

NEWSLETTER

FACULTY OF NATURAL SCIENCES JULY



iYunivesithi

Walter Sisulu

In pursuit of excellence



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Executive Summary

The Faculty of Natural Sciences continued to make meaningful progress during July 2026 across its core pillars of administration, teaching and learning, research, community engagement, and staff development. A major focus during the month was the implementation of the Academic Self-Evaluation process across all four departments, demonstrating the Faculty's commitment to continuous improvement, accountability, and academic excellence. Academic performance remained encouraging, with all departments achieving supplementary examination pass rates above 75%, reflecting the resilience of students and the dedication of academic and support staff. Research activity continued to gain momentum through increased collaboration and scholarly productivity, while staff and students remained actively engaged in community-based initiatives that support the University's strategic mission. Furthermore, considerable progress was observed in staff capacity development, particularly in enhancing Artificial Intelligence (AI) competencies to meet evolving teaching, research, and professional demands. Overall, the Faculty is satisfied with the progress achieved during the month and remains confident that these collective efforts will contribute positively towards achieving institutional objectives and strengthening academic success.

Administration



During July, the Faculty concentrated on the important project of Academic Self-Evaluation. Guided by recommendations outlined in the University's internal review report, all four academic departments have been actively engaged in preparing their respective Self-Evaluation Reports (SERs). The objective of this exercise is twofold:

- To identify and address immediate academic and operational challenges requiring attention during the current year.
- To provide evidence-based information that will support long-term planning and interventions by the University's Planning, Monitoring and Evaluation Directorate.

This process demonstrates the Faculty's commitment to quality assurance, continuous improvement, and institutional accountability.

INTERNAL AUDIT REVIEW OF ASSESSMENT PROCESSES IN THE FACULTY OF NATURAL SCIENCES (2025 ACADEMIC YEAR)

Purpose

To evaluate the effectiveness, adequacy, and compliance of assessment and examination controls within the Faculty of Natural Sciences and identify areas requiring improvement.

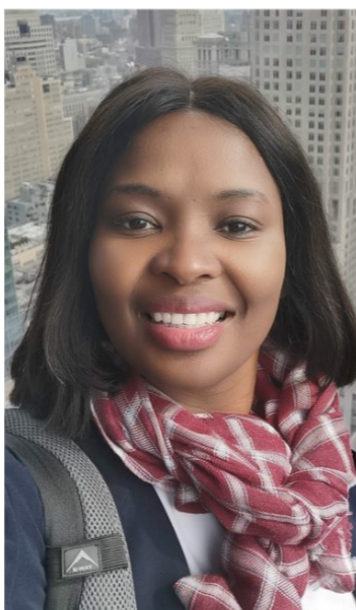
Recommendations

The Faculty will strengthen governance, standardize assessment practices, improve record management and verification controls, enhance staff training, and implement robust compliance monitoring mechanisms by the end of 2026.



DLT and the Faculty should jointly develop an annual Teaching and Learning Operational Plan to improve planning, coordination and communication.

Faculty-specific implementation plans should be developed to ensure institutional frameworks address discipline-specific priorities.



DLT DIRECTOR AND HER MANAGEMENT PRESENTED STRATEGIC FRAMEWORK TO FNS STUDENT SUCCESS, ACADEMIC ADVISING, AND TRANSFORMATIVE WORK-INTEGRATED LEARNING STRATEGY

- Dr Siqoko highlighted five resolutions on collaboration:
- Confirmation that DLT staff deployed within Faculties have dual reporting responsibilities, with functional accountability to DLT and operational accountability to Faculty leadership.
- Clarification that each Faculty will develop its own implementation plan aligned with the Institutional Student Success Framework while addressing faculty-specific priorities.
- Confirmation that Academic Advisors will assist Faculties in analysing student performance data and identifying academically at-risk students through evidence-based interventions.
- Assurance that the Transformative WIL Strategy will strengthen institutional partnerships to improve placement opportunities and promote coordinated institutional engagement with employers and professional bodies.

Teaching and Learning

The June 2026 Supplementary Examination Results reflect strong academic performance across the Faculty. All departments achieved pass rates exceeding 75%, indicating overall student success and effective academic support interventions. The outstanding performance of the Department of Biological and Environmental Sciences is particularly commendable, achieving an impressive average pass rate of 90.01%. Several Honours programmes achieved a remarkable 100% pass rate, including, Computer Science, Botany, Physics. These achievements reflect both student commitment and academic excellence within the respective programmes. While diploma programmes displayed varied outcomes, Consumer Science performed particularly well. However, the Advanced Diploma in Chemistry recorded the lowest pass rate within the Faculty. Note that the **first duplicate for Diploma results refers to the Extended Curriculum programme (EC)**. Targeted academic support and intervention measures will continue to be implemented in lower-performing programmes to strengthen student success, improve retention, and enhance graduation outcomes.

