5.11.6.4)

# 3 The thesis as original contribution to knowledge

The examiner is specifically required to judge whether the thesis conforms to the requirement of being an original contribution to existing knowledge in the subject area and whether it provides proof of independent critical ability in handling material from subject literature as well as the new contribution.

#### 2 Uittreksels uit die Algemene Akademiese Reëls vir die PhD-graad

- Van die eksaminatore vir 'n proefskrif, miniproefskrif ander of enige navorsingsproduk, word verwag om 'n oordeel uit te spreek oor die vraag of die navorsing bewys bevat dat die kandidaat insig toon in die veld en 'n duidelike en oorspronklike wetenskaplike bydrae tot die bestaande kennis in die veld gemaak het, óf deur die konstatering en verspreiding van nuwe feite en insigte, óf deur die beoefening onafhanklike kritiese van vaardighede.
- 'n Navorsingsproduk mag slegs eenkeer na die kandidaat terugverwys word en, na hersiening, eenkeer ingedien word vir hereksaminering. (A-Reël 5.11.6.4)

# 3 The thesis as original contribution to knowledge

Die eksaminator word spesifiek gevra om te oordeel of die proefskrif aan die vereiste voldoen om 'n oorspronklike bydrae tot bestaande kennis in die vakgebied te maak en of dit bewys lewer van 'n onafhanklike kritiese vermoë in die hantering van stof uit die literatuur sowel as van die nuwe bydrae.



#### 4 The Examiner's report

The examiner is requested to submit a formal, written examiner's report on the thesis. The guidelines below are to be followed in writing the report.

### 4.1 Explanation of extent to which the thesis complies with requirements

Comment in detail on the compliance or noncompliance of the candidate with the following criteria:

- 4.1.1 Original contribution to knowledge of the subject area
- 4.1.2 Insight into the nature and objectives of the study as well as into the scientific principles that form the basis of the study
- 4.1.3 Sufficient knowledge of relevant literature
- 4.1.4 Demonstrating mastery of the appropriate techniques and analytical methods 4.1.5 Thorough, logical and coherent assessment of the significance of the findings
- 4.1.6 Critical and independent thought demonstrating insight
- 4.1.7 Report writing on the studies and on the achievement of the objectives in an acceptable scientific format that is systematic, logical and persuasive

#### 4.2 Strong and weak points

Comment on the weak and strong points of the thesis.

#### 5 Die Eksaminator se verslag

Die eksaminator word gevra om 'n formele geskrewe eksaminatorsverslag oor die proefskrif in te dien. Die volgende dien as riglyne vir die geskrewe verslag.

# 4.1 Verduideliking van die mate van voldoening van die proefskrif aan die vereistes

Gee in besonderhede kommentaar oor die voldoening al dan nie van die kandidaat aan die volgende kriteria:

- 4.1.1. Die lewer van 'n oorspronklike bydrae tot kennis in die vakgebied.
- 4.1.2. Begrip van die aard en doelstellings van die studie, asook die wetenskaplike beginsels wat die studie onderlê
- 4.1.3. Voldoende bekendheid met die verbandhoudende literatuur
- 4.1.4. Bemeestering van die toepaslike tegnieke en analitiese metodes
- 4.1.5. Deeglike, logiese en samehangende beoordeling van die betekenisvolheid van die bevindings
- 4.1.6. Kritiese en onafhanklike denke wat van insig getuig
- 4.1.7. Verslaggewing van die studie en die bereiking van die doelstellings in 'n aanvaarbare wetenskaplike formaat wat sistematies, logies en oorredend is.

#### 4.2 Sterk en swak punte

Lewer kommentaar oor die sterk- en swakpunte van die proefskrif.



#### 5 Thesis in article format

In terms of the general academic rules of the University, candidates are allowed to submit a thesis in article format. In addition to the general guidelines in this document, there also appear further explanatory guidelines for this case in the appendix below.

#### 6 Recommendation of examiner

Write the recommendation on the result of your examining the thesis on the attached synoptic report form.

#### 7 Submission of the report

Email the signed report together with the form, Recommendation of examiner regarding doctoral thesis to the responsible officer. (The person who sent you the request). The report must reach the University within six weeks in the case of a doctoral thesis

#### 8 Feedback to candidate

After the final decision on the result the adjustments required in the reports by the examiners are supplied to the candidate without revealing the identities of the examiners.

If it is decided that the degree will be conferred, the names of the examiners are usually also revealed to the candidate, provided the examiners give their permission.

#### 9 Acknowledgement

The Faculty of Natural and Agricultural Sciences puts a high value on the opinion of examiners of theses and appreciates the time and energy they spend on maintaining and improving the standard of the doctorate.

#### 5 Proefskrif in artikelformaat

Ingevolge die algemene akademiese reëls van die Universiteit, word kandidate toegelaat om 'n proefskrif in artikelformaat in te dien. Benewens die algemene riglyne in hierdie dokument, verskyn daar ook verdere verduidelikende riglyne hieroor in die aanhangsel hieronder.

## 6 Aanbeveling van die eksaminator

Bring die aanbeveling oor die uitslag van die eksaminering op die aangehegte opsommende verslagvorm aan.

#### 7 Indien van die verslag

E-pos die ondertekende verslag saam met die Aanbeveling van eksaminator insake Doktorale Proefskrif aan die verantwoordelike beampte. (Die persoon van wie u die versoek ontvang het) Die verslag moet die Universiteit bereik binne ses weke in die geval van 'n Doktorsgraad.

#### 8 Terugvoering aan kandidaat

Na 'n finale besluit oor die uitslag, word korreksies soos vereis uit die verslae van die eksaminatore anoniem aan die kandidaat bekendgemaak.

Indien daar besluit is dat die graad toegeken word, word die name van die eksaminatore ook normaalweg aan die kandidaat bekendgemaak, op voorwaarde dat die eksaminatore hiertoe instem.

#### 9 Erkenning

Die Fakulteit Natuur- en Landbouwetenskappe heg groot waarde aan die menings van die eksaminatore vir die PhD-proefskrif en waardeer die tyd en energie wat hulle bestee om die standaard van die PhD-graad te handhaaf en te verbeter.



