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Walter Sisulu

FACULTY OF NATURAL SCIENCES NEWSLETTER: OCTOBER 2026





Success is not achieved by chance; it is built through commitment, innovation, collaboration, and the courage to make a difference in society.

Professor Albert Thembinkosi Modi, Executive Dean, Faculty of Natural Sciences

1. EXECUTIVE SUMMARY

October 2026 was a productive and impactful month for the Faculty of Natural Sciences (FNS). Significant achievements were recorded across administration, student success, research, and community engagement. The Faculty continued to strengthen its data-driven student support systems, achieved an overall pre-examination success rate of 88.1%, celebrated multiple staff research achievements, advanced transdisciplinary community engagement through the World Food Day 2026 Research and Innovation Challenge, and increased national visibility through participation in strategic scientific initiatives and workshops. These achievements demonstrate the Faculty's commitment to academic excellence, research impact, innovation, and societal transformation.

2. ADMINISTRATION

The Faculty received recognition from Dr Munienge Mbodiala for its proactive implementation of student success monitoring and academic support interventions through the institutional Early Warning System. The initiative, supported by collaboration between the Faculty and the ICT Directorate, enables the early identification of academically at-risk students and facilitates timely interventions by Academic Advisors and Heads of Departments. The student success tracking system represents an important institutional shift toward evidence-based student support. By integrating academic performance data with intervention records, the Faculty can identify academically vulnerable students early, monitor intervention effectiveness, improve progression and retention rates, strengthen accountability at departmental level, and support institutional goals related to student success and graduation outcomes. Our purposeful use of the Early Warning System data will position the Faculty to enhance student achievement in 2027 and beyond through data-informed decision-making and proactive academic support.

Dr Munienge Mbodila Acknowledges FNS Response to Early Intervention Response

- The Faculty of Natural Sciences is acknowledged for its proactive leadership in identifying and supporting academically at-risk students through the Early Warning System.
- While early identification has improved, sustained engagement by Academic Advisors and Heads of Departments in monitoring students, recording interventions, and addressing at-risk modules remains essential.
- Together, we remain committed to enhancing student success and academic achievement in 2027 and beyond.



3. TEACHING AND LEARNING

The Faculty achieved an overall pre-examination success rate of 88.1% during Semester 2 of 2026. Of the 8,673 students enrolled, 7,640 qualified for the final examinations by meeting the minimum duly performed (DP) requirements. Biological and Environmental Sciences achieved the highest pre-examination success rate (95.1%), closely followed by Applied Sciences (93.3%) and Chemical and Physical Sciences (92.3%). Mathematical Sciences and Computing recorded the largest student enrolment and continues to provide major teaching support across the University. The overall Faculty performance reflects effective teaching, student engagement, and academic support programmes.

Pre-Examination Student Success Rates:

Representing an overall Faculty pre-examination success rate of 88.1%

- During Semester 2 of 2026, the Faculty enrolled **8,673** students across all modules, including support services to other faculties.
- Of these, **7,640** students met the minimum DP requirements and were admitted to the final examinations.
- DP status provides **an important measure of teaching effectiveness**, student engagement, academic support, and overall programme performance.

Department	Enrolled Students	DP Admitted	Success Rate (%)
Applied Sciences	713	665	93.3
Biological & Environmental Sciences	2,235	2,125	95.1
Chemical & Physical Sciences	1,216	1,122	92.3
Mathematical Sciences and Computing	4,509	3,728	82.7
Faculty Total	**8,673**	**7,640**	**88.1**

SINCERE BEST WISHES FOR THE NOVEMBER 2026 EXAMINATIONS

Remember that success is built on careful preparation, effective time management, and a positive mindset.

The Faculty of Natural Sciences enters the November 2026 examinations with approximately **135 examination modules** across four departments.

The overall Faculty average **DP mark of 62.3%** indicates that students are generally well positioned for the examinations.

To our students, approach each examination with confidence, discipline, and determination.

To our staff, thank you for your commitment to teaching, mentoring, assessment preparation, administration, and student support.

