

**THE UNIVERSITY OF THE WITWATERSRAND**  
**SCHOOL OF GEOGRAPHY, ARCHAEOLOGY & ENVIRONMENTAL**  
**STUDIES**

**MSc in ENVIRONMENTAL SCIENCES BY COURSEWORK & RESEARCH**  
**REPORT**

**PICTURE:** GAES MSc Students-2024 Cohort on a Field Excursion



**Photo by** Mulala Danny Simatele (2024)



**Photo by** Prof Stefan Grab (2024)

**Programme Handbook: 2025-26**

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## WELCOME REMARKS BY THE HEAD OF SCHOOL



Prof Paida Mhangara, Head of School  
Geography, Archaeology & Environmental Studies  
[Paida.Mhangara@wits.ac.za](mailto:Paida.Mhangara@wits.ac.za)

I am delighted to welcome you to the MSc in Environmental Science by Coursework and Research Report which is offered by the School of Geography, Archaeology and Environmental Studies (GAES) in the Faculty of Science at the University of the Witwatersrand. This MSc programme has been running for two years now and you are the second cohort of students to be registered and pursue studies leading to the attainment of the MSc Degree in Environmental Science. We look forward to seeing you learn and grow in the field of environmental science whilst you are with us, and to receive feedback from you so that we can adapt it to meet the needs of future students, society, and industry. Environmental science, like any other science, is a challenging field in which to be working. The definition of what an environment is, is extensive and sometimes highly contested, but when explored rigorously it offers a useful framework by which to develop theories and practices to address many of the problems facing our societies and the planet. Because of the nature and complexity of these problems, some scholars have called environmental challenges as '*wicked problems*' - that is, a class of problems that are so complex that one requires to be highly informed to have some insights in understanding processes associated to them and how to find appropriate solutions.

Many of the technical details that you need to know about how the University operates, the content of the degree, and the courses you will have available to you can be found in this handbook. What you will not find written down anywhere, is the nature of the interaction that you will have with your lecturers, supervisors, and your fellow students. We, however, strive to create a safe learning environment for everyone and ensuring that there is mutual respect between lecturers and students and among students themselves. This programme will provide you with a space for intense exploration of themes of great personal importance to you in the company of a group of like-minded staff and students. Their input to your work and your input to their experience will be one of the most significant aspects of your course. Please do not hesitate to ask if you have questions regarding the procedures as well as the academic content of the degree.

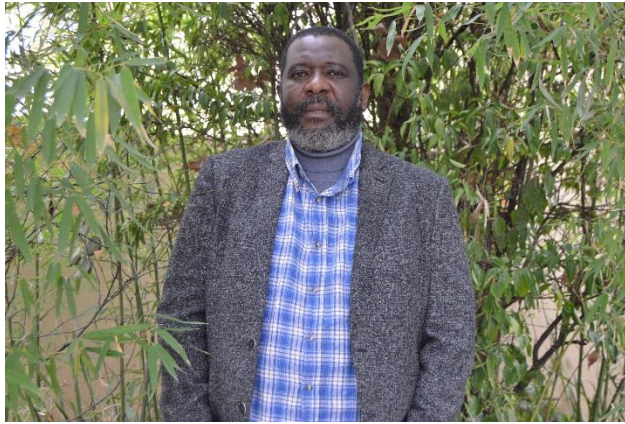
I look forward to our journeys together, literal, and metaphorical, and I hope you will find your studies transformative and inspiring.

## GAES MSc Students 2024 Cohort on Fieldwork



**Photo** by Takalani Malivhadza (2024)

## INTRODUCTION TO THE MSC-ENV-SCI-CWRR



Prof Mulala Danny Simatele  
MSc-Env-Sci-CWRR Programme Coordinator  
**Email:** [Mulala.Simatele@wits.ac.za](mailto:Mulala.Simatele@wits.ac.za)  
**Tel No:** +27-11-717-6515

### Overview of the MSc Programme

This handbook provides you with some important information relevant to your studies with us. It includes key features of your postgraduate programme, outlines administrative and support systems, and explains the procedures and regulations relevant to your postgraduate study at the University of the Witwatersrand.

Specifically, this handbook covers six key areas. The first provides you with an overview of the programme, the second explains important regulations, the third student progress and assessment, the fourth support services, the fifth the data protection policy of the University and the sixth the assessment guidelines and grading structure for qualitative and quantitative assignments.

Please make sure that you familiarise yourself with the contents of the handbook. However, as you would expect, it is not the only source of information regarding the programme and the University of the Witwatersrand. The School of Geography, Archaeology and Environmental Studies which will be hosting and running this MSc programme is comprised of three major units; Geography and Environmental Studies, Archaeology, and the Rock Art Research Institute and we maintain a website: (<https://www.wits.ac.za/gaes/>). Additional information can be obtained through the University's website (<https://www.wits.ac.za/>). If you have not visited the City of Johannesburg before, where the University of Wits is geographically located, then you can find information about the university and its environs at <https://www.britannica.com/place/Johannesburg-South-Africa/The-people>. In addition, please note that the information provided in this handbook should also be read in conjunction with the University's rules and regulations. These can be accessed via: <https://www.wits.ac.za/students/academic-matters/rules-and-syllabuses/>. Please note there is a whole network of people committed to ensuring that you have the best possible learning experience. If there is anything you do not understand or wish to clarify, please do not hesitate to contact any member of staff in GAES. You should also take the opportunity to seek advice and support from your fellow students.

On behalf of the School of Geography, Archaeology and Environmental Studies and the University of Wits, welcome to the Master of Science Programme in Environmental Science by Course Work

and Research Report, and we hope that your experience with us will be both challenging and rewarding.

## KEY CONTACTS & ROLES

Please note that if you wish to arrange to see any of the individuals below, it is generally advisable, in the first instance, to email them as office times tend to vary and are often not strictly 8am to 5pm Monday to Friday.

For many of your enquiries in the first instance, if the course lecturer cannot help you, please contact either Prof. Mulala Danny Simatele (the MSc Programme Coordinator), Ms Sindiswa Tilane or Mrs. Natanya Alexander (the GAES School Administrator). If for some reason you are not able to get hold of any of them, you can contact Prof. Prof Paida Mhangara who is the Head of School for GAES.

Please note that the Geography, Archaeology and Environmental Studies School Office opening hours are 8am – 5pm Monday to Friday.

<b>Title</b>	<b>Role/Key Notes</b>	<b>Name/Contact</b>
Head of School of Geography, Archaeology & Environmental studies	Overall responsibility for the operation of the School of GAES. GIS and Remote Sensing expert	Prof. Paida Mhangara T: +27 11 717 6541 E: <a href="mailto:Paida.Mhangara@wits.ac.za">Paida.Mhangara@wits.ac.za</a>
Programme Coordinator of the MSc by CWRR in Environmental Sciences	Responsible for the day to day running of the MSc by coursework and research in the field of Environmental Sciences. Environmental management, climate change & sustainability expert	Prof. Mulala D Simatele T: +27 11 717 7602/76516 E: <a href="mailto:mulala.simatele@wits.ac.za">mulala.simatele@wits.ac.za</a>
Postgraduate Administrator	Responsible for the administrative duties and day to day coordination of Post Graduate activities in GAES	Ms. Sindiswa Tilane T: +27 11 717 76525 E: <a href="mailto:Sindiswa.Tilane@wits.ac.za">Sindiswa.Tilane@wits.ac.za</a>
School Administrator & support to all the GAES programmes	Responsible for the day-to-day administration associated with running the school of GAES	Mrs. Natanya Alexander T: +27 11 717 76503 E: <a href="mailto:Natanya.Alexander@wits.ac.za">Natanya.Alexander@wits.ac.za</a>
Postgraduate coordinator	Responsible for coordinating all PG matters in the school. Research interests in solid waste management, Social and environmental justice, climate change, environmental management, and sustainability	Dr . Serge Kubanza T: +27 11 717 76521 E: <a href="mailto:Serge.Kubanza@wits.ac.za">Serge.Kubanza@wits.ac.za</a>
Alternate Postgraduate coordinator	Responsible for coordinating all PG matters in the school. Research interests in archaeology	Prof. Dominic Stratford T: +27 11 717 76577 E: <a href="mailto:Dominic.Stratford@wits.ac.za">Dominic.Stratford@wits.ac.za</a>
Teaching & Learning coordinator	Responsible for coordinating all teaching & learning in the school. Economic and Urban Geography expert	Dr. Alex Wafer T: +27 11 717 76517 E: <a href="mailto:Alex.Wafer@wits.ac.za">Alex.Wafer@wits.ac.za</a>
Undergraduate coordinator, Geography	Coordinating the environmental programme in the environmental stream from Geography. Physical geography expert	Prof. Jasper Knight T: +27 11 717 76508 E: <a href="mailto:Jasper.Knight@wits.ac.za">Jasper.Knight@wits.ac.za</a>
Academic coordinator,	Coordinating the environmental programme in the environmental stream from Archaeology.	Prof. Sarah Wurz T: +27 11 717 76587 E: <a href="mailto:Sarah.Wurz@wits.ac.za">Sarah.Wurz@wits.ac.za</a>

<b>Title</b>	<b>Role/Key Notes</b>	<b>Name/Contact</b>
Environmental Studies		
Technician	IT, GIS & Remote sensing Officer for the School of Geography, Archaeology & Environmental Studies	Mr. Mpho Gegana T: +27 11 717 76596 E: <a href="mailto:Mpho.Gegane@wits.ac.za">Mpho.Gegane@wits.ac.za</a>
School Health and Safety coordinator & Senior technician	School Technician for the School of Geography, Archaeology & Environmental Studies	Mr. Thandizwe Nsimbi T: +27 11 717 6520 E: <a href="mailto:Thandizwe.Nsimbi@wits.ac.za">Thandizwe.Nsimbi@wits.ac.za</a>
Finance Officer	School Finance Officer for the School of Geography, Archaeology & Environmental Studies	Ms. Khanyo Ngubo T: +27 11 717 76584 E: <a href="mailto:Khanyo.Ngubo@wits.ac.za">Khanyo.Ngubo@wits.ac.za</a>
Procurement officer	School Procurement Officer for the School of Geography, Archaeology & Environmental Studies	Ms. Mpho Thobejani T: +27 11 717 6513 E: <a href="mailto:Norah.Museta@wits.ac.za">Norah.Museta@wits.ac.za</a>
Cartographer	School cartographer for the School of Geography, Archaeology & Environmental Studies	Ms. Wendy Phillips T: +27 11 717 76504 E: <a href="mailto:Wendy.Phillips@wits.ac.za">Wendy.Phillips@wits.ac.za</a>
Programme Coordinator of the MSc by CWRR in GIS/RS	Research interests in Remote sensing and GIS application, Applied Environment, Precision Agriculture	Prof. Elhadi Adam T: +27 11 717 76532 E: <a href="mailto:Elhadi.Adam@wits.ac.za">Elhadi.Adam@wits.ac.za</a>
Lecturer in GIS & Remote Sensing	Research interests in Remote sensing and GIS application	Dr. Iqra Atif T: +27 11 717 77428 E: <a href="mailto:Iqra.Atif@wits.ac.za">Iqra.Atif@wits.ac.za</a>
Lecturer in Geography & water resources	Research interest in water quality, aquatic health, aquatic ecotoxicology, environmental risk assessment	Dr. Simone Dahms-Verster T:+27 11 717 76573 E: <a href="mailto:simone.dahms-verster@wits.ac.za">simone.dahms-verster@wits.ac.za</a>
Lecturer in Archaeology	Research interest in archaeological and environmental studies	Dr. Matt Lotter T: 0117176047 E: <a href="mailto:Matt.Lotter@wits.ac.za">Matt.Lotter@wits.ac.za</a>
Lecturer in Physical Geography	Research interest in Biometeorology, Climate Change, tourism for a climate future and global change'	Prof. Jennifer Fitchet T:+27 11 717 76514 E: <a href="mailto:Jennifer.Fitchet@wits.ac.za">Jennifer.Fitchet@wits.ac.za</a>
Lecturer in Physical Geography	Research interests in climate, climate change, historical climates, environmental change, geomorphology	Prof. Stefan Grab T:+27 11 717 76512 E: <a href="mailto:Stefan.Grab@wits.ac.za">Stefan.Grab@wits.ac.za</a>
Lecture in Geography & environment	Research interests in climate change and biogeography	Prof Mary Evans T: +27 11 717 6521 E: <a href="mailto:Mary.Evans@wits.ac.za">Mary.Evans@wits.ac.za</a>
Lecturer in physical geography	Research interests in meteorology, Air quality, air pollution, environmental health	Dr. Raeesa Moolla T:+27 11 717 76522 E: <a href="mailto:Raeesa.Moolla@wits.ac.za">Raeesa.Moolla@wits.ac.za</a>
Lecturer in archaeological studies	Research interests in archaeology (archaeobotanical, pastoralism and farming communities, environmental change) and IKS (ethnography of plant use and the built environment)	Dr. Malebogo Mvimi T: +27 11 717 76050 E: <a href="mailto:Malebogo.Mvimi@wits.ac.za">Malebogo.Mvimi@wits.ac.za</a>