#### ➤ 6.12.4.D: EXPLANATORY NOTES ON THE ARTICLE MODEL FOR MASTER'S DISSERTATIONS, MINI-DISSERTATIONS AND DOCTORAL THESES

VERDUIDELIKENDE AANTEKENINGE OOR DIE ARTIKELMODEL VIR MEESTERSVERHANDELINGS, SKRIPSIES EN DOKTORALE PROEFSKRIFTE IN DIE FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

#### 1 BACKGROUND

The Faculty of Natural and Agricultural Sciences adopted the article model for the submission of the research component of postgraduate studies in terms of the general rules of the North-West University, which make provision for this model. Advantages are that this encourages publication of the research results in scientific journals and also that students are trained in article writing in the course of their postgraduate studies.

This note provides a short explanation of the requirements, rules and guidelines for the use of this model.

#### 2 REQUIREMENTS OF MASTER'S AND DOCTORAL TRAINING

The basic quality and scientific requirements for Master's and Doctoral students, who prefer the article format, are the same as for the traditional model concerning completion of a dissertation, mini-dissertation or a thesis.

The General Rules of the University contain the following requirements for dissertations and mini-dissertations in article format:

• A-Rule 4.10.5: Where a candidate is allowed to submit the research product in the form of a research article or articles, such research product must be presented for examination purposes as an integrated unit, supplemented with a problem statement, an introduction and a synoptic conclusion as prescribed by faculty rules and the manuscript submission guidelines, or the

#### 1 AGTERGROND

Ingevolge die Algemene Reëls van die Noordwes-Universiteit, wat vir die artikelmodel vir indiening van die navorsingskomponent van nagraadse studies voorsiening maak, het die Fakulteit Natuur- en Landbouwetenskappe hierdie model aanvaar. Die voordele is dat dit publikasie van die navorsingsresultate in vaktydskrifte aanmoedig en ook dat studente in die loop van hul nagraadse studie in die skryf van artikels opgelei word.

Hierdie aantekeninge voorsien 'n bondige verduideliking van die vereistes, reëls en riglyne vir die gebruik van hierdie model.

#### 2 VEREISTES VAN MEESTERS-EN DOKTORALE OPLEIDING

Die basiese gehalte van en wetenskaplike vereistes vir meesters- en doktorale studente wat die artikelformaat verkies, is dieselfde as vir die tradisionele model wat betref afhandeling van 'n verhandeling, skripsie en proefskrif.

Die Algemene Akademiese Reëls van die Universiteit bevat die volgende vereistes vir verhandelings en skripsies in artikelformaat:

A-Reël 4.10.5: Waar 'n kandidaat toegelaat word om 'n navorsingsproduk in die vorm van 'n navorsingsartikel of artikels in te dien, moet so 'n navorsingsproduk, vir eksamineringsdoeleindes, as 'n geïntegreerde eenheid, aangevul met 'n probleemstelling, 'n inleiding en 'n samevattende slot, soos voorgeskryf deur fakulteitsreëls en die riglyne vir die indiening van die manuskrip, of die



url link to the manuscript guidelines, of the journal or journals concerned.

- A-Rule 4.10.8: Where any research article or internationally examined patent to which the candidate for a master's degree and other authors or inventors have contributed is submitted as the research product of a master's degree programme, the candidate must obtain a written statement from each co-author and co-inventor in which it is stated that such co-author or co-inventor grants permission for the research product to be used for the stated purpose, and in which it is further indicated what each co-author's or co-inventor's academic contribution to the research product concerned was.
- A-Rule 4.10.9: Where co-authors or coinventors .... were involved in the development of the research product, the candidate must mention this fact in the preface, and must include the statement of each co-author or co-inventor immediately following the preface to the research product.

The General Academic Rules contain the same requirements for a thesis for a doctoral degree.

# 3 STRUCTURE AND CHARACTERISTICS OF THE ARTICLE MODEL

#### 3.1 Structure

Typically, the structure of the document will include the following (from a description in the University's Manual for Master's and Doctoral Studies):

- Title page
- An abstract
- Acknowledgements
- Table of contents
- A preface comprising the following:
  - A statement that the article format has been selected
  - The student's share in the research in the case of co-authors for the article(s)/manuscript(s)
  - For each article which was submitted, but not yet published, the name of the journal concerned.
  - Permission from co-authors that the article(s)/manuscript(s) can be submitted for degree purposes

- webskakel vir die manuskripriglyne van die betrokke tydskrif of tydskrifte, aangebied word
- A-Reël 4.10.8: Waar enige navorsingsartikel of internasionaalerkende patent, waartoe die kandidaat vir 'n meestersgraad en ander skrywers of uitvinders bygedra het, ingedien word as die navorsingsproduk van meestersgraadprogram, moet kandidaat 'n geskrewe verklaring van elke medeskrywer of mede-uitvinder verkry, waarin gestel word dat so'n medeskrywer of mede-uitvinder toestemming verleen dat die navorsingsproduk gebruik word vir die gestelde doel en waarin verder aangedui word wat elke medeskrywer of medeuitvinder se akademiese bydrae tot die betrokke navorsingsproduk was.
- A-Reël 4.10.9: Waar medeskrywers of mede-uitvinders ... in die ontwikkeling van die navorsingsproduk betrokke was, moet die kandidaat dit in die voorwoord noem en die verklaring van elke medeskrywer of mede-uitvinder direk na die voorwoord tot die navorsingsproduk insluit.

Die Algemene Akademiese Reëls bevat dieselfde vereistes vir 'n proefskrif vir 'n doktorsgraad.

#### 3 STRUKTUUR EN KENMERKE VAN DIE ARTIKELMODEL

#### 3.1 Struktuur

Die struktuur van die dokument sal tipies die volgende insluit (uit 'n beskrywing in die Universiteit se Handleiding vir Meesters en Doktorale Studie):

- Titelblad
- 'n Opsomming
- Dankbetuigings
- Inhoudsopgawe
- 'n Voorwoord wat uit die volgende bestaan:
  - o 'n Verklaring dat die artikelformaat gekies is
  - Die student se aandeel in die navorsing in die geval van mede-outeurs vir die artikel(s)/manuskrip(te)
  - Vir elke artikel wat ingedien word maar nog nie gepubliseer is nie, die naam van die betrokke vaktydskrif.
  - Toestemming van die redakteur van die vaktydskrif indien enige outeursreg betrokke is



- Permission from the editor of the journal if any copyright is involved
- Literature review.
- Methods (optional, depending on the type of articles/manuscripts)
- Manuscripts
  - o Unpublished manuscripts or
  - Published articles
- Each article must be preceded by a copy of the guidelines for authors for the journal concerned.
- Conclusion.
- Bibliography.
- Addenda.