DEPARTMENT	AVERAGE DP MARK (%)
Biological & Environmental Sciences	65.1
Mathematical Sciences & Computing	53.7
Chemical & Physical Sciences	69.0
Applied Sciences	61.5
Faculty	**62.3**

4. RESEARCH

The Faculty proudly recognises staff members whose research outputs have contributed to the university's scholarly reputation through publications in accredited journals and internationally recognised publishers. The Faculty encourages all academic staff to continue publishing in:

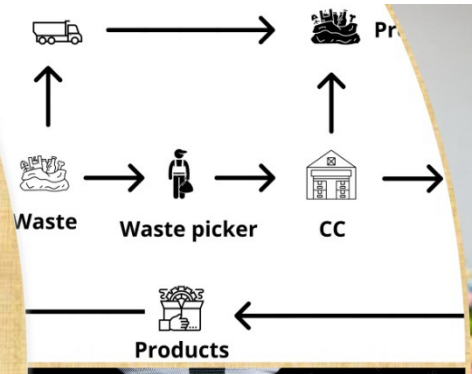
- DHET-accredited journals.
- Scopus-indexed journals.
- Web of Science-indexed journals.
- Reputable academic publishers.

Research publications remain essential for advancing knowledge, attracting funding, strengthening postgraduate supervision, enhancing NRF ratings, and increasing the visibility of both individual researchers and the university.



Zanele Xelelo
Silver Medal for Research

1. From Margins to Circular Partners: A Pathway for Waste Picker Integration in King Sabata Dalindyebo (KSD) Local Municipality. Waste MDPI. DOI: https://doi.org/10.3390/waste4040040
2. Spatial and Temporal Patterns of Metal Theft in Mthatha, South Africa: An Analysis of Police-Reported Incidents. World MDPI (accepted)



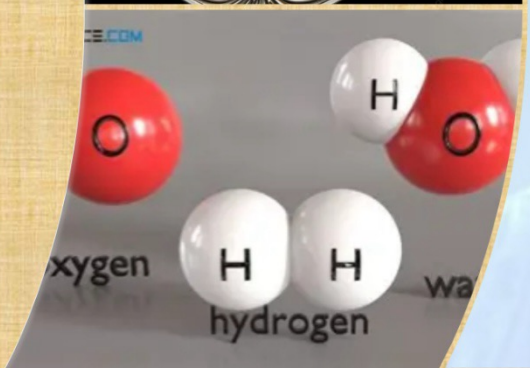




Raymond Taziwa
Silver Medal for Research

- What the Overpotential Does Not Tell You: Diagnosing Non-Comparability Across Hydrogen and Oxygen Evolution Benchmarking Metrics. Molecules 2026, 31(20), 3696; https://doi.org/10.3390/molecules31203696







Siyanda Nkwenkwe
Silver Medal for Research

1. Evaluation of Spring Water Quality for Detection of Escherichia coli and Total Coliforms: Implications for Public Health. AJWEP. (accepted)
2. Household Food Security, Livelihoods and Perceived Climate Variability in Selected Agricultural Projects in O.R. Tambo, South Africa. IJDS (accepted)
3. Systemic intermittency : A framework for understanding intermittent water supply as systemic water insecurity in South Africa. NEPT (accepted)







Machael Asemoloye
Bronze Medal for Research

- Dietary Pleurotus ostreatus supplementation is associated with selected hepatic and renal responses during lead exposure in Male Wistar Rats. South African Journal of Botany. https://doi.org/10.1016/j.sajb.2026.09.034







5. COMMUNITY ENGAGEMENT

World Food Day emerged as a flagship platform for research-led community engagement and interdisciplinary collaboration. The event generated innovative student-led solutions addressing food security challenges while promoting research, innovation, entrepreneurship, and societal impact.

World Food Day 2026 Foundation for future research-led community engagement

- Emergence of a university-wide portfolio of student-generated solutions addressing complex food system challenges from multiple disciplinary perspectives.
- A framework for future transdisciplinary research programmes that can link academic inquiry with societal needs.