<b>Title</b>	<b>Role/Key Notes</b>	<b>Name/Contact</b>
GAES Safe Space officer	Research interest in heritage archaeology	Dr. Catherino Namono T: +27 11 717 76055 E: <a href="mailto:Catherine.Namono@wits.ac.za">Catherine.Namono@wits.ac.za</a>
Lecturer in Geography	Research interests in Urban Planning & Policy, Urban Geography, Spatial Inequality, Real Estate, The State	Ms. Sarita Pillay T: +27 11 717 7725 E: <a href="mailto:Sarita.Pillay@wits.ac.za">Sarita.Pillay@wits.ac.za</a>
School Transformation Committee coordinator	Research interests: palaeoecology, osteoarchaeology, zooarchaeology, vertebrate taphonomy, Origins of modern human behaviour	Dr. Jerome Reynard T: +27 11 717 76044 E: <a href="mailto:Jereme.Reynard@wits.ac.za">Jereme.Reynard@wits.ac.za</a>
Lecturer in Archaeological studies	Research interest in archaeology studies	Dr. Thembiwe Russell T: +27 11 717 76043 E: <a href="mailto:Thembiwe.Russell@wits.ac.za">Thembiwe.Russell@wits.ac.za</a>
Postgraduate coordinator	Research interest in Archaeology, Lithics, Pastoralism, Neolithic, GIS, LiDAR, Late Iron Age	Prof. Karim Sadr T: +27 11 717 76595 E: <a href="mailto:Karim.Sadr@wits.ac.za">Karim.Sadr@wits.ac.za</a>
Lecturer in climate change and biogeography	Research interest in integrated environmental and waste management	Dr. Mary Evans T: +27 11 717 76521 E: <a href="mailto:Mary.Evans@wits.ac.za">Mary.Evans@wits.ac.za</a>
Academic coordinator, Archaeology	Research interests in Archaeology of farming, Archaeology of gender, Interaction between farmers and hunter-gatherers	Prof. Alex Schoeman T: +27 11 717 76046 E: <a href="mailto:Alex.Schoeman@wits.ac.za">Alex.Schoeman@wits.ac.za</a>
Lecturer in Physical Geography	Chemical water resource analysis and management	Prof. Craig Sheridan T: +27 11 717 76505 E: <a href="mailto:Craig.Sheridan@wits.ac.za">Craig.Sheridan@wits.ac.za</a>
Honours coordinators (Geography)	Research interests in Remote sensing, GIS, Geospatial modelling, Surface hydrology, Spatial ecology	Dr. Cletah Shoko T: +27 11 717 76502 E: <a href="mailto:Cletah.Shoko@wits.ac.za">Cletah.Shoko@wits.ac.za</a>
Lecturer & research programme	Research interest in science and communication	Dr. Meghan Judge T: +27 11 717 6667 E: <a href="mailto:Meghan.Judge@wits.ac.za">Meghan.Judge@wits.ac.za</a>
Lecturer in Archaeological Studies	Research interest in archaeology studies	Prof. David Pearce T: +27 11 717 76062 E: <a href="mailto:David.Pearce@wits.ac.za">David.Pearce@wits.ac.za</a>
Lecturer in Archaeological Studies	Research interest in archaeology studies	Dr. Sam Challis T: +27 11 717 76039 E: <a href="mailto:Sam.Challis@wits.ac.za">Sam.Challis@wits.ac.za</a>
Lecturer in Business Administration	Research interests in the climate change-water-energy nexus as well as environmental management systems	Dr. Steven Mathetsa T: +27 11 717 3314 E: <a href="mailto:Steven.Mathetsa@wits.ac.za">Steven.Mathetsa@wits.ac.za</a>
Lecturer in GIS and Remote Sensing	Research interest in the application of GIS in environmental management and agriculture	Dr Tumelo Mathe T: +27 11 717 6269 E: <a href="mailto:Tumelo.Mathe@wits.ac.za">Tumelo.Mathe@wits.ac.za</a>
Lecturer in statistics and geospatial (Sch. Statistics & Actuarial Science)	Research interest in statistics & geospatial	Dr Farai Mlambo T: +27 11 717 6298 E: <a href="mailto:Farai.Mlambo@wits.ac.za">Farai.Mlambo@wits.ac.za</a>
Lecturer in Archaeology	Research interest in archaeological studies	Dr. Keneiloe Molopyane T: +27-11 717 6050

Title	Role/Key Notes	Name/Contact
		E: <a href="mailto:keneiloe.molopyane2@wits.ac.za">keneiloe.molopyane2@wits.ac.za</a>
Post-doctoral Fellow	Research interest in archaeological studies.	Dr. Anton Coetzee T: E: <a href="mailto:Anton.Coetzee@wits.ac.za">Anton.Coetzee@wits.ac.za</a>
Post-doctoral fellow	Research interest in climate change adaptation and environmental systems	Dr. Obianuju Ilo T: E: <a href="mailto:Obianuju.Ilo@wits.ac.za">Obianuju.Ilo@wits.ac.za</a>
Post-doctoral Fellow	Research interest in archaeological studies	Dr. Salome Jones T: E: <a href="mailto:salome.jones@wits.ac.za">salome.jones@wits.ac.za</a>
Post-doctoral Fellow	Research interest in archaeological studies	Dr Pedzisai Kowe T: E: <a href="mailto:pedzisai.kowe@wits.ac.za">pedzisai.kowe@wits.ac.za</a>
Post-doctoral Fellow		Dr. Pierre Linchamps T: E: <a href="mailto:pierre.linchamps@wits.ac.za">pierre.linchamps@wits.ac.za</a>
Post-doctoral Fellow		Dr Tinotenda Mangadze T: E: <a href="mailto:tinotenda.mangadze@wits.ac.za">tinotenda.mangadze@wits.ac.za</a>
Post-doctoral Fellow	Research areas of interest in GIS & Remote Sensing	Dr Boitshwarelo Masocha T: E: <a href="mailto:boitshwarelo.masocha@wits.ac.za">boitshwarelo.masocha@wits.ac.za</a>
Post-doctoral fellow	Research areas of interest in archaeological studies	Dr. Peter Morrissey T: E: <a href="mailto:peter.morrissey@wits.ac.za">peter.morrissey@wits.ac.za</a>
Post-doctoral Fellow	Research areas of interest in climate change adaptation and environmental management systems	Dr. Liboster Mwadzingeni T: E: <a href="mailto:liboster.mwadzingeni@wits.ac.za">liboster.mwadzingeni@wits.ac.za</a>
Post-doctoral Fellow	Water resources management	Dr Tamlyn Naidu T: E: <a href="mailto:tamlyn.naidu@wits.ac.za">tamlyn.naidu@wits.ac.za</a>
Post-doctoral Fellow		Dr Daria Semikolennykh T: E: <a href="mailto:daria.semikolennykh@wits.ac.za">daria.semikolennykh@wits.ac.za</a>

**Other Useful Contacts and Web Addresses of the University include;**

University Switchboard	(+2711) (717) 1000
Wits' student crisis line	(0800 111 331 toll-free)
University Registrar	(+2711) (717) 1201/2
Faculty of Science Registrar	(+2711) (717) 6006
Faculty of Science Postgraduate Office	(+2711) (717) 6002
Dean of Science	(+2711) (717) 6012
Dean of Students	(+2711) (717) 9102
Assistant Dean: Postgraduate Affairs	(+2711) (717) 6744
Assistant Dean: Teaching and Learning	(+2711) (717) 6333

Academic Integrity & Misconduct

<https://www.wits.ac.za/students/academic-matters/postgraduate-affairs-office/>

Wits student life

<https://www.wits.ac.za/campus-life/>

Title	Role/Key Notes	Name/Contact
Wits accommodation	<a href="https://www.wits.ac.za/accommodation/">https://www.wits.ac.za/accommodation/</a>	
Wits student support	<a href="https://www.wits.ac.za/mia/student-support/">https://www.wits.ac.za/mia/student-support/</a>	
Wits campus security and protection services	<a href="https://www.wits.ac.za/campus-life/safety-on-campus/">https://www.wits.ac.za/campus-life/safety-on-campus/</a>	
Wits student teaching and learning support	<a href="https://www.wits.ac.za/teaching-and-learning/student-support/">https://www.wits.ac.za/teaching-and-learning/student-support/</a>	
Wits ICT student support services	<a href="https://www.wits.ac.za/mywits/">https://www.wits.ac.za/mywits/</a>	
Wits campus health	<a href="https://www.wits.ac.za/campushealth/">https://www.wits.ac.za/campushealth/</a>	
Wits Careers Centre	<a href="https://www.wits.ac.za/ccdu/career--job-search-resources/">https://www.wits.ac.za/ccdu/career--job-search-resources/</a>	
Wits funding opportunities	<a href="https://www.wits.ac.za/science/postgraduate/funding/">https://www.wits.ac.za/science/postgraduate/funding/</a>	
Complaints, Appeals and Discipline	<a href="https://www.wits.ac.za/students/student-grievance-procedures/">https://www.wits.ac.za/students/student-grievance-procedures/</a>	
Postgraduate matters	<a href="https://www.wits.ac.za/students/academic-matters/postgraduate-affairs-office/">https://www.wits.ac.za/students/academic-matters/postgraduate-affairs-office/</a>	

Obviously, the contacts above are not the only individuals and roles that you will interact with during your studies; however, they are perhaps the most pertinent.

Outside of the contacts above, each module in your programme of studies is led by a member of academic staff who is responsible for the co-ordination, teaching, and assessment of the module for which he or she is the module convenor. This individual will be made clear to you at the start of each module. Note that in delivering the teaching of his/her module, the Module lecturer may be assisted by other members of both the School of Geography, Archaeology & Environmental Studies, and wider University academic staff – indeed this is extremely likely given the inter-disciplinary nature of the MSc in the field of Environmental Science. However, module lecturers will issue specific details relating to module objectives, administration, teaching arrangements and assessment procedures. If you have a query relating to the teaching, learning and assessment of a particular module you would normally contact the module lecturer in the first instance.

Many of your enquiries will be answered by careful reference to printed material that you have received or to information contained on the School or University website.

### IMPORTANT ACADEMIC CALENDAR DAYS - 2025

2025 Term Dates	
Gateway to Success and PG Orientation	27 <sup>th</sup> January – 10 <sup>th</sup> February 2025
Returning students registration PG and UG (Online registration)	02 January - 04 February 2025
<b>First teaching block</b>	10 <sup>th</sup> February – Wednesday 26 <sup>th</sup> March 2025
Mid-term Vacation/Study break	27 <sup>th</sup> March – 6 <sup>th</sup> April 2025
<b>Second teaching block</b>	07 <sup>th</sup> April-27 <sup>th</sup> May 2025
Examinations/Assessment period	02 June -30 June 2025
<b>Third teaching block</b>	22 July-05 Sept 2025
Mid-term Vacation/Study break	06 Sept-14 Sept 2025
<b>Fourth teaching block</b>	15 Sept-28 Oct 2025

Study break	Wednesday 23 <sup>rd</sup> – 29 <sup>th</sup> October (5 Days)
Examinations/Assessment period	03 Nov-28 Nov 2025
<b>PUBLIC HOLIDAYS</b>	
Human Rights Day	21 March 2025
Freedom Day	28 <sup>th</sup> April 2025
Good Friday	18 <sup>th</sup> April 2025
Family Day	21 <sup>st</sup> April 2025
Workers Day	1 <sup>st</sup> May 2025
Youth Day	16 <sup>th</sup> June 2025
National Women’s Day	9 <sup>th</sup> August 2025
Heritage Day	24 September 2025

## Communication/Contacting You

Your university e-mail account is the official means of communication for the University, and you are therefore reminded that you should read your e-mails at least every 48 hours (particularly during the academic year). You can arrange to have your university e-mail account automatically forwarded to your personal non-University account. However, you should be aware that there may be problems with this, and you should check regularly to make sure the forwarding is working. **It is important to note that we will only reply to a university email address. A private/work email address is NOT appropriate.**

Please note any issues regarding the use of email or your email account should in the first instance be directed to the ICT Services helpdesk, which is located on the first floor in Solomon Mahlangu House. The helpdesk is available during the working day and may be contacted via e-mail. Problems may be solved on the spot or referred to an appropriate expert. Personal help is available on the formulation and solution of individual users’ computer problems. Various paper and online documents are produced on common topics such as use of popular program packages and writing web pages. News and advice to users are also published in the monthly Library and Information Services Newsletter. Other computer services include training and purchase of computer hardware, software and consumables, and support for users with special needs (including production of alternative formats for books and other teaching materials).

The web page for ICT services is <https://www.wits.ac.za/mywits/>. The other contact details for Wits ICT services are:

ICT Services Helpdesk, Solomon Mahlangu House, Level 1, East Campus  
T: +27 (0)11 717 1717

E: [ITStudentHelp@wits.ac.za](mailto:ITStudentHelp@wits.ac.za)

## **GAES MSc students 2024 cohort brainstorming on how to address landfill management challenges**



**Photo** by Prof Mulala Danny Simatele (2024)

### **THE MSc BY COURSEWORK & RESEARCH REPORT IN ENVIRONMENTAL SCIENCES**

The MSc by coursework and research in the field of environmental sciences is designed to introduce students to the subject area of environmental systems and processes, and the complexities that arise in seeking sustainable environmental management in theory and practice, and how comprehensive environment-human interactions can be sculpt. At the end of the programme, it is envisaged that students will have developed a high level of literacy in environmental systems and processes and will be able to go on to work as environmental professionals. Specifically, the MSc by coursework and research report in the field of environmental sciences intends by the end of the programme to realise learning outcomes for students in the four thematic areas (a) knowledge and understanding, (b) intellectual skills, (c) practical skills and (d) transferable skills. The intended learning outcomes in each of these areas are highlighted below.

#### **(A) - Knowledge and Understanding**

1. The problem set that the concept of environmental systems and processes is addressing, including its history and various current applications, as well as the science-policy interface.
2. A holistic understanding of natural, environment, social and economic systems, their current operation, and the inter-dependencies between these systems,
3. How disciplines can be brought together to address environmental concerns and the challenges of cross/multi/inter and trans-disciplinary study,
4. The history of development of knowledge, of the philosophical underpinnings of knowledge production and evaluation as well and research design within environmental sciences,
5. The process by which science-policy processes operate, the role of scientists, experts, and non-experts in those processes as well as how academic knowledge may be transferred to policy and other practice arenas,

6. Techniques that allow real world environmental problems to be deconstructed and the possibilities for environmental sustainability inspired solutions to be imagined and implemented and
7. One area of environmental systems and processes in considerable depth (by way of a research report investigation).

### **(B) – Intellectual Skills**

1. Analysis – that is, using an array of empirical evidence and theories to logically understand the characteristics of a particular problem area,
2. Abstraction – that is, after examining a series of situations to develop more general characterisations and understandings of environmental systems, processes, environmental management problems and solutions,
3. Application – that is, taking general environmental systems and principles to explore how they could be applied in particular settings,
4. Synthesis – that is, bringing multiple perspectives to bear on environmental problems and solutions, and
5. Criticism – that is, having the critical faculties to subject academic material to scrutiny to understand its limitations as well as to scrutinise practical problem areas to understand both the nature of the problem being presented and/or the solutions being proposed.