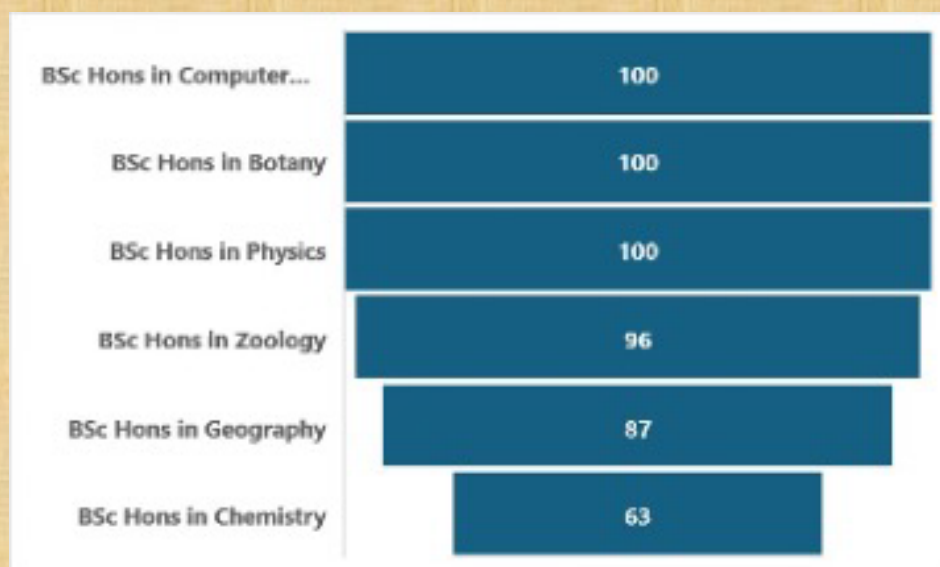
JUNE 2026 SUPP RESULTS: DEPARTMENTS

Department	Average Pass Rate	Performance Status
Biological & Environmental Sciences	90.01%	Excellent
Applied Sciences	78.59%	Good
Chemical & Physical Sciences	76.98%	Good
Mathematical Sciences & Computing	76.95%	Good

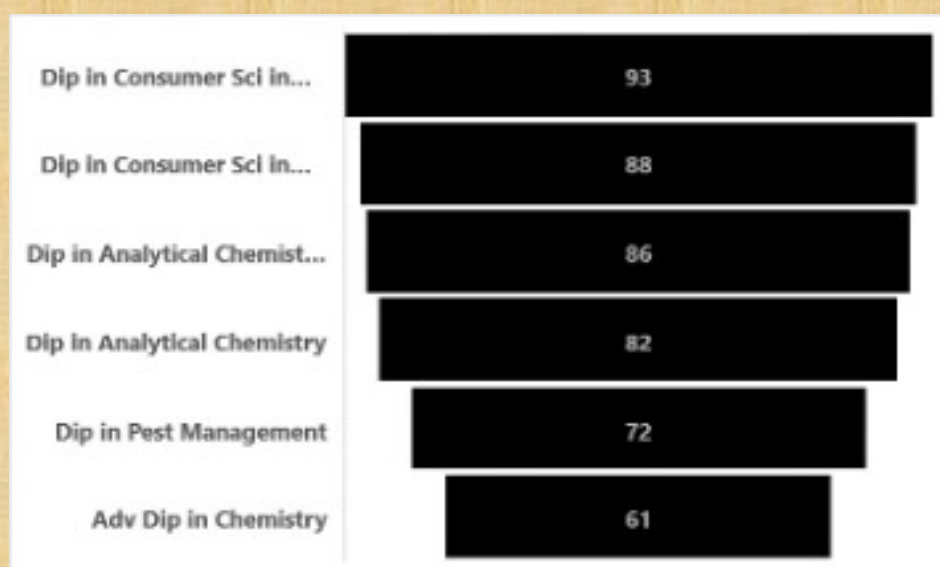
JUNE SUPP EXAMS Average Pass Rate by Academic Cluster

Academic Cluster	Qualifications Included	Average Pass Rate (%)
Biological & Environmental Sciences	Biological Sciences, Biological Sciences (ECP), Medical Sciences, Environmental Studies, Environmental Studies (ECP), Geography Hons, Botany Hons, Zoology Hons	90.01
Applied Sciences	Consumer Science, Consumer Science (ECP), Pest Management, Pest Management (ECP), Dip Pest Management	78.59
Chemical & Physical Sciences	Analytical Chemistry, Analytical Chemistry (ECP), Chemistry, Chemistry (ECP), Adv Dip Chemistry, Chemistry Hons, Physics, Physics (ECP), Physics Hons	76.98
Mathematical Sciences & Computing	Applied Mathematics, Applied Mathematics (ECP), Mathematics, Mathematics (ECP), Applied Statistical Sciences, Applied Statistical Science (ECP), Computer Science, Computer Science (ECP), Computer Science Hons	76.95