#### 3.2 Literature review and introduction

The literature review that is presented in an article is less comprehensive than in a traditional dissertation or thesis. However, it must still be taken into account that in a dissertation or thesis the student must provide proof of being familiar with and in control of the appropriate subject literature. A focussed literature analysis must be included. Such a review may also be in the form of a review article.

The introduction can be integrated with the literature review, depending on the nature of the research subject. It will, amongst others, give some brief background and motivation of the research, the questions asked and will explain the structure of the document to the reader. The introduction has to contextualise the research in a logical and coherent manner.

#### 3.3 Conclusion

The conclusion at the end of the document is written specifically to provide an integrated summary and discussion of the relevant conclusions and should contain specific recommendations for practice and/or further research. Some of the content in the conclusion could be repetition of what has been discussed in the individual manuscripts.

### 4 ARTICLES THAT MAY BE USED

In addition to other requirements that are stated in the formal prescriptions, unless the student provides an acceptable motivation, only articles that flow forth directly from the student's research after registration for the

- Toestemming van die mede-outeurs dat die artikel(s)/manuskrip(te) vir graaddoeleindes ingedien mag word
- Literatuuroorsig
- Metodes (opsioneel, na gelang van die tipe artikel(s)/manuskrip(te)
- Manuskripte
  - o Ongepubliseerde manuskripte of
  - Gepubliseerde artikels
- Elke artikel moet voorafgegaan word deur 'n afskrif van die riglyne vir die betrokke vaktydskrif
- Slot
- Bibliografie
- Bylaes

#### 3.2 Literatuuroorsig en inleiding

Die literatuuroorsig wat in 'n artikel aangebied word, is minder omvattend as in 'n tradisionele verhandeling of proefskrif. Daar moet egter steeds in aanmerking geneem word dat in 'n verhandeling of proefskrif studente bewys moet lewer dat hulle bekend is met en in beheer is van die toepaslike vakliteratuur. 'n Gefokusde literatuurontleding moet ingesluit word. So 'n oorsig kan ook in die vorm van 'n oorsigartikel wees.

Die inleiding kan met die literatuuroorsig geïntegreer wees, na gelang van die aard van die navorsingsonderwerp. Dit sal onder andere 'n kort agtergrond tot en motivering vir die navorsing en die vrae wat gestel word, gee en sal die struktuur van die dokument aan die leser verduidelik. Die inleiding moet die navorsing op 'n logiese en samehangende wyse kontekstualiseer.

#### 3.3 Slot

Die slot aan die einde van die dokument word spesifiek geskryf om 'n geïntegreerde opsomming en bespreking van die toepaslike gevolgtrekkings te gee en moet spesifieke aanbevelings vir die praktyk en/of verdere navorsing bevat. Van die inhoud van die slot kan 'n herhaling wees van wat in die individuele manuskripte bespreek is.

### 4 ARTIKELS WAT GEBRUIK MAG WORD

Benewens die ander vereistes wat in die formele voorskrifte gestel word, mag slegs artikels wat regstreeks voortvloei uit die student se navorsing ná registrasie vir die meesters- of doktorsgraad aan die NWU, vir 'n verhandeling of proefskrif, onder toesig van die aangestelde



master's or doctoral degree at NWU, for a dissertation or thesis, under supervision of the appointed supervisor/promoter, may be submitted in article format.

5 QUANTITY AND QUALITY

There is no prescribed number of articles in this model. However, the number of articles submitted must convince the examiners in terms of the number and/or extent that the candidate has truly complied with the requirements for a master's or doctoral degree.

The quality, nature and extent of the research that is described in the articles may not differ from that of a traditional dissertation or thesis. The difference is only found in the presentation of the results.

#### 6 MANUSCRIPTS VERSUS PUBLISHED ARTICLES

- Students must indicate to which peer reviewed journal they intend to submit any unsubmitted manuscripts. In the case of submitted publications, students must indicate to which journal it was sent.
- The publication of the manuscripts that are included in the document is not a prerequisite for the examination of the document. However, the Faculty requires that, in case of a master's dissertation or a mini-dissertation, at least one of the manuscripts should have been submitted for publication, and in the case of a doctoral thesis, that at least one of manuscripts should have been accepted for publication, before submission of the document for examination.
- The submission of the manuscript(s) for publication will be left to the discretion of the study leader / supervisor to determine readiness.
- A guideline for students and supervisors is to avoid presenting research results in article format if they do not really intend to publish such articles.

studieleier/promotor, in artikelformaat ingedien word, tensy die student 'n aanvaarbare motivering voorsien.

#### 5 GEHALTE EN HOEVEELHEID

Daar is geen voorgeskrewe hoeveelheid artikels in hierdie model nie. Die getal artikels wat ingedien word, moet egter die eksaminatore wat betref getal en/of omvang oortuig dat die kandidaat werklik aan die vereistes vir die meesters- of doktorsgraad voldoen het.

Die gehalte, aard en omvang van die navorsing wat in die artikels beskryf word, mag nie van dié van 'n tradisionele verhandeling of proefskrif verskil nie. Die verskil word slegs in die aanbieding van die resultate aangetref.

### 6 MANUSKRIPTE TEENOOR GEPUBLISEERDE ARTIKELS

- Studente moet aandui aan watter vaktydskrif, wat aan eweknie-evaluering onderwerp is, hulle voornemens is om onvoorgelegde manuskripte voor te lê. In die geval van voorgelegde publikasies moet studente aandui aan watter vaktydskrif dit gestuur is.
- Die publisering van die manuskripte wat in die dokument ingesluit is, is nie 'n voorvereiste vir die eksaminering van die dokument nie. Die Fakulteit vereis egter die dat, in geval van meestersverhandeling of skripsie, minstens een van die manuskripte vir publikasie voorgelê moes gewees het en in die geval van 'n doktorale proefskrif, dat minstens een van die manuskripte vir publikasie aanvaar moes gewees het, voordat die dokument vir eksaminering ingedien word.
- Die voorlegging van die manuskrip(te) vir publikasie sal, wat betref gereedheid, aan die goeddunke van die studieleier/promotor oorgelaat word.
- 'n Riglyn vir studente en studieleiers is om aanbieding van navorsingsresultate in artikelformaat te vermy indien hulle nie werklik van plan is om sodanige artikels te publiseer nie.