### **(c) – Practical Skills**

1. Observe, record accurately, and give an account of the impact of natural processes and human activity observed in the field,
2. Retrieve, sift and select appropriate information to allow a full analysis and description of situations being studied,
3. Apply appropriate methods and concepts to understand problems currently being experienced in the world, and
4. Cross over discipline boundaries and communicate to a varied audience (in a format suitable for these various audiences) the outcomes of investigations.

### **(d) – Transferable Skills**

1. Read and assimilate material from a variety of disciplines,
2. Gather information to support arguments,
3. Analyse problems to ascertain the key elements of those problems,
4. Present coherent arguments (in verbal and a variety of written forms) to a variety of audiences (including, academic, practitioner, policy and lay audiences),
5. Respond in discussion settings to questions (from teachers, peers and others taking part in the degree programme),
6. Work effectively individually and in groups (often against deadlines) to achieve outcomes,
7. Accurately identify skill strengths and weaknesses and systematically work to attain skills required to an appropriate level, and
8. Understand one's own approach to learning and practice and modify that approach as necessary to attain desired outcomes.

## **WHAT IS ENVIRONMENTAL SCIENCE?**

Environmental science is a study that applies geography, biology, chemistry, physics, geology, and other sciences to the study of the environment. Environmental scientists are individuals who study the impact of human developments on the environment and seek new technologies, methods, and systems to protect, conserve and preserve the environment. As an academic discipline, environmental science includes the atmospheric sciences, environmental engineering, ecology, environmental chemistry, environmental management, and the geosciences. In other

words, environmental science is a study that seeks to understand human-environment interactions and how they shape and influence each other with an alternate objective of achieving a development system, which is environmentally friendly and is sustainable.

The quest to understand the optimal operating space between humans and the environment triggered the concept of sustainable development. Broadly, defined, Sustainable Development refers to "Development that meets the needs of present generations without compromising the ability of future generations to meet their own needs" (Brundtland Report, 1987). However, the concepts of 'sustainability' and of 'development,' are intrinsic to the discipline of environmental sciences, and are widely debated, and understood differently from different disciplinary and philosophical perspectives. Environmental science, just as Sustainable Development (SD) are thus, been defined in many ways. What all the different definitions have in common is a concern with the longevity of the planet and of humankind.

In this Programme, we understand environmental science as an interdisciplinary academic field that integrates various academic disciplines to the study of the environment, and the solution of environmental problems. We thus view environmental science as "the art of human-environment longevity" (Orr 2000). Over the past forty years, debates on "environmental sustainability" have shifted from an exclusive concern with the environment narrowly defined as "the natural world", to a wider awareness that the natural and human worlds are irrevocably interconnected. The severity of current environmental degradation, widening social inequalities, political instability and the recent financial collapse dramatically face us with the challenge of thinking about life and its sustainability in radically different terms. An essential part of this "new" thinking is the explicit acknowledgement of the need for a deep change of the kind Albert Einstein was referring to when he said that the *same manner of thinking that created problems cannot solve them*. This new thinking implies a paradigmatic shift in the way we look at the world, nature, and humankind as well as a change that requires rigorous thinking about the interconnections and interdependencies between the physical, chemical and the social and the intellectual worlds.

Environmental science is thus more than just an academic subject. It challenges the predominant worldview that has guided our choices so far in terms of our relationship with the natural world. It demands a shift in our consciousness and think of the environment and its biological systems as a huge single entity which has closely controlled self-regulatory negative feedback loops that keep the conditions on the planet within boundaries that are favourable to life, beyond which everything can potentially collapse (i.e. from a Gaia hypothesis). It requires us to see our lives as part of a larger entity and to look at the world in a holistic way. The definitions of environmental systems are debated in different modules and from different contexts throughout this MSc Programme, which welcomes and encourages students to be creative and daring in approaching the multiple and complex issues of environmental systems and processes vis-à-vis management.

Environmental systems and management processes are about the challenges of the world we currently live in as much as about the world we would like to create for the future generations. These 'wicked problems' call for complex solutions. To gain an understanding of the interconnected issues involved and develop the ability to contribute towards environmental sustainability and development, a range of disciplines and skills are required. The MSc Programme is thus designed to respond to this intellectual and human challenge by exposing students to interdisciplinary from the very beginning of their studies. Sound science is essential to the formation of responsible strategic planning, but the arts and humanities help us understand and influence human actions.

## **GOALS AND PRINCIPLES OF THE MSC PROGRAMME**

THE OVERALL GOAL OF THE MSC PROGRAMME IS TO ENABLE STUDENTS TO CRITICALLY INTERROGATE THE PRINCIPLES, PRACTICE AND PLURALITY OF ENVIRONMENTAL SYSTEMS AND PROCESSES AND SO TO CONTRIBUTE TO THE EVOLUTION OF INNOVATIVE, INTERDISCIPLINARY THINKING AND ACTION IN THIS AREA.

Education in environmental science is more than learning facts about a topic area. Education for environmental science demands that we assist you, our students, to take your place as local and global citizens. We facilitate your rising to the challenges of the environment and society. This does not mean that we preach one way of doing things, but rather that we encourage you to develop your own critical perspectives on environment and management systems, to reflect on societal values and actions and to take responsibility for the environment through our offering innovative teaching and learning opportunities.

The MSc in Environmental Science Programme is run along five main principles, each of which is expanded briefly below:

- i. Critical interrogation of what “environmental science” is or might be
- ii. Interdisciplinarity – creating a new epistemology?
- iii. Transformative’ rather than ‘transmissive’ education
- iv. Academia as if the world matters
- v. Maintaining local focus and global perspective

#### **a). Critical interrogation of what “Environmental science” is or might be**

As indicated above, the main goal of the MSc Programme is to encourage students to critically interrogate the principles, practice, and plurality of environmental systems and so to contribute to the evolution of innovative, interdisciplinary thinking and action in this area. This requires a new way of thinking; it requires us to combine sound science and a humanitarian perspective to address wicked problems and develop holistic strategies for the future. This question runs throughout every module on the MSc Programme.

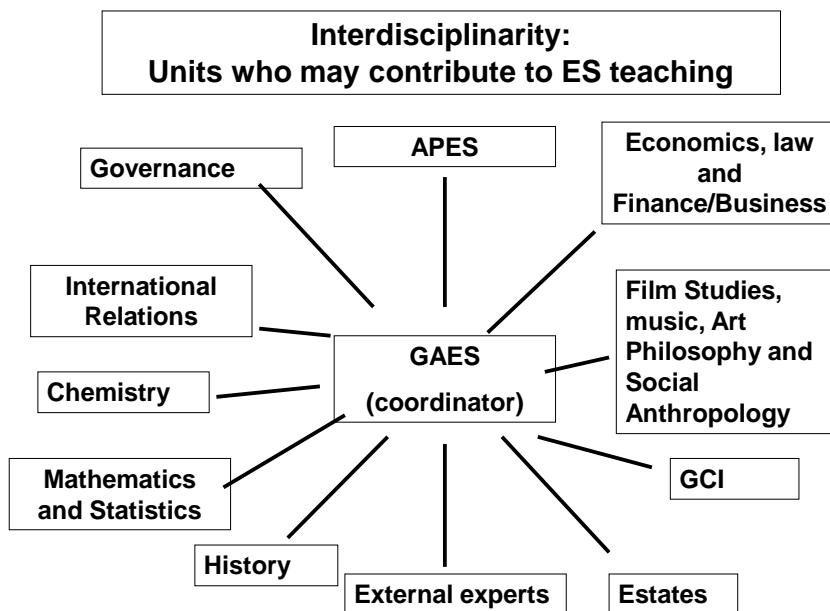
#### **b) Inter-disciplinarity – creating a new epistemology?**

Inter-disciplinarity means more than being exposed to different academic disciplines. It is not a simple trade-off in that you sacrifice ‘depth’ for ‘breadth’ and become a ‘jack of all trades’. Rather it is an approach in which different academic perspectives are acknowledged and respected and the ability to synthesise across these and hence develop holistic thinking is promoted. In environmental science, we also acknowledge the value of different forms of knowledge (e.g. academic, practitioner, indigenous) and of knowledge exchange. We thus academically explore the development of new kinds of knowledge that can address the complex wicked problems facing us today, and practically investigate a new relationship between knowledge, environment, and society.

Interdisciplinary learning is often more exciting than learning in a single discipline since it opens new paradigms for consideration, but it may require a greater learning effort from students to obtain the benefits it offers. Interdisciplinary teaching and learning are recognised to offer exciting opportunities to study real world issues in a holistic manner and, if conducted appropriately, to enhance understanding of discipline boundaries and overlaps and the underlying epistemologies of different research approaches. You may find that some parts of the Programme are easier for you than others because interdisciplinary learning expands your horizons often beyond the limits of your comfort zones. Whilst we hope that you will learn something new and unexpected through the core MSc – Environmental Science courses, we have designed the Programme in such a way that allows you to do a research project in an area of your interest. We hope that you will take the opportunity to expand your readings in these areas and think more deeply on the links between environment, society, and economy. The core courses are designed to shift increasingly from single or multidisciplinary perspectives to interdisciplinary perspectives as you progress through the Programme. Again, the Programme is designed to recognise these developing skills and to enhance peer learning as part of the learning process.

In practice, we offer interdisciplinary teaching and learning through the involvement of different members of staff in GAES, across the University as well as from industry.





### c) 'Transformative' rather than 'Trans-missive' education

Environmental Science is itself a field of study and innovation. If undertaken wholeheartedly, it should offer a whole new educational paradigm: "[O]ne which helps sustain the environment and ecosystem, the 'whole person', communities, and the economy" (Sterling 2004). The goal of consciously shifting to education for environmental sustainability is to escape the mechanistic and reductionist form of managerial learning for economically derived goals and move towards a form of learning that is suitable for understanding and responding to complex, interdependent natural and world systems. This means a shift from *transmissive* towards *transformative* learning is inevitable. It means 'education for environmental sustainability' as opposed to 'gaining knowledge about environmental sustainability'.

What does this mean for you? It means that we have designed the Programme to encourage you, and us, to grow and develop all of our potentials as 'whole people' as well as to meet 'teaching targets' – recognising the paradox that this presents. It means that we have designed some flexible, participatory, reflexive elements that you may not find yet in some other programmes. There are times when learning in this way will be more challenging than merely receiving and regurgitating information. You are asked to respect the diverse skills and knowledge sets of your fellow students and the diverse knowledge and communication strategies of your lecturers, and to be prepared to alter your preconceptions.

### d) Academia as if the world matters!

Over the last few centuries, the relationship between academia and practice has changed constantly. Maintaining an appropriate balance and healthy relationship between theory and practice is a real challenge for the field of study in environmental science. We need to always ask why we act. Then answer: how? Where? When? We reflect in environmental processes and management systems on our roles; are we academics, activists, or advocates? Does our position reconcile with our responsibilities? Different academic disciplines, regions and areas of practice

can have very different ways of linking theory and practice. For example, by necessity academics in developing countries have often been more flexible and engaged with applied projects as well as academic debate. In environmental science we reflect upon this and ensure we are academically rigorous but strive to make the connections that enable theory to transfer to practice on the ground. One way in which we work with you as students is to help you develop your own balance between theory and practice, by providing breadth and scope of theory and by providing multiple skills through the diverse assessment matrix in the ES Programme. You can also create your own links through your chosen ES Pathway.

An additional aspect of our studies is the development of contemporary issues matrix for environmental science, to define 'what' exactly this topic area comprises. We have taken the Department of Forestry, Fisheries, and the Environment's (DFFE) environmental sustainability areas, which of course are interconnected and overlapping, and defined some cross cutting themes. We ensure that modules have appropriate cover across this matrix.

### **Environmental Science Contemporary Issues Matrix**

<b>Priority areas (from DFFE):</b>	<b>Cross cutting themes:</b>
Sustainability in environmental management, conservation and protection, sustainable production, and consumption	Research, science communication and education
Natural resource protection and environmental enhancement Building sustainable communities	Policy, reporting, decision making and governance, financing & engagement
Climate change and energy, climate Financing, Loss and damage, climate And health, Fairness and improving wellbeing, Biodiversity & ecosystems, National and international sustainable development	Changing behaviour, social sustainability, ESG Values, philosophies, and ethics Transparency and public accountability Gender and equity

#### **e) Maintaining local focus and global perspective**

In the MSc - ES Programme, we recognise the adage "Think global, act local". We need to understand the environmental limits of our planet through an appreciation of the ecology, ecosystems, biogeochemical cycling and atmospheric interactions. We need to acknowledge the impacts of our actions also on other societies within our globalised world. Hence within the MSc ES Programme we strive to ensure a balance of local case studies and examples, focusing on environmental sustainability issues and solutions within the University of Wits, within Johannesburg, within Gauteng and within South Africa, with case studies exploring other national perspectives and international and global issues. This principle allows us to explore the consequences of scale and diversity. We examine some of the impacts of our individual actions and citizenship at different points in the Programme.

#### **Structure of the MSc in Environmental Science by Course work**

The programme consists of a mix of option courses and a core research report. A candidate must successfully complete the **Environmental Science Research Report which will be offered**

as a compulsory course in year one of study and any three (3) of the following option courses in order to obtain an MSc degree in the field of Environmental Science.

SEMESTER 1	SEMESTER 2	RESEARCH REPORT (SEMESTERS 1 & 2)
<b>Option:</b> Environmental Monitoring and Assessment (GAES7001A)	<b>Option:</b> Landscapes & Climate Change (GAES 7002A)	<b>Core:</b> Research Report: Environmental Science (GAES7003A)  The theory component starts in Semester 1 and runs through Semester 2.  The project & writing up stages take place both in Sem1 & 2  <b>ALL STUDENTS MUST COMPLETE THIS IN YEAR 1 OF STUDY</b>
<b>Option:</b> Knowledge, Society, precarity, Science & Communication in era of crisis (GAES7007A)	<b>Option:</b> People and Palaeoecology (GAES7006A)	
<b>Option:</b> Globalisation of Food (GAES7000A)	<b>Option:</b> Sustainable Tourism (GAES7005A)	
<b>Option:</b> Environmental Science Research-Master Class (GAES7010A)	<b>Option:</b>	

As can be seen in the figure above, there are **four option** courses in Semester 1, **three** in Semester 2 and **one compulsory** course that runs through semesters one and two. It is important to note that you will **ALL be required to complete GAES 7003A in YEAR ONE** of study before progressing to YEAR TWO of Study if you are a Part-time student. ALL Full-time registered students are expected to complete their studies in **Year One of study**.