JUNE 2026 SUPP RESULTS: HONOURS



JUNE 2026 SUPP RESULTS: DIPLOMAS



Research



Research remains a strategic priority within the Faculty of Natural Sciences. It is encouraging to observe academic staff pursuing impactful research topics that address societal challenges while simultaneously strengthening national and international collaborations. The Faculty continues to promote a culture of research excellence and aims to achieve a minimum of one research productivity unit per academic staff member. This goal is attainable through:

- Effective mentorship of emerging researchers.
- Interdisciplinary collaboration within and outside the University.
- Active participation in national and international research networks.
- Improved research output planning and support.

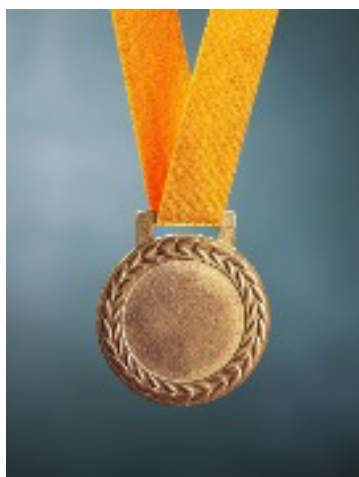
The growing research culture within the Faculty positions us well for future innovation, external funding opportunities, and increased scholarly impact.

PLATINUM MEDAL FOR JULY RESEARCH OUTPUT Raymond Taziwa

Trapped at Tier 1: Why machine learning guided electrocatalyst discovery has not closed the lab to-industry gap, Next Energy, 13, 2026, 100826, ISSN 2949821X,
<https://doi.org/10.1016/j.nxener.2026.100826>

Synthesis, characterisation and electrochemical behaviour of calcium carbonate nanoparticles derived from automobile oxyacetylene gas welding waste. Discover Nano 21, 360 (2026).
<https://doi.org/10.1186/s11671-026-04796-z>

Synthesis and characterization of limestone derived biphasic calcium silicate nanocomposites for coating and fuel cell applications. Discov Mater (2026).
<https://doi.org/10.1007/s43939-026-00819-9>



GOLD MEDAL FOR JULY RESEARCH OUTPUT

Njabulo Gumede

- Computational design and AI driven discovery of anaplastic lymphoma kinase inhibitors for non small cell lung cancer treatment. Discov. Chem. 3, 387 (2026).
<https://doi.org/10.1007/s44371-026-00855-7>



BRONZE MEDAL FOR JULY RESEARCH OUTPUT

Mbikazi Ketelo

- Statistical Modelling Relevance and Implications for Agricultural Extension. Journal of Agriculture and Rural Development Studies 2 244-255 (2026).DOI:
<https://doi.org/10.35219/jards.2026.2.17>





Community Engagement

In alignment with the University's strategic mission, Faculty staff continue to participate actively in both institutional and community engagement initiatives.

These activities provide valuable opportunities to:

- Share scientific knowledge and expertise.
- Transfer practical skills to communities.
- Strengthen partnerships with schools, organisations, and stakeholders.
- Enhance the social impact of academic programmes.

The Faculty particularly encourages initiatives that include student participation, as these experiences contribute to the development of socially responsive graduates and future leaders.

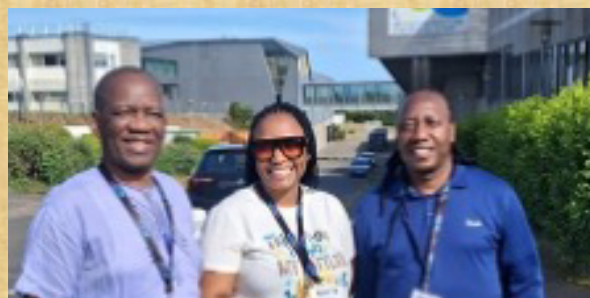
UNISA VICE CHANCELLOR INVITES FNS EXECUTIVE DEAN TO SIMISO NKWANYANA MEMORIAL LECTURE

- The 4th Simiso Nkwanyana Memorial Leturer was delivered by the Speaker of South African Parliament, Mrs Thoko Dididza on 24 July 2026 ([UNISA Memorial Lecture Sparks Debate Over Transformation and Local Representation–One News Network](#))
- The focus was on transformation and rural economic development.
- Professor Albert Modi represented the science voice among fourpanellists (political analyst, business leader and economist) who responded to the lecturer, providing recommendations.
- UNISA has recently established a Faculty of Agriculture, acquired 670ha of agricultural.
- Professor Ntanganedzeni Mapholi, Executive Dean, College of Agriculture & Environmental Scientist invited Professor Modi to consider collaborate in alternative agrisystems agri-tourism and drone technology