#### 7 CO-AUTHORSHIP

In some cases, students participate in research conducted by teams. Most of the articles from this kind of research are co-authored. Students, who are part of these research teams, must therefore indicate what their own contribution to the research was, and also include the permission that was obtained from the co-authors to use an article as part of their document.

#### 7 MEDESKRYWERS

In sommige gevalle neem studente deel aan navorsing wat deur spanne gedoen is. Die meeste van die artikels uit hierdie soort navorsing word deur mede-outeurs geskryf. Studente wat deel van hierdie navorsingspanne uitmaak, moet dus aandui wat hul eie bydrae tot die navorsing was en moet ook die toestemming insluit wat van mede-outeurs verkry is om 'n artikel as deel van hul dokument te gebruik.



## ➤ 6.12.4.E: RECOMMENDATION OF EXAMINER REGARDING A DOCTORAL THESIS

# FACULTY OF NATURAL AND AGRICULTURAL SCIENCES/ FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

### Recommendation of examiner regarding a doctoral thesis Aanbeveling van eksaminator insake doktorale proefskrif

(To be completed by the Faculty Officer before dispatching)	(Moet deur die Fakulteitsbeampte voor afsending voltooi word)
THESIS	PROEFSKRIF
Candidate /	Examiner /
Kandidaat:	Eksaminator:
Degree /	Programme code /
Graad:	Programkode:
Title / Titel:	

### MAKING KNOWN THE EXAMINER'S IDENTITY / BEKENDMAKINGVAN DIE IDENTITEIT VAN DIE EKSAMINATOR

Do you agree that, if the outcome would be that	Stem u in dat, indien daar besluit word dat die
the candidate passes, your name may be made	kandidaat slaag, u naam aan die kandidaat
known to the candidate? (Except for the	bekendgemaak mag word? (Behalwe vir korreksies
adjustments you recommend, your report will	wat u aanbeveel, word u verslag nie bekendgemaak
not be made known to the candidate.)	nie.)

Yes/Ja	
No/Nee	



#### Recommendation/AANBEVELING

and my re	amined the above mentioned thesis ecommendation agrees with the option by an "X" in the appropriate box.	geëksamineer en ek beveel die opsie aan wat deur "X" in die toepaslike blokkie hieronder aangedui word.	
1.	The thesis passes unconditionally/		
	Die proefskrif slaag onvoorwaardelik		
2		t specified revisions be made to the satisfaction of t please attach to this form a complete list of the erro	
		at spesifieke hersienings tot bevrediging van die promo nerk, heg by hierdie vorm 'n volledige lys van foute v	
3	☐ satisfaction of the examiners or the	specified revisions of a substantive nature be made to t academic director concerned (If you mark this option telected the errors to be corrected.)/	
	die bevrediging van die eksaminatore	at gespesifiseerde hersienings van 'n substantiewe aard e of die betrokke akademiese direkteur gemaak word. ( e vorm 'n volledige lys van foute wat gekorrigeer mo	As
4.	☐ for revision, elaboration or amendme	nt format, in which case it is referred back to the candidant and resubmission for re-examination ( If you mark the tention are described in detail in the attached written	nis
	word vir hersiening, uitbreiding of wy	format nie, in welke geval dit na die kandidaat terugverw siging en herindiening vir hereksaminering. (As u hiere aandag moet kry in besonderhede in die aangeheg	ίic
5.	The thesis does not pass and the car	ndidate fails./	
	Die proefskrif slaag nie en die kandid	aat druip.	
Signatur	re of examiner/	Date/	
	ening van eksaminator	Datum	



# ➤ 6.12.5.A: SUMMATIVE REPORT TO THE RESEARCH DIRECTOR REGARDING A MASTER'S DISSERTATION/MINI-DISSERTATION AND ORAL AND/OR WRITTEN EXAMINATION

See next page.



#### FACULTY OF NATURAL AND AGRICULTURAL SCIENCES/ FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

Summative report to the research director regarding a Master's dissertation/mini-dissertation and oral and/or written examination/ Samevattende verslag aan die navorsingsdirekteur oor die Magister-verhandeling/-skripsie en mondelinge en/of skriftelike eksamen

DIS	ISSERTATION / VERHANDELING MINI-DISSERTATION / SKRIPSI				N / SKRIPSIE	MAF BLC	RK BOX KKIE	1	MERK
CA	NDIDATE / KAND	IDAAT:	1			<u> </u>			
Deg	gree / GRAAD:			PROGR	AMME CODE	/ PROGRAM	KODE:		
Des	scriptive name of	degree as found in	the yearbook	1			I		
	=	van graad soos in	=						
		chool / Navorsings		ol					
Research Director / Navorsingsdirekteur: School Director / Skooldirekteur:									
Titl	le / Titel:								
A	The undersigned declares as the supervisor of the above-mentioned candidate that all of the examiners have examined the dissertation/mini-dissertation. The undersigned makes the recommendation indicated by an "X" in the appropriate box below:  Die ondergetekende verklaar as studieleier van bogenoemde kandidaat dat al die eksaminatore die verhandeling/skripsie van die kandidaat beoordeel het. Die ondergetekende en beveel aan soos aangedui deur "X" in die gepaste blok hieronder:								
1	The disserta	ation/mini-dissertation p	asses uncondition	nally /Die ve	rhandeling/skrip	sie slaag onvo	orwaardelik		
2	supervisor.	ation/mini-dissertation / Die verhandeling/sk emaak word.							
3		ation/mini-dissertation pof the examiners or the				f a substantive	nature be m	ade to	the
		deling/skripsie slaag o van die eksaminatore					estantiewe aa	ard tot	die
4	The dissertation/mini-dissertation does not pass in its current format, in which case it is referred back to the candidate for revision, elaboration or amendment and resubmission for re-examination /Die verhandeling/skripsie slaag nie in die huidige formaat nie, in welke geval dit na die kandidaat terugverwys word vir hersiening, uitbreiding of wysiging en herindiening vir hereksaminering.								
5	The dissertation/mini-dissertation does not pass and the candidate fails./ Die verhandeling/skripsie slaag nie en die kandidaat druip.								
В		d written examination			-				
	Average mark awa	rded to dissertation/mi aan verhandeling/skrips	ni-dissertation			RESU	JLTS / UITSI	LAG:	
		ieved in oral/written exa behaal in mondelinge/s		n(s):		Fail /	Druip		
	Final mark calculat	ted according the ratio	below:			Pass	/ Slaag		
Examination papers:Dissertation/Mini-dissertation Finale punt bereken volgens die onderstaande volgens die onderstaande volgenselle : Verhandeling/skripsie =:			ande verhouding:	le verhouding:			Pass with distinction / Slaag met lof		