The following table provides an overview of the compulsory and optional taught courses, the semester the course is taught in and the credit weighting of each course.

Component	Name of Course	Semester & BLOCK	Course Credits	Key Notes/ Course Coordinator
Compulsory (Core)  ALL MUST REGISTER FOR IT IN YEAR 1	GAES7003A: Research Project & Report.	SEM1-BLK1	90	Prof Mulala Simatele
	Will involve aspects on research training in Quantitative & Qualitative Methods as well as Report writing	SEM1-BLK2		
			<b>90</b>	
<b>Option modules</b>				
component	Name of Course	Semester & BLOCK	Course Credits	Key Notes/Module Coordinator
Option	GAES7001A: Environmental Monitoring and Assessment	SEM1-BLK 1	30	Prof Mulala D Simatele
Option	GAES7007A: Knowledge, society, pricarcity: Science & Communication in an era of climate crisis	SEM1-BLK1	30	Dr Alex Wafer
	GAES7010A: Environmental Science Research: Master class and Case Studies	SEM1-BLK2	30	Prof Jasper Knight

Component	Name of Course	Semester & BLOCK	Course Credits	Key Notes/ Course Coordinator
Option	GAES7000A: Globalisation of Food	SEM1-BLK2	30	Prof Mary Evans
	GAES7006A: People and Palaeoecology	SEM2-BLK3	30	Dr Malebogo Mvimi
	GAES7005A: Sustainable Tourism	SEM2-BLK3	30	Sessional Lecturer TBC
	GAES7002A: Landscapes & climate change	SEM2-BLK4	30	Prof Jasper Knight & Prof Stefan Grab

Please note that the list of available option courses is correct at the time of going to press, due to unforeseen circumstances the availability of course may change. You are also advised to look at the core overview handbook which outlines all the courses available to you. This handbook will be made available to you and will be on Ulwazi. If you encounter any difficulties regarding course choices please contact the Programme coordinator, Prof Mulala Danny Simatele (Mulala.Simatele@wits.ac.za). Outside of the courses above, students can take other 7000 level modules should the relevant PG convenors agree.

Outlined below is a brief description of each of the course. Full details of each course content and knowledge outcomes will be made available by the course coordinator and will be provided at the start of each course.

### **GAES Environmental studies students visiting a coal mine**



**Photo** by Prof Mulala Danny Simatele (2024)

## **COURSE DESCRIPTION**

### **GAES 7000A: Globalisation of Food**

#### **Course summary**

This course introduces issues of food production and food security. Food production and security are highly topical and political topics and highlight the global disparities in power and social justice. This course will introduce students to the complex relationships between soil fertility, climate change and food production; and to food as a development issue that concerns hunger, food insecurity, malnutrition and undernutrition, sustainability, politics, and social justice at a global and local scale. The relationship between natural resources and global population growth will be explored and the course will draw on the theoretical and empirical contributions to analyse food challenges. Food is about the hard trade-offs that the globalisation era has brought about and has become more challenging in the light of global North and South disparities and global climate change. This course will allow students to understand the current debates on the globalisation of food production, distribution and consumption while considering the broader questions of environmental sustainability and the ever-increasing demand for natural resources in a changing climate.

### **GAES 7001A: Environmental Monitoring and Assessment**

#### **Course summary**

This course will introduce students to environmental monitoring and assessments. Environmental monitoring and assessment are decision-making tools, legislative instruments and formalised environmental management processes that are designed to observe an environment, characterize its quality, and establish environmental parameters, to accurately quantify the impact an activity has on an environment. Environmental monitoring and assessments exist to enable precautionary measures to be integrated into project design, implementation and policy planning for the protection of environmental, human and economic systems. Environmental monitoring and assessments, therefore, allows the determination of the potential impacts of development on environmental quality, social wellbeing and regional and/or national economies. The objective of the proposed new course is to provide students with a working knowledge of current trends in environmental, social and economic impacts and methods relating to environmental monitoring and assessments in South Africa, and consider in detail how these tools can be used for social, economic and environmental sustainability. The course will also provide students with an overview of environmental management systems including the legislative framework of environmental governance and auditing process, as well as evaluate their operations in South Africa and other countries, thus providing examples of techniques used in impact assessment relating to a wide range of environmental topics. The course will also provide an opportunity for students to review and appraise the environmental impact and auditing process and associated techniques through investigation of case studies and develop practical skills to conduct screening, scoping, report review stages in environmental assessments, write reports, analyse and synthesise previous environmental assessments and auditing processes.

## **GAES Environmental Science Students – conducting an environmental impact assessment**



**Photo** by Prof MD Simatele (2024)

### **GAES 7002A: Landscapes and Climate Change**

#### **Course summary**

This course examines in detail the composition and workings of landscape systems (including climate, weathering/erosion, hydrology, geomorphology, sediment system dynamics and ecology), and their sensitivity to climate and environmental change both in the past and present. The course explores the climatic, geomorphological, and anthropogenic controls on landscape development, over different spatial and temporal scales, with specific reference to southern Africa but set in a global context. The course then examines the relative influence of different forcing factors on landscape dynamics and properties, and concepts of sensitivity. Contemporary examples of landscape geomorphic change in southern Africa are considered through a two-day compulsory fieldtrip within South Africa in which students are able to receive training and develop their skills in field data collection and analysis, which will be supported by lab analysis.

## GAES7002 Field excursion – MSc 2024 cohort



Photos by Prof Stefan Grab (2024)

## GAES 7003A: Research Report Module

### Course summary

This course creates the context within which students can investigate a substantive environmental science topic in considerable depth. It is the capstone module of the MSc in Environmental Science. Please note that the research report will take the **traditional form** of an **academic argument** and will be composed of different chapters.

## GAES 7005A: Sustainable Tourism

### Course summary

The Course is designed to provide students with a holistic background on archaeo-tourism focusing on a balance between tourists' need for authentic experience as frequently dictated by popular culture, and conservation of the resources. A range of local and international archaeological resources that are currently utilized as tourism attractions will be critically analysed and evaluated incorporating appraisal of the intersection between heritage, popular culture, and conservation, in a South African context.

## **GAES 7006A: People and Palaeoecology**

### **Course summary**

This course will introduce students to the past of present-day environmental thinking. Understanding the role that the environment played in shaping humanity's past is key to modelling effective responses to current global climate change. Paleoenvironmental proxies are a critical means of documenting past ecologies, and it is important for environmental consultants, modellers, and researchers to be able to recognise and evaluate the significance of these proxies. Current technology has its roots in past technologies and paleo-technology is a key aspect in the development of the human ecological niche. Given this, insight into both paleoecology and the origins and development of technology is critical in developing effective technological strategies to mitigate the effects of climate change. This module will allow students to understand how the environmental change in the past has shaped human development. It will also enable students to develop the skillsets to interrogate and critically assess strategies that monitor and model environmental interventions and policies.

## **GAES 7007A: Knowledge, Society, Precarity: Science & Communication in an Era of climate crisis.**

### **Course summary**

This course is designed to introduce students to the critical engagement with the intersection between scientific knowledge productions on the one hand, and how the climate crisis is understood, debated, and confronted in society on the other. The focus is on society in the global south primarily, where the impacts of climate change are predicted to be most severe and where the concept of a single homogeneous society is most contested. The course is intended to address a gap in current environmental studies curricula in Southern Africa, i.e. the disjuncture between expert knowledge in the field and the willingness or capacity of different groups within society to meaningfully participate in the production and application of scientific knowledge. The course proceeds from the premise that confronting global change is a wicked problem, requiring the meaningful participation of all social actors. In the course, students will be confronted with real-world scenarios and will be offered multiple theoretical and practical resources to work towards viable responses to global change.

## **GAES7010A: Environmental Science Research: Masterclass and Case Studies**

### **Course summary**

This course introduces students to key overarching ideas in Environmental Science in a southern Africa context, through a case studies approach in which weekly guest lecturers present the rationale, methods and outcomes of their own research endeavors in different environmental contexts. This will allow students to take a synoptic overview of the nature, diversity and different research approaches undertaken in Environmental Science through the experiences and achievements of academic staff within the school, and to position their own research studies into a wider academic and environmental context. The course is lecture- and seminar-based and students will be expected to undertake critical readings around the weekly topics and to seek interconnections between different research approaches and outcomes in the discipline.



## GAES MSc TEACHING SCHEDULE/TIMETABLE - 2025

COURSE	SESSION	DATE OF DELIVERY	Lecturer
GAES7001A – Environmental Monitoring and Assessment	SEM1-BLK1	10 <sup>th</sup> Feb – 26 <sup>th</sup> Mar	Prof M. Simatele
GAES 7007A – Knowledge, Society, Precarity, Science & communication in Era of Crisis	SEM1-BLK1	10 <sup>th</sup> Feb – 26 <sup>th</sup> Mar	Prof A. Wafer
GAES 7000A – Globalisation of Food	SEM1-BLK2	7 <sup>th</sup> Apr – 27 <sup>th</sup> May	Prof M. Evans
GAES7010A: Environmental Science Research: Master class and Case Studies	SEM1-BLK2	7 <sup>th</sup> Apr – 27 <sup>th</sup> May	Prof J. Knight
GAES 7005A – Sustainable Tourism (Sessional lecturer – TBC)	SEM2-BLK3	22 <sup>nd</sup> Jul – 5 <sup>th</sup> Sept	Sessional
GAES7006A- People and Paleoecology	SEM2-BLK3	22 <sup>nd</sup> Jul – 5 <sup>th</sup> Sept	Dr Malebogo Mvimi
GAES 7002A – Landscapes and Climate Change	SEM2-BLK4		Prof S. Grab & Prof J. Knight
GAES 7003A – Research Project in all the blocks (Mulala)	SEM1&2 ALL BLKS	YEAR ONE	Prof M. Simatele
GAES 7001A <b>Compulsory Field School</b>	SEM1-BLK1	27 <sup>th</sup> – 30 <sup>th</sup> March	Prof M Simatele
GAES 7002A <b>Compulsory Field School</b>	SEM2-BLK4	25-28 September	Prof Grab & Prof Knight

There will be **TWO compulsory Field Schools** for GAES 7001A in Block 1 and GAES 7002A in Block 4. (We will depart early Thursday morning and return on Sunday afternoon). Students who are unable to attend the field school cannot register for these two courses.

COURSE	TIME	DATE OF DELIVERY	VENUE
A combined Orientation & Group Dynamics for the MSc in Env-Sci & MSc in GIS & Remote will be led by Prof Mulala Simatele, Prof Elhadi Adam, and Prof Paida Mhangara, the Head of School. <b>ALL STUDENTS ARE ENCOURAGED TO ATTEND</b>			
Session 1	09h30 – 12h30	12 Feb	SHB1075 (Basement Lab)
Session 2	14h00 – 16h00	12 Feb	SHB1075 (Basement Lab)

### BLOCK 1

GAES7001A – Environmental Monitoring and Assessment – Prof Mulala Simatele Mondays and Thursdays			
SESSIONS	TIME	Mode of Delivery	Room Location
Session 1: Thurs 13 Feb	12h-15h	Face to Face	BP 122
Session 2: Mon 17 Feb	12h-15h	Face to Face	BP 122
Session 3: Thurs 20Feb	Voice-over	Online	Online
Session 4: Mon 24 Feb	Voice-over	Online	Online
Session 5: Thurs 27 Feb	Voice-over	Online	Online
Session 6: Mon 3 Mar	12h-15h	Face to face	BP122
Session 7: Thurs 6Mar	Voice-over	Online	Online
Session 8: Mon 10 Mar	Voice-over	Online	Online

Session 9: Thurs 13 Mar	12h-15h	Face to face	BP122
Session 10: Mon 17 Mar	12h-15h	Face to face	BP122
Session 11: 20 Thurs Mar	Voice-over	online	Online
Session 12: 24 Mon Mar	12h-15h	Face to face	BP122
<b>No Exam</b>	<b>Assessed via 100% coursework</b>		
<b>Compulsory Field School:</b> Depart early Thursday morning, return on Sunday afternoon. <b>Theme:</b> Environmental Management Systems & Impact Assessments – Capricorn District- Limpopo Province			
<b>Thursday to Sunday 27<sup>th</sup> – 30<sup>th</sup> March 2025 - Depart @8hrs &amp; return by 17hrs</b>			

**GAES 7007A – Knowledge, Society, Precarity, Science & communication in Era of Crisis – Dr Alex Wafer**

SESSIONS	TIME	Mode of Delivery	Room Location
Session 1 – Tues – 11 Feb	17h30 – 21h00	Face to Face	GAES Tea Room
Session 2 – Wed – 12Feb	17h30 – 21h00	Face to Face	GAES Tea Room
Session 3 - Thurs – 13 Feb	17h30 – 21h00	Face to Face	GAES Tea Room
Session 4 - Wed - 19 Feb	17h30 – 21h00	Online	Online
Session 5 - Wed – 26 Feb	17h30 – 21h00	Online	Online
Session 6 - Wed – 5 Mar	17h30 – 21h00	Online	Online
Session 7 - Wed -12 Mar	17h30 – 21h00	Online	Online
Session 8 - Wed - 19 Mar	17h30 – 21h00	Face to Face	GAES Tea Room
<b>No Exam</b>	<b>Assessed via 100% coursework</b>		

