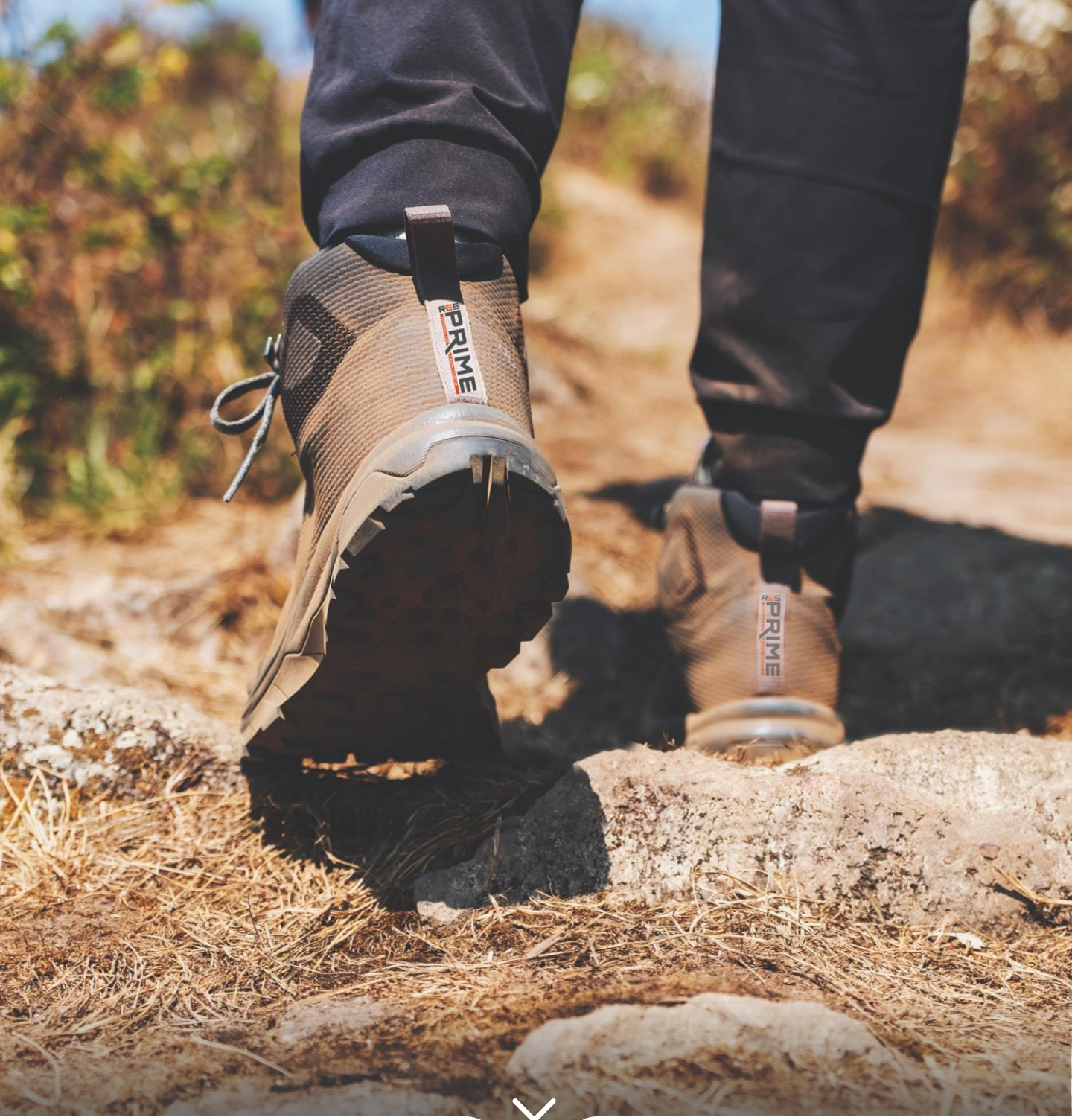


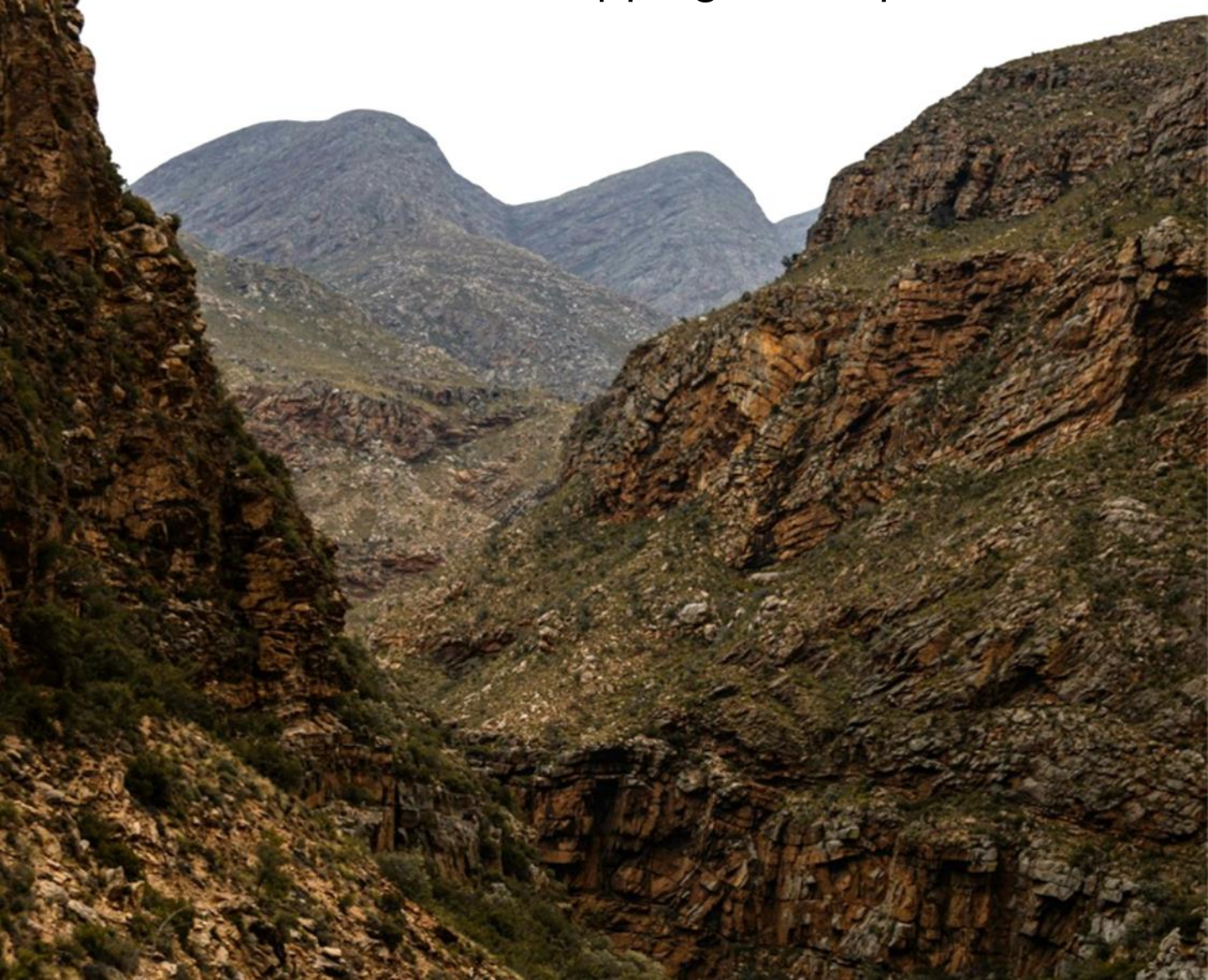
RES PRIME
PROFESSIONAL RIGOR IN MINERAL EXPLORATION

FIELD SCHOOL
21 – 28 FEB 2025

{Registration Deadline 15 Jan 2025}

COURSE OVERVIEW

The RESPRIME Field School aims to provide Post Graduate Geoscience Students and early career Professionals the opportunity to learn and practice the skills commonly needed as an Exploration Geologist in mineral exploration, focusing on lithological and structural field mapping techniques.



Why participate in a Field School?

Participation in the Field School will teach you how to connect petrography, structural geology, exposure and field mapping, as well as data collection and documentation into a coherent understanding of the regional evolution of the crust.

Make observations and decisions, set priorities on what to focus on and what to ignore in testing a hypotheses.

Learn what to look for and what to exclude in complex natural settings through pattern recognition in the field as well as on topographical and geologic maps.

Develop an ability to judge uncertainties and to distinguish between observation and inference.

Acquire the skill to visualise, think and sketch models in 3D, gained from field work, in order to represent what the geological element/ geo-body looks like.

Understand how to integrate content knowledge, observation and interpretation, analysis, experiment and theory as well as the relationship between rocks and topography.

Acquire essential practical geological skills that set you apart from other recent graduates or early career professionals, towards jumpstarting your career as a Field Geologist.

Who is the Field School for?

The target group of participants for the RESPRIME Field School includes industry geologists who require further or refresher field training in their professional development, MSc / PhD students / postdocs, who wish or need to develop their field experience and are preparing for a career in the minerals industry generally or specifically as an Exploration Geologist.

Course Requirements

- Honours Degree in Geoscience -

Field School Itinerary

DAY 01

- **Travel to George**
  Welcome, brief introduction to the Cape Fold Belt and to the geology at Victoria Bay.