Signature supervisor / Handtekening studieleier

## > 6.12.5.B: SUMMATIVE REPORT TO THE RESEARCH DIRECTOR REGARDING A DOCTORAL THESIS.

## FACULTY OF NATURAL AND AGRICULTURAL SCIENCES/ FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

Summative report to the research director regarding a doctoral thesis Samevattende verslag aan die navorsingsdirekteur oor 'n doktorale proefskrif

CANDIDATE/ KANDIDAAT:						
SUBJECT AREA / VAKGEBIED		PROGRAMME CODE/PROGRAMKODE				
TITLE/TITEL:						
mentioned candidate of have examined the the	ne promoter of the above- declares that all of the examiners esis. The undersigned makes the eated by an "X" in the appropriate	Die ondergetekende verklaar as promotor van bogenoemde kandidaat dat al die eksaminatore die proefskrif van die kandidaat beoordeel het. Die ondergetekende en beveel aan soos aangedui deur "X" in die gepaste blok hieronder:				
	is passes unconditionally / skrif slaag onvoorwaardelik					
		ions be made to the satisfaction of the super nersienings tot bevrediging van die studieleie				
	s passes on condition that specified revision ademic director concerned /	ons of a substantive nature be made to the sa	atisfaction of the examiners			
	skrif slaag op voorwaarde dat gespesifise atore of die betrokke akademiese direkteu	erde hersienings van 'n substantiewe aard t r gemaak word.	tot die bevrediging van die			
	is does not pass in its current format, in whent and resubmission for re-examination /	hich case it is referred back to the candidate	for revision, elaboration or			
	skrif slaag nie in die huidige formaat nie g of wysiging en herindiening vir hereksar	, in welke geval dit na die kandidaat terugve minering.	erwys word vir hersiening,			
5. The thesi	is does not pass and the candidate fails./					
Die proef	skrif slaag nie en die kandidaat druip.					
Signature promote	r / Handtekening promotor	Date/Datum				



#### > 6.12.5.C: RESULTS OF THE MASTER'S EXAMINATION

See form on next page.

FNAS Quality Manual 2020



#### FACULTY OF NATURAL AND AGRICULTURAL SCIENCES/ FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

Results of the Master's examination/Uitslag van die Magistereksamen

DISSERT	ISSERTATION / VERHANDELING MINI-DISSE SKRIPSIE			MINI-DISSEI SKRIPSIE	RTATIO	ON /		MARK	BOX/ME	RK BLO	KKIE	
CANDID	ATE / KAND	IDAAT			l	STUE	DENT DENTENOMM	NUM ER	BER	1		
Degree /	GRAAD:					PRO	GRAMME CO	DE / PR	OGRAN	MKODE:		
Descript	ive name of	degree	as found	in the	yearbook /							
	ende naam											
Researc	h entity or s	chool / I	Navorsin	gsentit	teit of skool							
Research Director / Navorsingsdirekteur:							School Dire	ctor / S	kooldir	ekteur:		
Title / Titel:												
A The undersigned as the school director and research director concerned notify Faculty Management that the results of the master's examination of the abovementioned candidate are as follows:  Die ondergetekendes gee as die betrokke sk navorsingsdirekteure, aan die Fakulteitsbestuur ke die uitslag van die Magistereksamen van boge kandidaat soos volg is:							tuur kenr	nis dat				
The dissertation/mini-dissertation passes unconditionally / Die verhandeling/skripsie slaag onvoorwaardelik  The dissertation/mini-dissertation passes on condition that specified revisions be made to the satisfaction of the supervisor. / Die verhandeling/skripsie slaag op voorwaarde dat spesifieke hersienings tot bevrediging van die studieleier gemaak word.												
3	of the exan	niners or	the acade	mic dire	es on condition th ctor concerned. ot die bevredigin	/ Die ve	erhandeling/skri	psie slaa	ag op voo	orwaarde da	at gespesi	ifiseerd
4	revision, ela examination dit na die ka	aboration n will be m andidaat te	or amendi ade to Fac erugverwys	ment an culty Mai s word vi	not pass in its d resubmission nagement / Die v ir hersiening, uitb eksaminering si	for re-ex erhande reiding	kamination. A eling/skripsie sla of wysiging en h	recomme ag nie ir erindieni	endation die huidi ing vir her	on examine ige formaat reksamineri	ers for this nie, in wel	secon ke geva
The dissertation/mini-dissertation does not pass and the candidate fails./ Die verhandeling/skripsie slaag nie en die kandidaat druip.												
MA	AGISTERGRA	AD				PUNTEBEREKENING VIR   MARK/ RESULTS/UITSL				S/UITSLA	\G	
	erage mark av emiddelde pun									Fail/Drui	0	
Av	erage mark ac	chieved in	oral/writte	n exami	nation(s)/	)·				Pass/Sla	ag	
Gemiddelde punt behaal in mondelinge/skriftelike eksamen( Final mark calculated according the ratio below: Examination papers:Dissertation/Mini-dissertation =: Finale punt bereken volgens die onderstaande verhouding: Vraestelle: Verhandeling/skripsie =:										Pass distinctio met onderske	_	
Research	Research director/Navorsingsdirekteur School director/Skooldirekteur Date/Datum											