**BLOCK TWO - 07 April- 27 May 2025**

**GAES 7000A – Globalisation of Food – Prof Mary Evans Tuesday & Thursdays**

SESSION	TIME	Mode of Delivery	Room Location
Session 1 –Tues- 8 Apr	17h00 – 19h00	Online	MS Teams
Session 2 – Thurs- 10 Apr	17h00 – 19h00	Online	MS Teams
Session 3 – Tues – 15 Apr	17h00 – 19h00	online	MS Teams
Session 4 –Thurs- 17 Apr	17h00– 19h00	online	MS Teams
Session 5 -Tues- 22 Apr	17h00 – 19h00	online	MS Teams
Session 6 – Thurs –24Apr	17h00– 19h00	online	MS Teams
Session 7 – Tues – 29 Apr	17h00– 19h00	online	MS Teams
Session 8 - Thurs – 1 May	17h00– 19h00	online	MS Teams
<b>No Exam</b>	<b>Assessed via 100% coursework</b>		

## Block 2 GAES7010A: Environmental Science Research: Masterclass and Case Studies

- This course takes place in Block 2 and is of 7 weeks duration in total.
- **LECTURES**: will take place online only, through MS Teams, on TUESDAYS at 18:00h -20:00h.
- **SEMINARS**: This is then followed by an online seminar discussion of key readings, on FRIDAYS at 18:00h -20:00h.
- All classes should be considered as compulsory.
- The online classes are live only, there is no recording

**NO EXAM & ASSESSED THROUGH 100% COURSEWORK**

**GAES7003A – Research Project proposal Presentations - Prof Mulala Simatele and supervisors. ALL STUDENTS BOTH FULL-TIME AND PART-TIME WILL BE EXPECTED TO PRESENT – From 1 May – 21 May 2025, all students are expected to work with supervisors to complete their proposal presentation and readiness.**

### DATE OF PRESENTATIONS 22 MAY 2025

SESSIONS	TIME	Mode of Delivery	Room Location
Group 1	09:00 – 13h00	Face to face	BP 001
Group 1	14h00 - 16h00	Face to face	BP 001
Group 2	09:00 – 13h00	Face to face	BP 122
Group 2	14h00 - 16h00	Face to face	BP 122

**GAES7003A – Research Project Submission – Prof Mulala Simatele and supervisors.**

- ALL STUDENTS ARE EXPECTED TO COMPLETE THEIR RESEARCH PROJECT IN YEAR ONE OF STUDY
- ALL FULL-TIME STUDENTS ARE EXPECTED TO SUBMIT A COMPLETED RESEARCH PROJECT END OF FEBRUARY 2025

For more information on the submission procedures click on the link below:

Step 1- Proposal submission

Step 2: - Amendment to Registration

Step 3: Submission of progress reports

Step 4: Intention to submit for examination.

Step 5: First submission

Step 6: Final Submission

<https://www.wits.ac.za/science/postgraduate/forms/#d.en.1742002>

**BLOCK THREE - 22 July-05 Sept 2025**

<b>BLOCK 3 GAES7005 Sustainable Tourism – Sessional Lecturer: Dr Precious Shabalala</b>			
<b>SESSIONS</b>	<b>TIME</b>	<b>Mode of Delivery</b>	<b>Room Location</b>
Session 1	12h00 - 15h00	Face to Face	BP122 (Bernard Price Building)
Session 2	12h00 – 15h00	Online	Microsoft Teams (Virtual)
Session 3	12h00 – 15h00	Online	Microsoft Teams (Virtual)
Session 4	12h00 – 15h00	Online	Microsoft Teams (Virtual)
Session 5	12h00 – 15h00	Online	Microsoft Teams (Virtual)
Session 6	12h00 – 15h00	Online	Microsoft Teams (Virtual)
Session 7	12h30 – 15h00	Face to Face	BP122 (Bernard Price Building)
<b>No Exam</b>		<b>Assessed via 100% coursework</b>	

<b>GAES7006 A People and Paleoecology – Dr Malebogo Mvimi</b>			
<b>Please will you plot your preferred dates, times and venue</b>			
<b>SESSIONS</b>	<b>TIME</b>	<b>Mode of Delivery</b>	<b>Room Location</b>
Session 1	17h30 – 21h00	Face to Face	BP 16
Session 2	17h30 – 21h00	Face to Face	BP 16
Session 3	17h30 – 21h00	Online	Online
Session 4	17h30 – 21h00	Online	Online
Session 5	17h30 – 21h00	Online	Online
Session 6	17h30 – 21h00	Face to face	BP 16
Session 7	17h30 – 21h00	Online	Online
Session 8	17h30 – 21h00	Face to face	BP 16
<b>No Exam</b>	<b>Assessed via 100% coursework</b>		

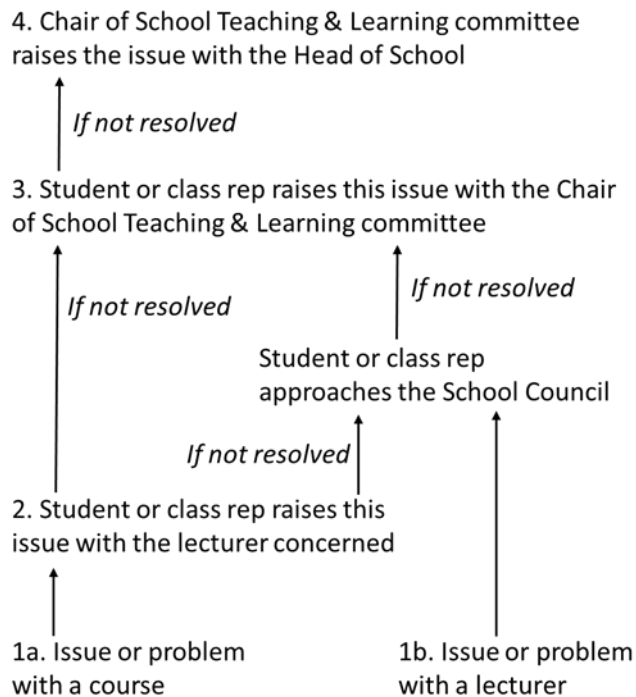
**BLOCK FOUR - 15 Sept-28 Oct 2025**

<b>GAES7002A Landscapes and Climate Change – Prof Stefan Grab &amp; Prof Jasper Knight</b>			
<b>SESSIONS</b>	<b>TIME</b>	<b>Mode of Delivery</b>	<b>Room Location</b>
Week 1: Sessions 1 & 2	18h00 – 20h00	Face to face	BP 001
Week 2: Sessions 3 & 4	18h00 – 20h00	Online	Online
Week 3: Sessions 5 & 6	18h00 – 20h00	Online	Online
Week 4: Sessions 7 & 8	18h00 – 20h00	Online	Online
Week 5: Sessions 9 & 10	18h00 – 20h00	Online	Online
Week 6: Sessions 11 & 12	18h00 – 20h00	Face to face	BP 001
<b>Compulsory field School</b> is proposed for 2 <sup>nd</sup> week of block 4 (depart early Thursday)			

morning 19 <sup>th</sup> September, return on Sunday afternoon 22 <sup>nd</sup> September) – Let us review this?		
Thursday - Sunday	08hrs to 17hrs	19-22 Sept 2025

## Reporting concerns on Course issues

Please note that comments or concerns about individual courses or lecturers must follow the escalation procedure as outlined in the *Code of Conduct for Staff and Students* document:



## FIELD TRIP

As part of the MSc in environmental science by CWRR, there are **TWO Compulsory Field Schools** that you will be expected to attend:

- The first field school will be for GAES 7001A and this will take place from the 27<sup>th</sup> to the 30<sup>th</sup> March 2025. This is likely to take place in Polokwane, Limpopo Province.
- The second one will be for GAES 7002A and this will take place from the 25-28 September 2025
- Details for this field school will be shared with you in due course by the course lecturers (Prof Jasper Knight and Prof Stefan Grab).

PLEASE MAKE SURE THAT YOU MAKE NECESSARY ARRANGEMENTS TO ATTEND THESE FIELD SCHOOLS AS THEY ARE COMPULSORY FOR BOTH FULL-TIME AND PART-TIME STUDENTS. NO EXCUSES WILL BE ACCEPTED.

## **WEEK 0 AND READING MATERIALS**

Students are reminded that Week 0 and the reading week are integral parts of the University semester, even though no classes are scheduled during that time. Week 0 offers students an opportunity to prepare for classes by purchasing and beginning work on course material, and some Schools hold induction meetings during this time. Reading Week is intended as an opportunity for staff and students to catch up on academic work and to deepen their understanding of their subject(s). All Postgraduate students are expected to devote these parts of the semester to their studies. For additional information please visit: <https://www.wits.ac.za/students/academic-matters/postgraduate-affairs-office/wits-gold/>

As well as taking courses, the University offers a range of training programmes that are relevant to postgraduates. The co-ordination of these programmes is provided by administrative unit called Centre for Learning, Teaching and Development (CLTD) (<https://www.wits.ac.za/cltd/>). Other relevant training initiatives in the University includes GRADSkills, which focuses on the professional development of postgraduates (<https://www.wits.ac.za/ccdu/study-skills/>).

## **REGULATIONS**

This section outlines key regulations that you should be aware of throughout the course of your studies. In addition to those rules and regulations outlined below students are also advised to review the University website as rules and regulations are subject to change and the website will always have the most current version of any regulation.

As well as being aware of the regulations outlined below, students are also advised to refer to the University's Code of Practice for Students in Taught and Research Postgraduate Programmes This Code of Practice contains all relevant information concerning study, regulations, and progress review; it is updated periodically, so please consult it regularly. Please refer to: ([https://www.wits.ac.za/media/wits-university/students/gender-equityandtolerance/documents/Student%20Code%20of%20Conduct%20\(17%20April%202015\).pdf](https://www.wits.ac.za/media/wits-university/students/gender-equityandtolerance/documents/Student%20Code%20of%20Conduct%20(17%20April%202015).pdf))

## **SENATE REGULATIONS**

You should make yourself aware of the Senate Regulations and the key Codes of Practice and Rules that govern your studies and behaviour at the University of the Witwatersrand. These are all available on the University web page under the Sections on Academic Matters and Rules and Regulations (<https://www.wits.ac.za/students/academic-matters/>)

## **ACADEMIC MISCONDUCT**

Academic integrity is fundamental to the values promoted by the University. It is important that all students are judged on their ability, and no student will be allowed unfairly to take an advantage over others, to affect the security and integrity of the assessment process, or to diminish the reliability and quality of a University of the Witwatersrand's degree. Please the policy on: <https://www.wits.ac.za/about-wits/governance/university-policies/>.

Academic misconduct includes the presentation of material as one's own when it is not one's own; the presentation of material whose provenance is academically inappropriate; and academically inappropriate behaviour in an examination or class test. Any work that is submitted for feedback and evaluation is liable for consideration under the University's Academic Misconduct policy irrespective of whether it carries credit towards your degree. All work submitted by students is expected to represent good academic practice.

You should be aware that the University takes academic misconduct offences extremely seriously and any student found guilty of a repeat offence may be expelled from the University either temporarily or on a permanent basis.

The University's Academic Misconduct policy covers the behaviour of both undergraduate and postgraduate students.

All students are advised to familiarise themselves with the University's policy on academic misconduct which may be accessed from: [https://www.wits.ac.za/media/witsuniversity/library/documents/Student%20Plagiarism%20Policy%20Approved%202020-11-28%20\(002\).pdf](https://www.wits.ac.za/media/witsuniversity/library/documents/Student%20Plagiarism%20Policy%20Approved%202020-11-28%20(002).pdf) and <https://libguides.wits.ac.za/c.php?g=145365&p=953118>. Students who are unsure about the correct presentation of academic material should approach their tutors, and may also contact Prof Mulala Danny Simatele: [Mulala.Simatele@wits.ac.za](mailto:Mulala.Simatele@wits.ac.za)

## **ACADEMIC APPEALS AND COMPLAINTS**

The University is committed to ensuring students gain as high a quality student experience as possible while studying at Wits. Occasionally things may go wrong and if you are experiencing a difficulty or are dissatisfied with your academic experience, you should raise concerns as soon as possible. This allows effective resolutions to be worked out quickly.

Difficulties or dissatisfaction normally fall into one of three categories:

**I. Appeals against academic judgements** - where, for example, the University has made a judgement about your assessed work or academic progression.

**II. Complaints** - where you are dissatisfied with the provision, whether academic or non-academic, that you have received from any part of the University.

**III. Disciplinary cases** - where the University has grounds to believe that you have conducted yourself in an unacceptable manner in an academic or non-academic context.

More information on the procedures to follow are outlined in the University's Code of Practice on Student Appeals, Complaints and Discipline: <https://www.wits.ac.za/students/student-grievance-procedures/>

If there are personal circumstances that may affect your academic performance and subsequently may result in an Academic Appeal, please bring these to the attention of an appropriate member of staff as soon as possible, for example your Academic Adviser, the Head of School or the Faculty Dean or Dean of Students.

You can also obtain guidance on the procedures relating to any of the sections of the Code from the Students Representative Council (SRC) (<https://www.wits.ac.za/students/src/>), the Academic Registrar & or Student Services.

## **FURTHER GUIDANCE AND SUPPORT**

The Student Representative Council (SRC) provides independent and confidential help and advice for students who are contemplating a complaint or appeal or are having discipline proceedings taken against them. The Wits SRC representative for Legal, Policy and Constitutional Officer is Cara-seugnet Kaboni and can be contacted on: [src.legal@students.wits.ac.za](mailto:src.legal@students.wits.ac.za). You can also contact Tshiamo Chuma who is the SRC academic representation on: [src.academic@students.wits.ac.za](mailto:src.academic@students.wits.ac.za). If you cannot get through to anyone of these then contact the SRC present Cebolenkosi Khumalo on [src.president@students.wits.ac.za](mailto:src.president@students.wits.ac.za).