DAY 02

- **Morning in Victoria Bay**
  Mapping exercise of coastal outcrops of the Kaaimans Inlier.
- **Afternoon in Blanco Area**
  Contact metamorphic schists, pegmatites and aureole tectonics.

DAY 03

- **Oudtshoorn Basin & Swartberg Range**
  Jurassic sedimentary rocks, Kango Fault, Kango Inlier and the Geology of the Swartberg Pass area.

DAY 04

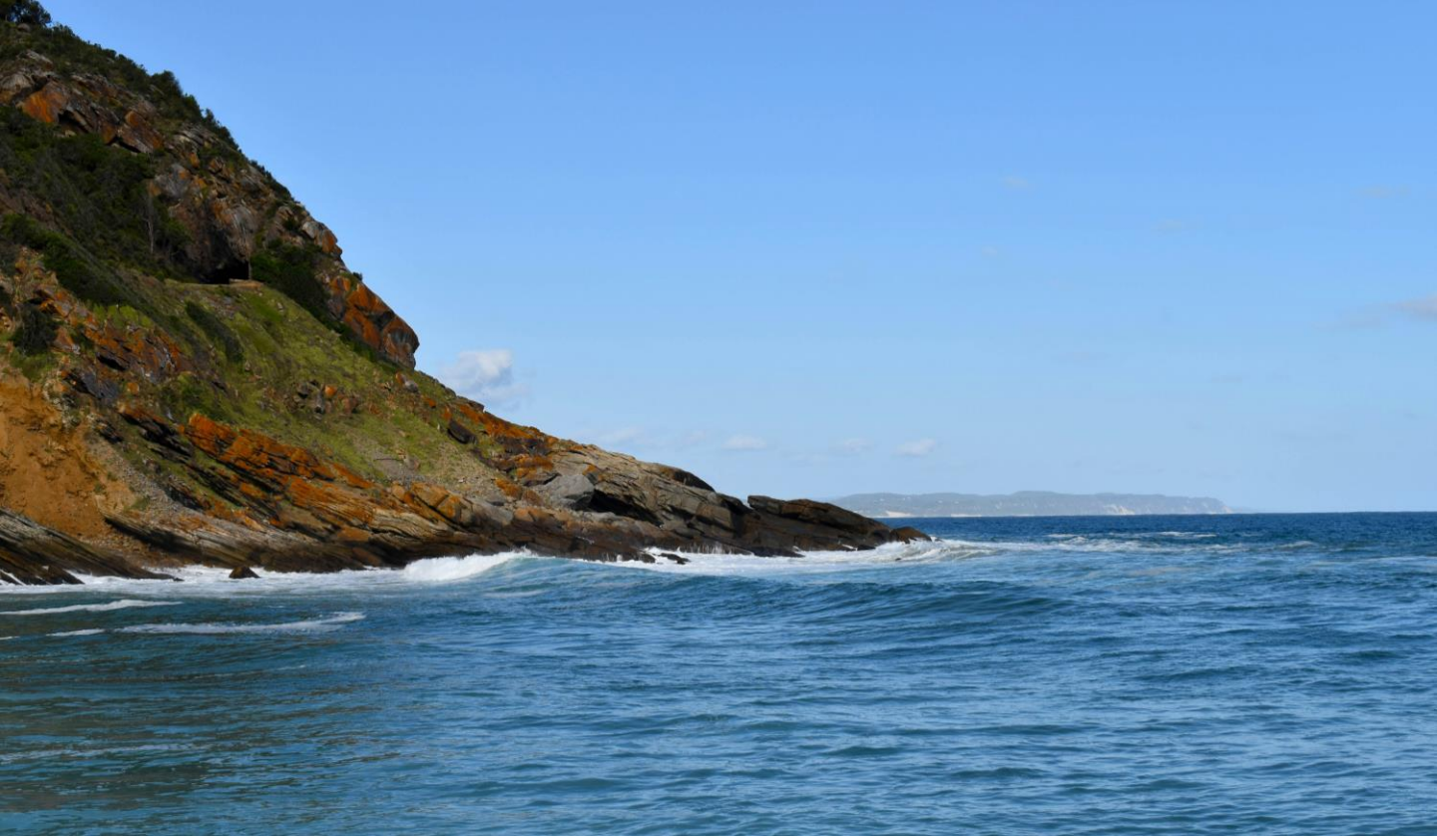
- **Meiringspoort Area**
  Rocks and structures in the Bokkeveld Group

DAY 05

- **Meiringspoort Area**
  Start of field mapping exercise in folded Bokkeveld Group rocks

DAY 06

- Complete field mapping exercise in folded Bokkeveld Group rocks
- **Return to George & Cape Town**



Locations and Tasks

Day 1 & 2

Examination of metamorphic and igneous rocks of the Pan-African (Neoproterozoic) **Kaaimans Inlier around George Victoria Bay.**

Using the topographical map supplied, draw a geological map of the bay area and describe the geology, paying particular attention to lithologies, mineralogy and structures (S0, S1, lineations and folds).