#### > 6.12.5.D: RESULTS OF THE DOCTORAL EXAMINATION

#### FACULTY OF NATURAL AND AGRICULTURAL SCIENCES/ FAKULTEIT NATUUR- EN LANDBOUWETENSKAPPE

Results of the doctoral examination/Uitslag van die doktorale eksamen

CANDIDATE / KANDIDAAT				STUDENT NUMBER / STUDENTENOMMER						
DEC	GREE / GRAAD:			PROC	GRAMME CODE / PROGR	AMKODE:				
	Descriptive name of degree as found in the yearbook / Beskrywende naam van graad soos in die jaarboek:									
Res	earch entity or school / N	lavorsingsentit	teit of skool							
Res	earch Director / Navorsin	gsdirekteur:			School Director / Skoolo	direkteur:				
Title	e / Titel:									
The undersigned as the school director and research director concerned notify Faculty Management that the results of the doctoral examination of the abovementioned candidate are as follows:  Die ondergetekendes gee as die betrokke skool navorsingsdirekteure, aan die Fakulteitsbestuur kenni die uitslag van die doktorale eksamen van bogenoe kandidaat soos volg is:							tuur kennis dat			
1	The thesis passes und	conditionally /Die	proefskrif slaag on	ovoorw	aardelik					
2	The thesis passes on	condition that spe	ecified revisions be	made	to the satisfaction of the super	rvisor. /				
L	Die proefskrif slaag op	o voorwaarde dat	spesifieke hersien	ings to	t bevrediging van die studieleie	er gemaak wo	ord.			
3	The thesis passes on the academic director		ecified revisions of	a sub	stantive nature be made to the	satisfaction o	of the examiners or			
	Die proefskrif slaag o eksaminatore of die b				enings van 'n substantiewe a d.	ard tot die be	evrediging van die			
The thesis does not pass in its current format, in which case it is referred back to the candidate for revision, elaboration of amendment and resubmission for re-examination. A recommendation on examiners for this second examination will be made to Faculty Management / Die proefskrif slaag nie in die huidige formaat nie, in welke geval dit na die kandidaat terugverwys word vir hersiening, uitbreiding of wysiging en herindiening vir hereksaminering. 'n Aanbeveling oor die eksaminatore vir hierdie tweede eksaminering sal aan die Fakulteitsbestuur gemaak word.										
5										
	Die proefskrif slaag ni	e en die kandidaa	ii uruip.							
Res	earch director/Navorsin	gsdirekteur	School direct	tor/Sl	cooldirekteur	Date/Dati	um			



# ➤ 6.12.5.E: ADMINISTRATIVE PROCESS FOR THE EXAMINATION OF MINI-DISSERTATIONS FOR BUSINESS MATHEMATICS AND INFORMATICS

#### A. STEPS IN THE PROCESS

- The Director of the Centre submits the titles of the mini-dissertations together with the, supervisors and examiners to the Faculty Management for approval. (Note: The Faculty Management decided that it is sufficient that the research proposals are approved within the well described process of the Centre for BMI by the committee involved and that they need not be submitted to the Faculty Management as well).
- 2. The Director of the Centre is responsible for clarifying the classification of the dissertation as well as any ethical considerations that might impact the student industry directed research project (dissertation) with the particular client company. This, amongst others, is documented in a client confirmation letter. This information is incorporated in the title registration form, which is then sent, together with the client confirmation letter, to the relevant committees once a year for approval.
- 3. Higher Degree Administration (HDA) sends the letters of appointment to the examiners.
- 4. The supervisor gives consent in the usual manner for the submission of the mini-dissertation and the student then submits it to the HDA office as communicated to them by BMI administration.
- 5. The HDA ensures that each mini-dissertation is delivered to the external and internal examiner involved, together with the Faculty guidelines for examination of mini-dissertations and dissertations (See Section C3) as well as the Faculty recommendation form for examiners See Section E. Information on the clarification of criteria for the examiners appears in the accompanying information of Section B.
- 6. The internal and external examiners complete their examiners reports by using the prescribed table (as given in Section B) independently of each other and send the reports directly to the HDA.
- 7. The HDA communicates the results to the Director of the Centre who compiles a synoptic report based on the reports of the internal and external examiners and taking into account the process mark, which was awarded at several stages of the progress with the project. The Director of the Centre also completes the summative report form of the Faculty.
- 8. The BMI Examination Committee approves the results.
- 9. The Director of the Centre gives the final result to the Faculty administrator who completes the final result form. It is then submitted to the Dean and thereafter to the Faculty Management.
- 10. Higher Degree Administration makes known the outcome as soon as the Faculty Management has approved it.
- 11. The students hand in the final copies of their Dissertations to BMI due to the confidential nature of the documents



#### **B. PRESCRIBED FORM**

#### **Evaluation Form for BMI mini-dissertations**

#### **Evaluation form for BMI mini-dissertations**

Please use the guidelines provided to evaluate the mini-dissertation of the student using the following scale. Examiners are encouraged to use decimals (e.g. 3.5) to indicate performance in between the levels described here.

#### NAME OF CANDIDATE:

#### **SCALE**

1	2	3	4	5
Unacceptable	Poor	Average	Very Good	Outstanding
Total lack of effort -	Hardly any effort –	Met some	Great effort –	Consistently made
Consistently failed to	failed to meet most	expectations and	exceeded most	extraordinary efforts
meet any	expectations.	failed to meet others	expectations.	and far exceeded all
expectations.		in equal proportions.		expectations.

Please see the section on the next page for further clarification of scales for individual criteria, in cases where ambiguity may arise.

Criterion	Maximum Mark	Student Mark
Formulation of problem	5	
Command of research techniques	*10	
Deductions, conclusions and evaluation thereof	*15	
Spelling and Grammar	*10	
Logical Flow of Document	*15	
Document Structure	5	
Executive Summary	5	
Literature Study	*15	
Complexity / Scope of Study	*10	
Perceived Value Added	*10	
TOTAL (Student Mark)	100	

EXAMINER NAME:	SIGNATURE:	DATE
	RELATED TO THE MINI-DISSERTATION:	
by 2 or 3 as required.	. scale is for a mark from 1-3. If the maximum	minark is 10 or 13, just multiply your mark
* Note: The assessment	t scale is for a mark from 1-5. If the maximui	m mark is 10 or 15 just multiply your mark



#### Clarification of Criteria:

#### Formulation of the Problem:

This criterion assesses the student's understanding of the business context of the problem.

A low mark would show that the student failed to formulate clearly and realistically how it developed and what the business impact is.

A high mark would indicate that the student understood the essence of the problem and its implications for business environment, with a very high mark indicating exceptional insight.

#### Command of Research Techniques:

This criterion assesses whether a reader with some understanding or practical experience of the technical aspects of the work would agree with the description or implementation of these aspects, or the interpretation of any results obtained. A reader with little knowledge of a specific technical concept should be able to obtain a reasonable degree of insight from reading the document.

A low mark would indicate that the student conveyed a poor understanding of a concept or technique, that the descriptions given were inadequate or incorrect, or that the student was unable to successfully convey knowledge to the reader.

A high mark would indicate that the student demonstrated a clear understanding of the concepts and research techniques.