## SUPPORT SERVICES FOR STUDENTS

### Within the School

Person/organisation	Contact details/their location	What they can help you with
Chair, School Transformation Committee	011 717 6044 <a href="mailto:Jerome.Reynard@wits.ac.za">Jerome.Reynard@wits.ac.za</a> Origins North building	Any issues to do with discrimination in the school
School Safe Space officer	011 717 6055 <a href="mailto:Catherine.Namono@wits.ac.za">Catherine.Namono@wits.ac.za</a> Origins North building	To support diversity, especially for LGBTIAQ+ people
School Students at Emotional Risk representative	011 717 6514 <a href="mailto:Jennifer.Fitchett@wits.ac.za">Jennifer.Fitchett@wits.ac.za</a> BP building 012	For referral of students at emotional risk to relevant support services
School Health and Safety coordinator	011 717 6520 <a href="mailto:Thandizwe.Nsimbi@wits.ac.za">Thandizwe.Nsimbi@wits.ac.za</a> BP building 015	Any issues to do with Health and Safety or access to Bernard Price or Origins North buildings

### Within the Faculty

Person/organisation	Contact details/their location	What they can help you with
FACULTY OF SCIENCE Student Wellness and Learning Facilitator	<a href="mailto:grant.demas@wits.ac.za">grant.demas@wits.ac.za</a> TW Kambule Building (Mathematical Sciences Building), West Campus	Time management, life coaching, stress management
FACULTY OF SCIENCE Academic Skills Coordinator	<a href="mailto:marike.kluyts@wits.ac.za">marike.kluyts@wits.ac.za</a> TW Kambule Building (Mathematical Sciences Building), West Campus	Improving your reading and writing skills
FACULTY OF HUMANITIES Teaching and Learning Advisor	011 717 4099 <a href="mailto:nompumelelo.bhengu@wits.ac.za">nompumelelo.bhengu@wits.ac.za</a> South West Engineering building, East Campus	Curriculum counselling and study support
FACULTY OF HUMANITIES Teaching and Learning Advisor	011 717 4099 <a href="mailto:lindiwe.tshuma@wits.ac.za">lindiwe.tshuma@wits.ac.za</a> South West Engineering building, East Campus	Curriculum counselling and study support

### Within the University

Person/organisation	Contact details/their location	What they can help you with
Transformation and Employment Equity Office	011 717 1462 <a href="mailto:Cecilia.Smith@wits.ac.za">Cecilia.Smith@wits.ac.za</a> Room SH9006, 9th Floor, Solomon Mahlangu House, East Campus	Anyone who experiences any form of discrimination on campus may report their complaint to the Wits Transformation and Employment Equity Office. Discrimination may include but is not limited to racism, sexism, transphobia, homophobia, xenophobia, ableism or classism. All reports of discrimination are treated confidentially
Gender Equity Office	011 717 9790 <a href="mailto:Info.geo@wits.ac.za">Info.geo@wits.ac.za</a> 20th Floor, University Corner, East Campus	Collects and tracks all GBH-related complaints across the university and analyses trends to inform and improve intervention initiatives; Provides a safe and confidential space with full-time counselling support to



		complainants and victims of GBH; Confidentially advises complainants and victims of GBH of their options; Oversees an independent disciplinary procedure for formal complaints against staff or students accused of GBH; Engages actively in advocacy around gender equality.
Disability Rights Unit	011 717 9154 <a href="mailto:tish.lumos@wits.ac.za">tish.lumos@wits.ac.za</a> Solomon Mahlangu House, East Wing, First Floor, East Campus	Disability testing and support
Health and Wellness Centre	011 717 9111 / 9113 Basement of Matrix building, East Campus	For medical needs and services, including contraception, blood testing, minor medical emergencies, physiotherapy, and referral to in-house psychiatric services
Counselling and Careers Development Unit (CCDU)	011 717 9140 / 9132 <a href="mailto:info.ccd@wits.ac.za">info.ccd@wits.ac.za</a>	Short term counselling, study skills, careers counselling, peer mentoring, life coaching, graduate recruitment
Emthonjeni Centre	011 717 4513 <a href="mailto:Paballo.lepota@wits.ac.za">Paballo.lepota@wits.ac.za</a> Emthonjeni Centre, next to OLS, east campus	Longer term therapy and counselling
Central Accommodation Office	011 717 9172 / 9173 / 9174 <a href="mailto:accommodation@residence.wits.ac.za">accommodation@residence.wits.ac.za</a> Room SH045, Ground Floor, Solomon Mahlangu House, East Campus	For all accommodation issues including student residences
Wits Citizenship and Community Outreach (WCCO)	011 717 9217/55 <a href="mailto:Karuna.Singh@wits.ac.za">Karuna.Singh@wits.ac.za</a> Hostel Road (next to the cricket fields), East Campus	Wits food programme, tutoring and support, clothing bank
Development and Leadership Unit (DLU)	Tel 011 717 9234 <a href="mailto:Neo.Cindi@wits.ac.za">Neo.Cindi@wits.ac.za</a> First floor, Matrix building, East Campus	
Wits Integrity Hotline	082 938 4559 / 4569 <a href="mailto:wits.integrity@wits.ac.za">wits.integrity@wits.ac.za</a>	To report improper, unethical or illegal conduct or activities related to the University without fear of victimisation
Student Equity and Talent Management Unit	011 717 8665 <a href="mailto:tp.setmu@wits.ac.za">tp.setmu@wits.ac.za</a> Marang Building, 2nd Floor, Education Campus, Parktown	For facilitating access to educational opportunities for previously disadvantaged young people
Student Crisis Line	0800 111 331 (24/7)	
Wits Campus Protection Services	011 717 4444/6666 (24/7)	

## OTHER RESOURCES

Lifeline: 011 443 3555 (24/7)

Mental Health Line: 011 234 4837 (office hours)

Suicide Crisis Line: 0800 567 567 (24/7)

## ABSENCE REPORTING

### Absence from Classes

Failure to attend classes or meetings with academic staff may result in your losing the right to be assessed in that module. Please ensure that you are familiar with the 'Academic Alert' regulations as stated in the policy: <https://www.wits.ac.za/media/wits-university/faculties-and->

[schools/health-sciences/studentdocuments/Rules%20pertaining%20to%20absence%20from%20compulsory%20activities.pdf](#) and elsewhere in this handbook.

Under certain circumstances such as ill health, Schools may request further documentation in the form of a doctor's certificate. If you submit more than three medical Certificates in a very short time, or if the period of absence extends to fifteen working days, you may be contacted by the programme coordinator, student services, the relevant Head of School or Dean, or by an appropriate member of staff in your School.

Finally, please note – you should make the relevant module co-ordinator, the programme coordinator, or the GAES school administrator – Mrs Natanya Alexander aware of your absence as soon as practical on [Natanya.Alexander@wits.ac.za](mailto:Natanya.Alexander@wits.ac.za)

### **ABSENCE FROM EXAMINATIONS**

Absence from Examinations due to illness or any other unavoidable reason should be reported IMMEDIATELY or as soon as you know you will be unable to sit an examination to the University Examinations Office by telephone (011) 717 1272 or email on: [help.EGO@wits.ac.za](mailto:help.EGO@wits.ac.za). This should then be followed up by completion of Medical Certification of Absence form in the case of ill health.

As soon as you are well enough you should contact the School to make arrangements for an alternative or deferred assessment to be completed at the earliest opportunity.

### **LATE SUBMISSION OF COURSEWORK ASSIGNMENTS**

Normally no extensions for coursework submissions are available. It may be possible under exceptional circumstances to grant students an extension to the submission deadline for coursework.

***Extensions will only be given for medically certified or other exceptional reasons.***

Requests should be made to the course Convenors involved who will decide if an extension is possible and also notify the revised date for submission.

Where no extension has been granted, penalties for late submission of course-work are as follows:

Up to one day late	10% penalty deducted off the given mark
Up to 3 days late (includes weekend)	20% penalty deducted off the given mark
More than 3 days late	100% penalty (i.e. the work receives a zero mark)

### **WITHDRAWAL FROM STUDIES**

If you are considering withdrawing from your studies at the University, you should discuss the matter with your programme coordinator in the first instance. You should arrange to do this as early as possible as there are often alternative options open to you that would not require the final step of permanent withdrawal from the University. If you do decide you wish to withdraw from your studies, ***you must contact the HOS*** who will be able to offer guidance on your options and who will ensure that the process is completed correctly. You can also consider taking leave from your studies and put your studies in abeyance. Information on abeyance and other important information on postgraduate studies can be obtained on: <https://www.wits.ac.za/science/postgraduate/forms/>

You should be aware that there are fee implications when you withdraw from your studies part of the way through an academic year. You should therefore ensure you contact the Fees Officer in the Registry to obtain early advice on the final implications of your decision before you complete your withdrawal. Additional advice could also be found on the university's website: <https://www.wits.ac.za/study-at-wits/student-fees/>

## **TERMINATION OF STUDIES**

If your performance is unsatisfactory and you have gained insufficient credits for you to progress to the next stage of your programme, your studies may be terminated. This decision is taken by the Faculty Business Committee upon the recommendation from your study supervisor, programme coordinator and endorsed by the Head of School. Please note that this is not a decision made by the school but usually following a recommendation from the school.

If you are in this situation, you will be notified that your studies are being terminated and you will have ten working days within which to submit a request for the decision to be reviewed by the faculty. This should be supported by appropriate documentary evidence specifying the reasons. If this request is unsuccessful and the faculty proceeds to terminate your studies, you will have one further right to an appeal to the Senate of the University. In this case appeals should be submitted to the Academic Registrar within one calendar month of receiving the outcome of the Review request to the school. Students who do not appeal against Termination of Studies will have their studies automatically terminated. Full details on the acceptable grounds for appeal and the processes involved are available from: <https://www.wits.ac.za/science/postgraduate/forms/>

## **PERSONAL DETAILS**

You are responsible for ensuring that your contact details are kept up to date. You may do this at any time during the year via the Faculty of Science Postgraduate Office: <https://www.wits.ac.za/postgraduate/academic-programmes/faculty-of-science/> or contacting any of the officials in the PG Office on: [#Fac-Science-MSc@wits.ac.za](mailto:#Fac-Science-MSc@wits.ac.za).

## **RESPONSIBILITIES: STAFF AND STUDENT**

The University's Code of Practice for Supervisors and Students in Taught and Research Postgraduate Programmes outlines the responsibilities that the University expects of postgraduate supervisors and students. Please see: <https://www.wits.ac.za/media/wits-university/faculties-and-schools/health-sciences/student-documents/postgraduate/Statement%20of%20Principles%20for%20Postgraduate%20Supervision%20Revised%20052021%20.pdf>.

To produce a positive and productive programme for you, the following indicates minimum requirements.

### **STAFF RESPONSIBILITIES**

- To provide clear notification of module objectives and content, teaching methods, assessment, and the penalties for non-compliance with attendance or submission requirements.
- To ensure sensitivity in setting coursework submission dates and early notice of such dates.
- To provide a level of library provision which gives you reasonable access to all recommended material, where necessary through the short loan system.
- To provide high quality provision of study aids (hardcopy information, electronic-based sources, etc).
- To return coursework with appropriate feedback and normally within 21 working days of submission (please note that all continuous assessment grades are technically provisional until endorsed at the final Exam Board with the External Examiner.
- To provide advanced notification of, and explanation for, any changes to teaching times or rooms, communicated by email or by updating relevant web pages.
- To offer a reasonable level of access to staff outside formal class times.

- To provide opportunities for discussion of performance in assessed coursework and examinations, and in relation to your general progress with your studies.

Please note that University policy concerning feedback on assessed work, examination performance and the return of examination scripts can be found at: <https://www.wits.ac.za/media/wits-university/learning-and-teaching/cltd/documents/2018%20Revised%20Policy%20on%20Evaluations%20and%20Teaching%20of%20courses.pdf>

### **STUDENT RESPONSIBILITIES**

- To be punctual and have full attendance at lectures and tutorials.
- To check relevant University web pages for timetable changes and for notices.
- To read the references required and consult additional sources such as academic and professional journals.
- To have adequately prepared for and have active participation in smaller group classes (tutorials, seminars etc).
- To organise and schedule work so that submission deadlines are adhered to. Requests for extensions to coursework submission dates must be agreed with the relevant Module Tutor.
- To provide written, and if possible, prior notification of unavoidable inability to attend lectures/tutorials (e.g. on health grounds). In these cases, students should email or write a letter to their Module Tutor
- To follow strict compliance with university regulations relating to academic offences (e.g. plagiarism) and acceptance of the penalties for noncompliance (see the Academic Misconduct section of this handbook)
- To check your university email on a **daily** basis.
- To inform us promptly of any change of address for either your St Andrews or home details. This must be done through the Student Portal.

### **UNIVERSITY FEES**

For full information on the Tuition Fees that you will be liable to pay throughout your studies go to <https://www.wits.ac.za/study-at-wits/student-fees/>. Programme related fees such as field trips, laboratory fees etc can be provided by your School.

### **HEALTH & SAFETY**

Notices are posted throughout the school indicating who the current First-Aiders are and how to contact them. The location of the first-aid box will be clearly marked within each building. Notices are also displayed detailing your exit routes and assembly points in the event of fire. All students should familiarise themselves with this information. Each School has a Safety Officer. Any hazards or safety-related incidents should be reported to the School Safety Officer or the School Office immediately. Students are reminded that the misuse of any Safety, Fire or First Aid equipment will result in discipline.

The School of Geography, Archaeology and Environmental Studies' health and safety officers are: Prof Craig Sheridan ([craig.sheridan@wits.ac.za](mailto:craig.sheridan@wits.ac.za)), Dr Thembi Russell ([Thembi.Russell@wits.ac.za](mailto:Thembi.Russell@wits.ac.za)) and Mrs Natanya Alexander ([Natanya.Alexander@wits.ac.za](mailto:Natanya.Alexander@wits.ac.za)). Any hazards or safety-related incidents should be reported to the School Safety Officers.

### **FIRE EMERGENCY INFORMATION**

Events can move rapidly when a fire occurs so you must know your fire routine before a fire breaks out i.e. what to do if the fire alarm sounds and what to do if you discover a fire.

**If you discover a fire, you should:**

1. Sound the alarm by breaking the nearest glass fire call point. This will set off the building fire alarm. You or someone else must then phone **(011) 717-4444** from any phone in the University) and request the attendance of the Fire Service. The sounding of a building fire alarm does not mean the Fire Service are automatically alerted. In fact this is not the case in most instances so you must assume the alarm has not alerted the Fire Service and you should make the emergency call **EVERY TIME**.
2. Only fight the fire if you can do so without endangering yourself or others - a water extinguisher can throw a jet of water up to 6 metres. If one extinguisher does not put the fire out, **GET OUT AND CLOSE THE DOOR BEHIND YOU AND STAY OUT UNTIL TOLD BY A FIRE SERVICE OFFICER IT IS SAFE TO RETURN.**
3. Do not fight a fire which is large and/or spreading or if you are unsure of the type of extinguisher to use on the fire.