World Food Day Student Research and Innovation Challenge 2026

Innovative student proposals from all seven Walter Sisulu faculties.

Faculty	Winner	Winning Proposal Topic
Faculty of Economic & Financial Sciences	**Yamkela Mtolo**	*Innovative Economic Models for Enhancing Food Security and Sustainable Rural Livelihoods*
Faculty of Education	**Thakgatso Legoete**	*Transforming Food and Nutrition Education through Community-Based Learning and School Gardens*
Faculty of Engineering, Built & Information Technology	**Ziyanda Z. Nkosi**	*Smart Technologies and Sustainable Infrastructure Solutions for Food Security*
Faculty of Law, Humanities & Social Sciences	**Pretty Matodzi**	*Social Inclusion, Community Participation and Policy Innovations for Food System Transformation*
Faculty of Management & Public Administration Sciences	**Mncedisi Sebeela**	*Governance and Entrepreneurship Frameworks for Sustainable Food Systems Development*
Faculty of Medicine & Health Sciences	**Desiree Dzivhuluwani Ratshilumela**	*Community Health and Nutrition Interventions for Improved Food and Nutrition Security*
Faculty of Natural Sciences	**Palesa Nomfundo Ndhlangamandla**	*Nature-Based Scientific Solutions for Climate-Resilient and Sustainable Food Production*





Ms Zanele Adams represented Walter Sisulu at the SANBI South African Living Collections Cluster Workshop. The workshop explored national strategies for strengthening living collections, herbarium repositories, biodiversity governance, and long-term sustainability of scientific collections.



Students from the Department of Mathematical Sciences and Computing participated in the inaugural Eastern Cape Inter-University Hackathon. The event, organised together with the Office of Technology Transfer and The Cortex Hub, brought together students from several institutions to develop technology-based solutions to real-world challenges.

Mathematical Sciences and Computing Students Attended Eastern Cape Inter-University Hackathon



- Department of Mathematical Sciences and Computing, the Office of Technology Transfer, and The Cortex Hub hosted the inaugural Eastern Cape Inter-University Hackathon (17-18 October 2026).
- Bringing together 35 students from five institutions to develop technology solutions for real-world challenges.

These activities illustrate the Faculty's commitment to community-responsive science, innovation, biodiversity stewardship, and digital transformation.

Career & Market Day: Showcasing Student Talent and Entrepreneurship

- On 2 October 2026, Walter Sisulu's **Chiselhurst Campus** hosted a successful Career & Market Day, providing students with opportunities to showcase their skills and explore entrepreneurship.
- **Fashion students from the Faculty of Law, Humanities and Social Sciences** impressed visitors through fashion shows featuring garments they had designed and produced themselves.
- **Consumer Science, Food & Nutrition students (FNS)** showcased and sold food products developed during their practical laboratory training.





6. IMPORTANT NOTICES



The following conferences may be of interest to Faculty staff and postgraduate students:

https://www.isspa2027.org/ (International Symposium on Soil and Plant Analysis 2027) [isspa2027.org]
https://www.iubmbcongress2027.co.za/ (IUBMB/FASBMB/SASBMB Congress 2027) [iubmbcongr...2027.co.za]
https://conferenceindex.org/conferences/natural-sciences/south-africa [conferenceindex.org]
https://conferenceindex.org/conferences/science/south-africa [conferenceindex.org]
https://conferencealert.com/south-africa/environment [conferencealert.com]
https://www.allconferencealert.com/south-africa/environment [allconfere...ealert.com]

CONCLUSION

The October achievements highlighted in this newsletter demonstrate the Faculty of Natural Sciences' growing impact in teaching and learning, research excellence, innovation, and community engagement. Through strong partnerships, committed staff, capable students, and strategic initiatives, the Faculty continues to contribute meaningfully to the advancement of science and societal development. As we approach the end of the academic year, we encourage all staff and students to remain focused, continue striving for excellence, and embrace opportunities to contribute to a stronger, more innovative, and more impactful faculty.


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