#### **Deductions. Conclusions and Evaluation Thereof:**

This criterion assesses the ability of the student to draw sensible, relevant conclusion, to understand the impact of such conclusions and to relate them back to the original problem description and business context.

A low mark would indicate that the student drew misguided or irrelevant conclusions, or was unable to demonstrate insight into the implications of the conclusions drawn.

A high mark for this criterion would indicate that the student justified the conclusions drawn in every section of the document to an extent that convinced the reader of the validity and relevance of those conclusions.

#### Spelling and Grammar:

Students are required to have their final reports professionally reviewed by a language specialist and as such any obvious spelling or grammatical errors should be strictly penalized.

A low mark for this criterion will be for a document containing errors that could have been prevented by using a standard spelling and grammar checker.

A high mark will be given for a student who has mastered the art of technical report writing.

#### Logical Flow:

This criterion assesses whether the content of the document allows the reader to envisage the sequence of events as problems were identified, addressed and resolved.

A low mark would indicate that the document contained sections or paragraphs assuming knowledge of concepts not yet introduced, or seemingly unrelated to the topic at hand. A low mark would also be appropriate if at any given time the reader felt unsure what the project was about, how and why the student chose a particular approach, or in what way the work done addressed the problem.

A high mark would indicate that the student painted a clear sequential picture of each stage of the project and was able to relate how and why any approaches or techniques were chosen or implemented.

#### Document structure:

This criterion assesses whether the document layout was clearly communicated and adhered to, allowing the reader to quickly establish an understanding of the document layout and to easily find any section of interest by briefly paging through the document.



A low mark would indicate that the student submitted a poorly structured document that left the reader unable to navigate the report easily on the basis of headings, page numbers, and chart or table captions.

A high mark would indicate that headings followed a logical sequence as indicated by the table of contents, and that footers clearly indicated correct page numbers as applicable to subsections or appendices.

#### **Executive Summary:**

This criterion assesses whether the executive summary allowed the reader to ascertain at a glance the nature of issues addressed by the project, the nature of the approach followed, and the conclusions drawn in the process.

A low mark would indicate that the executive summary section of the report did not give an adequate overview of project.

A high mark would indicate that the executive summary consisted of a succinct but adequately informative "one page" summary of the entire document.

#### Literature Study:

This criterion assesses the quality of the literature study produced as part of the research phase of the project.

A low mark would show that the extent of coverage was inadequate, that the student misunderstood the material or poorly communicated key concepts, or that irrelevant material was included.

A high mark for a literature study would indicate that the student did comprehensive research related to the focus area of the project and in compiling the literature study illustrated thorough command of the subject matter.

#### Complexity / Scope of Study:

This criterion assesses the level of effort required to complete the project in terms of the depth of the understanding (i.e. project completion required the student to obtain very specific business domain knowledge or detailed, in-depth understanding of a collection of complex concepts) or the scope of study (i.e. working knowledge of a wide variety of concepts or the understanding of a wideranging business domain) that was required in order to complete the project successfully. The mark for this criterion should aim to make a realistic assessment taking into account the time frame available for project completion.

A low mark would indicate that the project consisted of a straightforward task requiring little creative thinking ability or research prowess.

A high mark would indicate that the proposed solution required significant creative thinking ability and research prowess.

#### Perceived Value Added:

From the perspective of an academic external examiner, this criterion refers to the level of contribution of the work to the field of study. From the perspective of an industry external examiner, the criterion assesses whether the work adds value to the industry as a useful business deliverable.

A low mark would indicate that the work was of little consequence, either in terms of publication potential or as a business deliverable, depending on the perspective of the examiner.

A high mark from an academic perspective would indicate that the work has publication potential, or that the report provided significant insight into the practical application of theory in the particular field. A high mark from a business representative would indicate that the work has contributed significantly towards the understanding or resolution of a business problem.



### C. FACULTY GUIDELINES FOR THE EXAMINERS OF MINI-DISSERTATIONS FOR THE MASTER'S DEGREE

# Faculty of Natural and Agricultural Sciences GUIDELINES FOR EXAMINERS TO EVALUATE A DISSERTATION/MINIDISSERTATION FOR THE MASTER'S DEGREE

#### 1 General

#### 1.1 Contents of master's studies

Master's studies usually follow upon an honours degree and comprise research for a dissertation or mini-dissertation under the guidance of a supervisor. In some cases, passing examination papers is required as well. The required number of credits to be obtained is 180, which is in accordance with 1800 study hours.

On the recommendation form to be completed by examiners, the number of credits for the dissertation or mini-dissertation is indicated, as well as the number of credits for the examination papers, if applicable. The allocation of credits indicates the scope of the dissertation or mini-dissertation relative to the examination papers. A mini-dissertation must comply with the same requirements than those set for a dissertation, except that it is of smaller scope.

#### 1.2 Appointment and role of examiners

The Dean appoints at least two examiners of whom at least one must be external to the University. None of the examiners may have been involved with the studies and the external examiners may not be from the same institution. Examiners must be experienced and active academics or other scientists, and preferably have a PhD. They must evaluate the dissertation or mini-dissertation according to international scientific standards.

#### 1.3 Confidentiality

In order to ensure the independence of the examiners in writing the reports, they may not discuss the dissertation or mini-dissertation with each other. After the dissertation or mini-dissertation has been submitted, no communication may take place between the examiners and the supervisor, except through the Dean or his delegated.

#### 1.4 Postgraduate Examination Committee

On receiving the examiners' reports, the supervisor compiles a synoptic report and passes it on to the research director concerned, who presents a recommendation with regard to the result to the Postgraduate Examination Committee of the Faculty of Natural and Agricultural Sciences. The recommendation of this committee is submitted to Faculty Management, who has final decision ability in this regard. Should the examiners not be unanimous of opinion regarding the evaluation of the dissertation or mini-dissertation, the Dean takes the steps he deems necessary to get a result.



### 2 Excerpts from the General Academic Rules for the master's degree

- Whereas a general master's degree must be aimed at educating and training researchers who can contribute to the development of knowledge at an advanced level, the professional master's degree must be aimed at educating and training graduates for advanced and specialised professional employment with the ability to contribute to the development of knowledge at an advanced level.
- A research product may only be referred back to a candidate once and, after revision, be submitted once for re-examination.
- Dissertation: Refers to a manuscript prepared for examination purposes, including a single published research article or set of published research articles or unpublished manuscript(s) in article format, in accordance with the prescripts of documentation, argumentation, language and style in which the student must provide proof that he/she is conversant with the method of research, and which is presented in partial or full compliance with the requirements for the prescribed outcomes for a masters' degree from the University

#### 3 Guidelines for examination of dissertation/mini-dissertation

#### 3.1 Requirements for dissertation/mini-dissertation

To have his/her dissertation or mini-dissertation approved the candidate must provide proof of compliance with the requirements listed in 4.1 below.