#### **If you hear the fire alarm, you should:**

1. Leave your place of work, closing windows and doors behind you if this can be done quickly.
2. Follow your nearest exit route to the agreed place of safety/assembly point and stay there until authorized to return by a Fire Officer.
3. If your usual exit route is blocked by smoke, **STOP – CHANGE DIRECTION - FIND AN ALTERNATIVE EXIT ROUTE.** You should still gather at the normal assembly point for your workplace.
4. **DO NOT**
  - a. Stop to collect personal belongings.
  - b. Use any lifts.
  - c. Re-enter the building until authorised by the Fire Brigade Officer

#### **Actions by Persons Requiring Assistance:**

It is expected that, on entering the building for the first time, a person who for any reason will require assistance:

- Should familiarise themselves with the established procedures of the building. (Fire action notices detailing this procedure are sited throughout the building);
- Contact a member of staff to arrange for the appropriate nominated person to discuss an agreed fire evacuation plan.
- Co-operate with the agreed managerial procedures for safe evacuation in the event of fire.

## **STUDENT PROGRESS & ASSESSMENT**

### **Advising**

At the beginning of each session, before matriculation in the University, taught postgraduate students will be advised into the appropriate modules for their programme by the MSc Programme coordinator to whom any queries regarding this process and module selection should be addressed to in the first instance. Names of Advisers of Studies and Programme Directors can be obtained from each School.

### **RE-ADVISING/CHANGING COURSES**

Students are ordinarily allowed to change courses only during the first two weeks of each semester. After two weeks then your Adviser of Studies or Programme Co-ordinator must place a special request, on your behalf, to the appropriate Dean. No matter what level of module you

are studying, you must contact the Programme Co-ordinator to obtain the necessary approval for any change.

You must not, in any circumstances, enrol yourself into a new module or simply start attending the classes for a new module, at any level, without being Re-advised. Advising is one of the primary means by which your academic record is maintained and exam schedules are produced; and unless you ensure that this is kept up to date you may find you will not receive the credit for the modules you have taken or that you have a clash in your exam timetable.

## **COURSE CONFIRMATION**

Following Re-advising students have a two-week period to check and confirm that their module choices are correct. Students will be contacted in Week 3 of each semester with details of how to complete this requirement.

## **WITHDRAWAL FROM A COURSE**

If you wish to withdraw from a course after the second week of a semester, you should discuss the matter with your programme Adviser of Studies who will then contact the assistant Dean/registrar (Advising) to seek the appropriate approval. You will be required to complete the amendment form that can be obtained from the Faculty of Science Postgraduate website: <https://www.wits.ac.za/postgraduate/academic-programmes/faculty-of-science/>

## **CREDIT VALUE**

This relates to each course' "worth". One credit is equivalent to 10 hours of study associated with the course; thus a 30-credit course means that a minimum of 300 hours of study is regarded as necessary to pass the course. The 300 hours comprises class contact time (i.e. lectures/fieldtrips), time to undertake the assessments associated with the course and your own private study time.

## **PROGRESSION TO RESEARCH REPORT**

This refers to the academic decision that is made at the end of semester two as to whether you are allowed to progress to the final stage of assessment for the MSc Project Work and Research Report. To achieve automatic "progression" you must pass the semester one and semester two module assessments. For Full time students, you are expected to complete both the course work and project work in year 1 of study, while Part-time students are expected to complete all the course work in Year 1 of study and the Research Project and Research Report in Year 2 of their study.

## **GRANTING OF DEGREES**

To be granted the MSc degree, a student must fulfil the following criteria.

- He or she must **obtain 90 credits from the course work** and 90 Credits from the project work and research report: totalling 180 Credits.

Please note regarding the awarding of a distinction, as per the University's Taught Post Graduate Code of practice (<https://www.wits.ac.za/exams/>), a distinction can be awarded for the taught element of the MSc and the research report.

## **ASSESSMENT (MARKING) PROCEDURES**

The School of Geography, Archaeology and Environmental Studies is committed to a continuing review of its assessment procedures and is active in evaluating and implementing in creative modes of assessment, where appropriate. The philosophy and practical aspects of assessment for each module will be fully explained by each Module lecturer. A central aim of this approach is that, for each module, the mode of assessment should constitute a strong incentive for students to strive for excellence.

All assessments are subject to a five-stage process.

1. Scripts are marked according to the grade related criteria.
2. All course work is accessed by the course lecturer and later moderated by the external moderator.
3. ALL research reports are assessed by experts within the specific area the student has written on. There is usually one internal assessor and one external assessor. In some cases, two external assessors will be nominated to assess the research report.
4. A sample of scripts representing the different grade categories and any problem scripts (for instance, where a third marker was called in) is sent to the External Examiner. External Examiners are responsible for “balancing and checking” to ensure consistency.
5. A final stage follows which involves Examination Board meetings. Every student’s record on coursework and examination is scrutinised, any special circumstances (e.g. medical) are considered, and grades agreed.
6. The Faculty Examinations Officer then submits these final “approved” marks to the University Examinations Officer.

## **COURSEWORK SUBMISSION**

The details for submission of coursework for a course will be found in that particular course handbook and will vary by course, however it is likely that written assignments will be submitted as follows:

- All assignments must be word-processed.
- A hard copy (stapled and not in plastic wallets) and an electronic copy will need to be submitted. The electronic copy maybe submitted as an electronic assignment on Ulwazi or email depending on the advice given to you by your course lecturer.
- The location for handing work in GAES is by 12 noon on the submission date (to be advised by the course lecturer).

Where written work requires to be submitted for marking, a deadline will be specified well in advance. If work is submitted after the specified deadline the penalties described above will be applied.

## **FEEDBACK TO STUDENTS ON ASSESSED WORK**

Students should be able to receive routine feedback on any work that they have submitted. Feedback will give you advice that will guide you to improving your learning and future performance. Feedback opportunities vary from lecturer to lecturer but can include individual face-to-face discussion, written commentaries on work or electronic feedback, for example through Ulwazi.

Feedback on examination performance is usually not given but if there is a request put forward can be given to you from a member of academic staff on an examination script, you should contact the Head of School and specific lecturer to arrange a suitable time. No fee is charged for this type of feedback.

## **EXAMINATIONS – TIMETABLES, RULES**

Module Handbooks and the University Course Catalogues contain details of the percentage of the final module mark that will be derived from the formal examinations and course. Timetables will also be contained this course handbook. Please make a habit of checking them all the time.

### **Anonymous Marking (Exams)**

All examination papers are marked anonymously. The examination script books are designed so that all your personal details are completed along a strip on the right-hand side of the script book, which you seal before leaving the Examination Hall. You should ensure your matriculation number is completed on the front of the script book and that it remains clearly visible.

Your personal information will remain sealed while the internal marker(s) mark your script. Once a mark has been agreed by the internal marker(s) and recorded on the front of your script book, the flap will be opened to reveal your personal details to ensure that the information is recorded on the correct student record.

## **SUPPORT SERVICES**

A range of support services are available for students during their time at the University. Support services range from helping with the personal through to the academic. Some of the key support services and their contact details are highlighted in this section.

### **STUDENT SERVICES: GENDER-BASED HARM AND TRANSFORMATION**

Student Services is available to provide advice, assistance, and support in all areas of your life which may affect your academic studies. You can seek information and advice on a wide range of issues including immigration, disability services, study related problems, mental health support and student finances. The main reception area of Student Services is on the first floor of the Students' Association building, where you can obtain information and/or be referred to the appropriate person within Student Services to assist you. You are encouraged to come in when any issue or difficulty arises and it is very easy to access its services – simply email, call, or drop in and you will be able to speak to someone as soon as possible. Further information is available at: <https://www.wits.ac.za/education/student-services/>. You may wish to obtain advice and guidance from within your School in the first instance. The school office will normally identify the most appropriate person to speak to you.

Please be assured that personal matters will be dealt with confidentially in relation to the POPIA Act and information will only be passed on to other members of staff in accordance with the University Student Confidentiality Policy:-

<https://www.wits.ac.za/media/witsuniversity/study/undergraduate/documents/Wits%20Privacy%20Notice.pdf> and <https://www.wits.ac.za/site-assets/small-footer/popia-and-paia/>. Should you feel your rights have been violated based on gender, the university takes this seriously and you are welcome to contact any official at the Gender Equity Office: <https://www.wits.ac.za/students/geo/university-policies/> or the Transformation Office on: <https://www.wits.ac.za/transformationoffice/>. The transformation Officers in GAES are Dr Jerome Reynard ([Jerome.Reynard@wits.ac.za](mailto:Jerome.Reynard@wits.ac.za)) and Dr Catherine Namono ([Catherine.Namono@wits.ac.za](mailto:Catherine.Namono@wits.ac.za)).

### **STUDENTS WITH DISABILITIES**

Students with special needs or disabilities should contact the in the first place the Head of School and the School administrator who are Prof Paida Mhangara ([Paida.Mhangara@wits.ac.za](mailto:Paida.Mhangara@wits.ac.za)) and Natanya Alexander ([Natanya.Alexander@wits.ac.za](mailto:Natanya.Alexander@wits.ac.za)). Information about the university's policies, procedures and support for students with disabilities can be found here; <https://www.wits.ac.za/disability-rights-unit/>.

### **COUNSELLING & CAREERS DEVELOPMENT UNIT (CCDU)**

The CCDU offers support with study skills and career advice to all students. Study skills enable students to become more proficient learners. One-to-one support is available for numerous study



areas including note taking, study techniques, study organisation, reading skills, essay writing, report writing, lab reports, presentation skills, research skills and time management.

If you are seeking help for a topic not named above, then help may still be available. See the CCDU website for further details: <https://www.wits.ac.za/teaching-and-learning/student-support/#:~:text=To%20contact%20CCDU%20call%20011,high%20school%20to%20university%20life>

## **ENGLISH LANGUAGE TEACHING CENTRE (ELT)**

Wits English Language School (WELS) is a university department which, amongst other roles, provides language and study skills support to students who are non-native speakers of English. Various different courses and services are available including a postgraduate writing support class and a proof-reading service. See the WELS website for further details: <https://www.wits.ac.za/witslanguageschool/courses/english-improvement/>

## **FURTHER INFORMATION**

### **Staff-Student Liaison (Postgraduate Forum)**

At the start of the academic year, the MSc in ES programme students will elect a class representative. The role of the class representative will be to bring to the attention of the school issues and matters of common concern that affect (or may affect) student progress with their studies. Such issues can be raised on a "need-to" basis at any time and brought to the attention of any member of staff in the school, preferably the HoS. Periodically, the class representative will meet with the Programme coordinator, Prof Mulala Simatele and others if necessary to discuss issues that may apply to all students. This is known as the Staff-Student Liaison forum. More details concerning the duties and election of class representative and the operation of the Staff-Student forum will be made known to you in due course.

The dates of the committee meetings will be made available during the first week of semester 1.

## **THE LIBRARY**

The University of Wits have several libraries scattered across its campuses. You are advised to visit any of these libraries and use them. The library is where you will find books, journals, CD ROMs, DVDs, videos, newspapers, maps, manuscripts, microfilms, study areas and a large PC cluster.

Details of all the services and collections available at the library can be found at:

<https://www.wits.ac.za/library/>.

The library opening hours vary by day and whether it is during semester or vacation time. However during the semester, it is open seven days a week.

## **ICT SERVICES**

The ICT Services helpdesk will help with all your computer problems. The helpdesk is available during the working day and may be contacted via e-mail. Problems may be solved on the spot or referred to an appropriate expert. Personal help is available on the formulation and solution of individual users' computer problems. Various paper and online documents are produced on common topics such as use of popular program packages and writing web pages. News and advice to users are also published in the monthly Library and Information Services Newsletter. Other

computer services include training and purchase of computer hardware, software and consumables, and support for users with special needs.

The web page for IT services is; <https://www.wits.ac.za/mywits/>.

The ICT services helpdesk is located on Level 1 in the Solomon Mahlangu Building on main campus, E: [ITHelp@wits.ac.za](mailto:ITHelp@wits.ac.za). T: 011 717 1717

## **EQUAL OPPORTUNITIES**

The University is committed to a comprehensive policy of equal opportunities for students, in which individuals are selected and treated based on their relevant merits and abilities and are given equal opportunities within the University. No student should receive less favourable treatment on any grounds which are not relevant to academic ability and attainment. The University is committed to a programme of action to make the policy fully effective. Information pertaining to equal opportunities relative to students can be found here; (<https://www.wits.ac.za/transformationoffice/policies/>); (<https://www.wits.ac.za/students/geo/>).

## **DATA PROTECTION**

The University is implementing the Protection of Personal Information Act (POPIA) and reserves the right to enter personal student data on its computer systems as well as safe guard that information. Details of the University's policy on data protection and how data protection pertains to students can be found here; <https://www.wits.ac.za/site-assets/small-footer/popia-and-paia/>.

## **REFERENCING GUIDE**

Referencing something correctly is a VITAL component of academic writing. There are TWO related components that are necessary for successful referencing. These are (1) citing (=namechecking) a reference source within the main text of an essay or report that you are writing, if you are using information from that source, and (2) listing the full reference in the Reference List of your essay or report. You need to ensure that both elements match each other – i.e. that references you cite in the text appear in the Reference List, and references that appear in the Reference List are cited in the text. Before you submit any work you much check your references to make sure you are not missing anything.

All the reference works cited in an essay or report are grouped together at the end in a **Reference List**. This is a single list that includes all books, journal articles, websites etc that you have used in the work you are submitting. Do NOT use the term 'bibliography', which refers to something rather different. The way in which a Reference List is arranged is given at the end of this document.

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### **(1) Citing references in the text**

When you make a statement which provides information, or which gives someone's opinion, you HAVE to tell the reader where that information came from. This is so that the information can be traced to an original source, and to ensure that you have interpreted or used that information correctly. Giving the source of information you have used in an assignment (including any written or visual work or on a Powerpoint slide) is called **referencing**. When you give a statement that provides information, the source of that information is given in brackets at the end of that sentence.