SUCCESSFUL SAMOS WORKSHOP IN FRANCE

- Professor Nakin, Dr Dlaza, Dr Duna, and Miss Nkwali proudly represented Walter Sisulu University at the successful SAMOS Workshop in Brest, France, gaining valuable knowledge, strengthening international collaborations, and enhancing ocean science research, teaching, and community engagement



SAMOS

South African Master of Ocean Sciences

Midterm meeting & transverse skills workshop

29 June - 3 July 2026, IJEM, Brest, France

APPLIED SCIENCES STAFF PARTICIPATE IN STEM EVENTS

- During National Science Week, Applied Sciences actively promoted STEM career awareness through keynote engagement and participation in three youth and school career exhibitions across the Eastern Cape during July 2026.



Staff Capacity Development



The Faculty congratulates colleagues who dedicated time during July to strengthening their professional and disciplinary expertise. A notable development has been the positive response from academic staff towards improving competencies in Artificial Intelligence (AI). As AI continues to influence higher education, research, and professional practice, the Faculty welcomes this commitment to lifelong learning and innovation.

Continued investment in staff development will ensure that the Faculty remains responsive to emerging trends and equipped to deliver high-quality teaching, research, and community engagement.



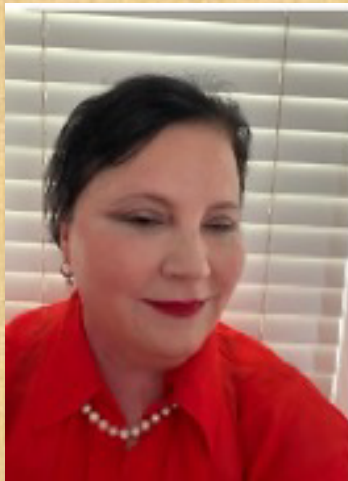
Congratulations to Dr Rekha Panicker on Achieving AI Training Certificates



- This course is not only about understanding AI, but about practically integrating it into teaching and learning practices.

Congratulations to Ms Cristina Toma on Achieving AI Training Certificates

- This course is not only about understanding AI, but about practically integrating it into teaching and learning practices.



CONGRATULATIONS
ALFRED MAPFUMO





Notices

Staff members are encouraged to:

- Respond promptly to official University communications.
- Monitor opportunities relating to research grants and funding calls.
- Participate in relevant conferences, seminars, and academic development programmes.
- Share opportunities with colleagues and postgraduate students where appropriate.

Active participation in these opportunities contributes significantly to both personal and institutional growth.

FOUNDATIONAL BIODIVERSITY INFORMATION PROGRAMME GRANTS

THE FOLLOWING CALLS ARE NOW OPEN ON THE NRF CONNECT SYSTEM UNDER THE RESEARCH GRANTS CATEGORY:

Foundational Biodiversity Information Programme (FBIP) – Small Grants 2

Foundational Biodiversity Information Programme (FBIP) – Large Grants (*Please note: This is a closed call for individuals*)

Submission Deadlines:

Call Opening Date: 31 July 2026

Applicant Closing Date: 21 August 2026

For Programme Enquiries, Please Contact:

- Ms. Nocawe Ndayi
Professional Officer: Science Missions
RIISA: Thematic Research, Support and Advancement
Tel: +27 (0)12 481 4359
Email: NL.Ndayi@nrf.ac.za

Annual Young Scientists' Coreference 2026



Hosted by: ASSAf and SAYAS
Date: 13 - 15 September 2026
Closing date: 21 June 2026
Venue: Walter Sisulu University, Mthatha Campus
Annual Young Scientists' Coreference 2026
Theme: Assuring Sustainable Water Availability and Safe Sanitation Systems to Achieve the Goals of Agenda 2063





Conclusion

The Faculty of Natural Sciences extends sincere appreciation to all staff and students for their dedication, resilience, and commitment throughout July 2026. The achievements highlighted in this newsletter are a reflection of your collective effort, professionalism, and determination to excel despite ongoing challenges. As we move forward, let us continue to support one another, embrace innovation, strive for academic excellence, and remain committed to serving our communities through teaching, research, and engagement. Every contribution, whether large or small, plays an important role in shaping the future success of our Faculty. Together, we can build a stronger, more impactful Faculty of Natural Sciences that inspires excellence, advances knowledge, and creates opportunities for future generations. Keep striving, keep learning, and keep making a difference. The future is bright because of your efforts.