A master's study is essentially a training course to equip the candidate with skills for employment in the relevant field or for further independent research. Therefore, the dissertation or mini-dissertation does not need to be an original contribution to the field of research.

The scope and duration of master's studies tend to expand beyond the expectations for the degree. Based on the point of view that the PhD degree is the most appropriate opportunity for more in-depth research, the Faculty makes a concerted attempt to narrow down the scope of master's studies.

In terms of the general academic rules of the University, candidates are allowed to submit a dissertation/mini-dissertation in article format. In addition to the general guidelines in this document, there also appear further explanatory guidelines for this case in the appendix below.

#### 3.2 Requirements for awarding a distinction

A candidate must obtain at least 75% for a dissertation or mini-dissertation to pass it with distinction. Conferring a distinction comprises that the examiner must be convinced of the outstanding quality of the dissertation or mini-dissertation at master's level, taking into account the available time, the complexity of the methodology and the degree of difficulty of the relevant subject material.

Compliance with the following criteria may serve as a guideline:

- The subject content is of high quality.
- The structure of the document complies with high standards.



• The presentation is excellent. Less significant editorial errors regarding typing or spelling do not need to be a disqualification, but repeated errors indicating carelessness and a lack of accuracy may contribute to disqualification of a distinction.

Although an original contribution to the subject area is not a requirement, it may be taken into consideration in awarding a distinction.

#### 4 Examiner's report

The examiner is requested to submit a general, written examiner's report and to submit it together with the synoptic report form. Guidelines for the written report follow below.

#### 4.1 Explanation of the extent of compliance with requirements

The examiner is required to comment in detail on compliance or non-compliance of the candidate to the following criteria:

- 4.1.1 Understanding the nature and objectives of the study, as well as the scientific principles that form the basis of the study
- 4.1.2 Sufficient knowledge of related literature
- 4.1.3 Demonstrating mastery of the appropriate techniques and analytical methods
- 4.1.4 Thorough, logical and coherent evaluation of the meaningfulness of the findings
- 4.1.5 Critical and independent thought demonstrating insight
- 4.1.6 Report writing on the studies and on the attainment of the objectives in an acceptable scientific format that is systematic, logical and persuasive
- 4.1.7 An original contribution to the field of study (not a requirement to pass)

#### 4.2 Unacceptable aspects

Comment on unacceptable aspects or sections of the dissertation or mini-dissertation, the nature of these shortcomings and what the candidate could do to rectify the shortcomings.

#### 5 Recommendation of examiner

Write the recommendation on the result of the examination, as well as the marks allocated, on the attached synoptic report form.

#### 6 Feedback to candidate

After the final decision on the result, the adjustments required in the reports by the examiners are supplied to the candidate without revealing the identities of the examiners.

If it is decided that the degree will be conferred, the names of the examiners are usually also revealed to the candidate, provided the examiners give their permission.

#### 7 Acknowledgement

The Faculty of Natural and Agricultural Sciences puts a high value on the opinion of examiners of the master's dissertations and mini-dissertations and appreciates the time and energy the examiners spend towards maintaining and improving the standard of the master's



### D. ADDITIONAL CONTENT IN THE ACCOMPANYING LETTER FOR EXAMINERS

The mini-dissertation of BMI master's degree students is the final deliverable of the BMI industry directed research projects. Unlike classical theses, the primary focus of the industry directed research projects is to add value to industry rather than to create new knowledge. The BMI industry directed research projects are subject to a detailed project-based evaluation process which is documented in study guide BWIR826. The mark obtained in this process, together with that of the internal and external examiner, will be used to determine the final mark. The industry directed research projects are unique in the sense that students have to complete the mini-dissertation and project in a 6 to 7 month period for a specific company in industry.

Each examiner is expected to submit a written report within two weeks after receiving the mini-dissertation. This report must consist of an evaluation of the mini-dissertation in respect of the specific aspects in the GUIDELINES FOR EXAMINERS TO EVALUATE A DISSERTATION/MINI-DISSERTATION FOR THE MASTER'S DEGREE and by way of the attached EVALUATION FORM FOR BMI MINI-DISSERTATIONS. The report should be accompanied by the EXA



MINER'S RECOMMENDATION FORM and be e-mailed to the HDA:

# E. RECOMMENDATION FORM FOR EXAMINERS FACULTY OF NATURAL AND AGRICULTURAL SCIENCES

## Recommendation of examiner regarding master's dissertation/mini-dissertation

	(To be completed by the Faculty Officer before dispatching)							
Dissertation / Mini-dissertation (Delete that which is not applicable)								
Can	ndidate:				Examiner:			
Deg	gree:				Programme code:			
Titl	le:							
Tot	al of cre	dits for examination		Credi	ts for dissertation/		Number of	
		papers:			mini-dissertation:		examination papers:	
know	vn to the				the candidate passes, ts you recommend, you			
Rec	ommer	ndation						
		ned the above mention on indicated by an ")			mini-dissertation and mate box.	ıy re	commendation agrees	
1.	1. The dissertation/mini-dissertation passes unconditionally							
2.	The dissertation/mini-dissertation passes on condition that specified revisions be made to the satisfaction of the supervisor. (If you mark this option, please attach to this form a complete list of the errors to be corrected.)/							
3.	The dissertation/mini-dissertation passes on condition that specified revisions of a substantive nature be made to the satisfaction of the examiners or the academic director concerned (If you mark this option, please attach to this form a complete list of the errors to be corrected.)							



4.		The dissertation/mini-dissertation does not pass in its current format, in which case it is referred back to the candidate for revision, elaboration or amendment and resubmission for re-examination (If you mark this option, the aspects which need attention are described in detail in the attached written report.)
5.		The dissertation/mini-dissertation does not pass and the candidate fails.
Mark	for dis	sertation/mini-dissertation:%
(Awar	d a ma	ark in agreement with your recommendation above.)
Signat	ure of	examiner
 Date	••••••	