For example:

Human interaction with the coast has changed over time (Carter, 1988).

This tells the reader that you got this information from that particular source. Note the structure of this sentence: the reference comprises the last (or family) name of the author of that study. This is followed by a comma (,) and then the date of publication of that article or book. All this is then contained within brackets (...) at the end of the sentence. Note that this reference citation is contained WITHIN the sentence and is then followed by a full stop/period (.) If you use a direct quotation of passages from books/articles, this must be in quote marks ('...') and the page number from where that quotation comes from

For example:

'Man has had a long, but often uneasy relationship with the coast' (Carter, 1988, p.2).

Although quotations may be common in the social sciences, I do not recommend that you use lots of direct quotations – this is lazy academic practice because it shows that you do not understand what the author is trying to say and so you rely on their own words to do the talking. Quotes are also difficult to remember for exams. They also represent a statement of opinion, and not the facts/figures upon which that opinion is based. You should always put forward your own opinion based on evidence (=facts), not someone else's. Therefore, it is more useful to **paraphrase** information from your different reference sources rather than use direct quotations. (Please see the accompanying document on paraphrasing.)

If you are using several reference sources for the information contained in any one sentence, they must be cited in date order (not alphabetical order) in the text, for example: (Jeje, 1993; Brunnsden, 2001; Clifford and Richards, 2005; Murray *et al.*, 2009; Church, 2010). Please note where commas (,) and semicolons (;) are in the reference. The punctuation must be done correctly. The *et al.* bit is an abbreviation for the Latin term *et alia* which simply means 'and others'. This abbreviation is used where there are more than two authors and is always in italics (because it is a Latin phrase, just like the species name of a plant or animal).

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## (2) Citing references in a Reference List

All reference sources used in the written text or cited in figures and tables must be contained in the Reference List.

Referencing a journal article in the reference list generally follows the Harvard system:

Author(s) - Year - Title of article – *Journal name* – volume number – page numbers of the first and last page of the article.

For example:

Church, M. 2010. The trajectory of geomorphology. *Progress in Physical Geography*, 34, 265-286.  
Clifford, N. and Richards, K. 2005. Earth System Science: an oxymoron? *Earth Surface Processes and Landforms*, 30, 379-383.  
Jeje, L.K. 1993. Contributions on the physical geography of tropical Africa. *Singapore Journal of Tropical Geography*, 14, 191-211.  
Murray, A.B., Lazarus, E., Ashton, A., Baas, A., Coco, G., Coulthard, T., Fonstad, M., Haff, P., McNamara, D., Paola, C., Pelletier, J. and Reinhardt, L. 2009. Geomorphology, complexity, and the emerging science of the Earth's surface. *Geomorphology*, 103, 496-505.

The authors are named in the order in which they appear in the original source. Please look carefully to identify what is the family name of the author, and what is their first name (which should be given as initials only, as in the examples above). Please note the position of punctuation in this list and make sure that you follow this exactly. The journal name is always given in *italics* (or is sometimes underlined).

Some journals do not use a page number system, but instead use a unique code for every different article which is known as the article's *Digital Object Identifier* (doi). This is used most commonly for journals where hard copies of individual journal volumes are not published, or where articles in journals are continually being published. The doi is often located in the footnotes at the bottom

of the first page, please look carefully. To correctly cite an article that uses a doi, you need (1) the volume number, (2) the unique article number (this is the number after the volume number in the list), and then (3) the doi. Note that this can be expressed as doi:..... or by <https://www.doi.org/.....>

For example:

Sundqvist, H.S., Holmgren, K., Fohlmeister, J., Zhang, Q., Bar Matthews, M., Spötl, C. and Körnich, H. 2013. Evidence of a large cooling between 1690 and 1740 AD in southern Africa. *Scientific Reports*, 3, 1767, doi:10.1038/srep01767.

In this example, the volume number is 3, the article number is 1767.

Referencing a book in your reference list:

Author(s) - Year - *Book title* - Publisher - Place of publication.

For example:

Knight, J. and Rogerson, C.M. (eds) 2019. *The Geography of South Africa: Contemporary Changes and New Directions*. Springer, Switzerland, 326pp.

Masselink, G., Hughes, M.G. and Knight, J. 2011. *Introduction to Coastal Processes and Geomorphology (2nd edition)*. Hodder, London.

Note that the book title is in *italics*, just like the name of a journal.

For a chapter in an edited book:

Author(s) – Year – Chapter title – Editor(s) – *Title of book* – Publisher – Place of publication – first and last page of the chapter.

For example:

Dardis, G.F. 1987. Sedimentology of late Pleistocene drumlins in south-central Ulster. In: Menzies, J. and Rose, J. (eds), *Drumlin Symposium*. Balkema, Rotterdam, pp. 215-224.

Knight, J. and Burningham, H. 2011. Sand dune morphodynamics and prehistoric human occupation in NW Ireland. In: Brown, A.G., Basell, L.S. and Butzer, K.W. (eds), *Geoarchaeology, Climate Change and Sustainability*. Geological Society of America Special Paper, 476, pp. 81-92.

Knight, J., Mitchell, W.A. and Rose, J. 2011. Geomorphological field mapping. In: Smith, M.J., Paron, P. and Griffiths, J. (eds), *Geomorphological Mapping: a handbook of techniques and applications*. Elsevier, London, pp. 151-187.

If there is one editor, please use the abbreviation (ed). If there are two or more editors, please use the abbreviation (eds). Note that towards the end of the reference there is the name of the publisher (e.g. Balkema, Elsevier), and the place of publication (e.g. Rotterdam, London). This information is usually located on the reverse of the title page of the book.

Websites are cited like this:

Website name or author – Title of individual webpage used – Year that the information on the website was uploaded or updated (often this is given at the bottom of the page) – Full URL of the webpage – Date that you accessed the information.

For example:

Department of Science and Technology, 2011. *SA Risk and Vulnerability Atlas*. Available from <http://www.rvatlas.org>, accessed 9 December 2019.

For online reports add the publisher and place of publication, for example:

CCSP, 2009. *Coastal Sensitivity to Sea-Level Rise: A Focus on the Mid-Atlantic Region*. A report by the US Climate Change Science Program and the Subcommittee on Global Change Research, US Environmental Protection Agency, Washington DC, USA, 320pp. Available from <http://www.climatechange.gov/Library/sap/sap4-1/final-report/sap4-1-final-report-FrontMatter.pdf>, accessed 11 December 2019.

Note that this also includes the URL where this report can be found. I would strongly recommend **NOT** to rely on websites except those from reputable sources (e.g., government agencies, NGOs), as you don't know where their information is from. This includes Wikipedia, which is **NOT** a valid reference source!!

All the bibliographic information that you need to cite an article correctly and fully is usually given on the front page of the journal article, you just have to look for it. For example:

Journal name, volume number (year), page numbers

Catena 151 (2017) 87-97

Contents lists available at ScienceDirect

**Catena**

journal homepage: [www.elsevier.com/locate/catena](http://www.elsevier.com/locate/catena)

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The sediment stratigraphy of a flood event: An example from the Sabie River, South Africa Article title

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<p><b>ARTICLE INFO</b></p> <p><i>Article history:</i>          Received 5 August 2016          Received in revised form 14 December 2016          Accepted 16 December 2016          Available online xxxx</p> <p><i>Keywords:</i>          Flood sediments          Wood debris          Grain size analysis          Fluvial geomorphology          South Africa          Semi-arid climate</p>	<p><b>ABSTRACT</b></p> <p>The geomorphic effects of river floods in various climatic settings worldwide have been extensively described, but there is little information on sedimentary processes during and immediately following flood peaks. Here we reconstruct sedimentary processes and patterns of the 2012 flood on the Sabie River in Kruger National Park, South Africa, from the preserved geomorphic and sedimentary signature of this event. Based on a combination of geomorphic and sedimentary evidence, the maximal and waning flow stages of the flood event are identified, shown by cut and fill and fining up sequences within aggradational bars, and organic horizons, which may be buried, that correspond to the period of flood peak recession. The presence of organic horizons suggests a strongly seasonal flow regime typical of semi-arid South African rivers. It also provides an exemplar of a flood event stratigraphy that is usually poorly preserved in the geologic record.</p> <p style="text-align: right;">© 2016 Elsevier B.V. All rights reserved.</p>
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The correct citation of this article is therefore:

Knight, J. and Evans, M. 2017. The sediment stratigraphy of a flood event: An example from the Sabie River, South Africa. *Catena*, 151, 87-97.

Note the order in which this information is given in the reference citation. Note that you must include all authors in the order in which they are given in the original source.

The bibliographic information on a particular journal article might also be located at the bottom of the first page, or on a cover page (if present) so you need to look around very carefully. If you want to reference any information source, whether an article, chapter or book, (1) **DO NOT** rely

on its citation that is given in another article, chapter, book or website. Many times these citations are simply incorrect, and you **MUST** check it for yourself against the original published hard copy or pdf. (2) Do not cite something that you have not seen in full: **IF YOU CAN'T SEE IT, DON'T USE IT**. This includes where you see only the abstract of the article and not the full article itself.

I do **NOT** recommend that you use bibliographic software to store indexes of journal articles. These often screw up all types of formatting, miss off information and cannot display non-uniform text or symbols. (Such software is commonly used in human geography however.)

References are given in the following order in the Reference List:

1. Alphabetically by the last (family) name of the author, or by the last name of the first author where there is more than one author.
2. If two different first-authors have the same last name they are order alphabetically by their initials – e.g. Smith, A. will come before Smith, C.
3. Works by the same author are ordered according to date, e.g. Jones, 2008 will come before Jones, 2010.
4. Single-authored works by the same author come before multiple-author works, e.g. Smith, 2004 comes before Smith and Jones, 2001.

**If you are confused, simply follow to the letter the format of the references given in any standard journal article.**

## GRADE RELATED CRITERIA

Each piece of submitted work will be assessed on a percentage mark.

Standard	Class	Mark %
Excellent	First	75+
Very Good	Upper Second	70 – 74
Above Average	Second	60 – 69
Average	Third	50 – 59
Below Average	Fail	< 49

### Marking criteria used for all assessments undertaken in Geography

DEPARTMENTAL MARKING GUIDELINES			
<b>First</b>	<b>Excellent</b>	<b>Outstanding 90-100</b>	Unique, outstanding and insightful work which shows evidence of substantial scholarship and originality, thorough awareness of the context of the assessment and its content. It is difficult to see how it could be improved in any way.
		<b>Exceptional 81-90</b>	Originality, a thorough comprehension of the essay's requirements, exceptional ability, insightful, fully realises requirements for assessment and develops them far beyond normal expectations, evidence of critical evaluation of wider reading.
		<b>Excellent 75-80</b>	Insight, originality, logical and articulate, demonstrates a comprehensive coverage of subject matter, engagement with scholarship and research, very good analytical ability, no major flaws. Excellently organised and presented. Argument concisely and systematically developed. Standard of spelling, punctuation, vocabulary use and grammar is high.
<b>U p p e r s e</b>	<b>V e r y g o o d</b>	<b>Very good 70-74</b>	Sound and well thought out, organised, secure knowledge of subject, appropriate use of critical

			references, broadly realises the purpose and context of the assessment, well expressed, good analytical skills. Argument concisely and systematically developed. Standard of spelling, punctuation, vocabulary use and grammar is good.
<b>Second</b>	<b>Above average</b>	<b>Good 65-69</b>	Shows a firm grasp of most of the material, argues effectively and is able to make some evaluation of the material, uses examples appropriately. Good critical and conceptual analysis. Subject matter effectively covered and accurately presented.
		<b>Competent 60-64</b>	Competent, reasonable understanding of the material, presentation is satisfactory with some examples and referencing used correctly. Structure and arguments are present but are relatively weak. Rather more descriptive than critical and conceptual. Evidence of relevant reading but not always effectively used.
<b>Third</b>	<b>Average</b>	<b>Satisfactory 55-59</b>	Largely descriptive in approach, generally sound, adequate or routine knowledge of subject, may be elements missing, limited evidence of independent thought. Ideas are developed but not always concisely or systematically.
		<b>Average 50-54</b>	Perfunctory, largely descriptive, may contain irrelevant material. Understanding of subject matter is incomplete. Little evidence of wider reading. Organisation and presentation contain errors.
<b>Fail</b>	<b>Below average</b>	<b>Weak 45-49</b>	Material is largely relevant, but muddled, poorly argued, inadequate deployment of critical method, lacking focus, lacking depth of understanding, some important elements missing. May show a significant error or seriously deficient analytical skills. Material is almost entirely descriptive.
		<b>Weak 40-44</b>	Some relevant material, few or no relevant examples, little reading, unsubstantiated and inaccurate remarks, naïve thought, lack of awareness of the context of the answer, regurgitation of basic course material. Frequent errors of spelling, punctuation, vocabulary and grammar. Stylistically poor.
<b>Fail</b>	<b>Below average</b>	<b>Poor 35-39</b>	Some evidence for comprehension but many basic misunderstandings or misinterpretations, demonstrates almost no ability to meet the requirements of the assessment, little to no evidence of reading, poorly written and structured, may be very brief.
		<b>Unsatisfactory 30-34</b>	Unsatisfactory, lacking evidence of preparation, evaluation or reflective skills. Largely irrelevant to the requirements of the assessment. Much redundant and irrelevant material.
		<b>Unsatisfactory 20-29</b>	Unsatisfactory, little or no evidence of preparation or analysis. Hastily thrown together, presentation

			poor, expression/style/grammar extremely poor, may not relate to the question posed.
		<b>Incompetent 0-20</b>	Brief, irrelevant, confused, incomplete. No evidence of understanding of the material. May be clearly plagiarised or has disregarded the question entirely.
<b>Comments on academic content</b>		<b>Comments on presentation</b>	
The best features of this assessment:		-Content (use of materials, evidence of understanding, evidence of reading, use of diagrams)	
Suggestions for improvement:		-Structure and form (logic and organisation)	
		-Language and vocabulary (use of correct grammar and academic English, correct referencing style)	
		-Presentation (neatness, layout, diagrams)	
<b>Mark awarded (%)</b>			