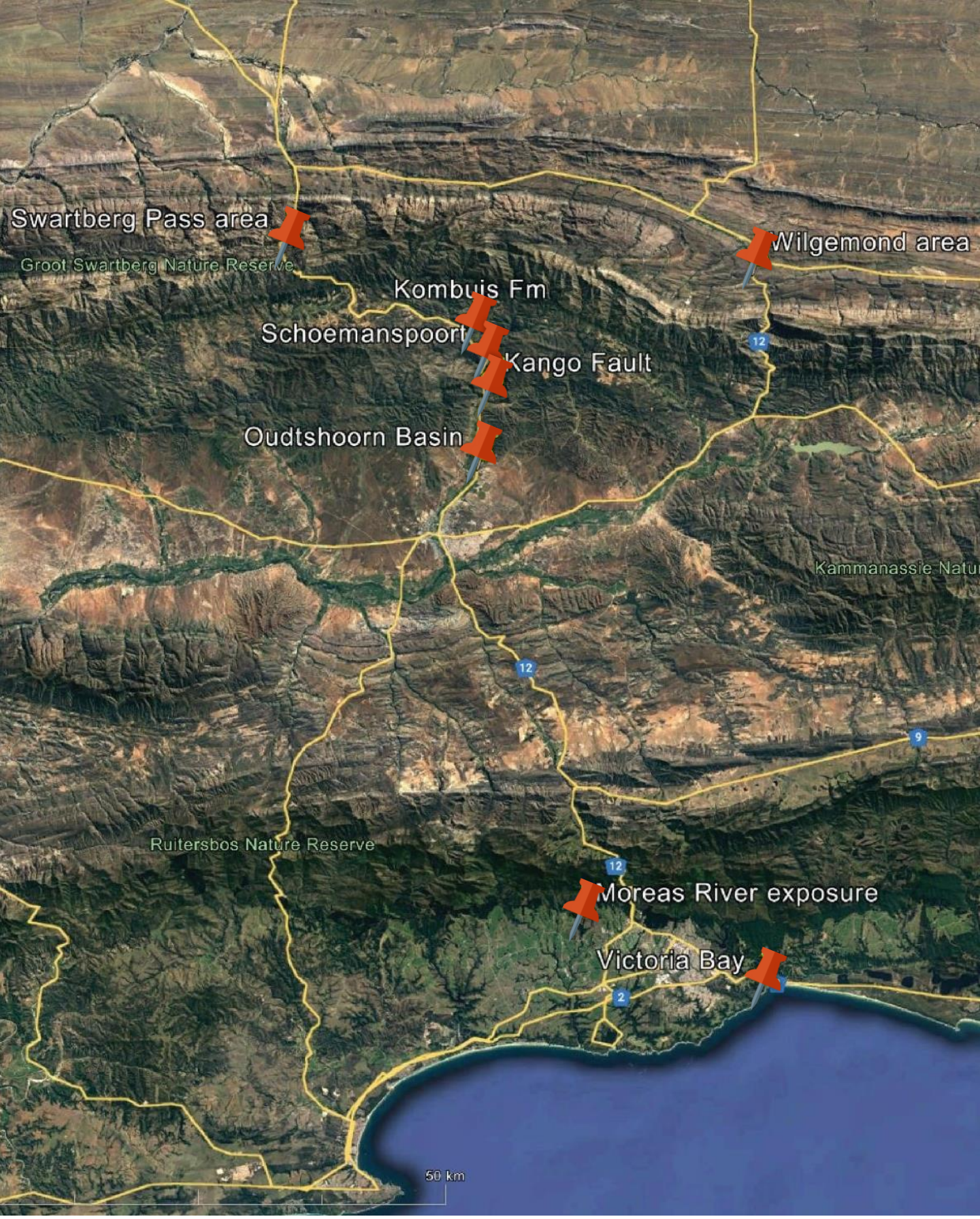
Day 2

Moeras River outcrop, Blanco area northwest of George.

Metaseimentary rocks of the Saasveld Formation.

Examine the lithological variations, determine rock types and their field relationships.

Examine, identify and describe primary and secondary structural features. Analyse the sequence of sedimentary, metamorphic, magmatic, hydrothermal and tectonic episodes.



Locations of areas to be visited on the trip

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Locations & Tasks

Day 3

Roadside geology from **George to the Kango Inlier north of Oudtshoorn, and further to the Swartberg Pass** area:

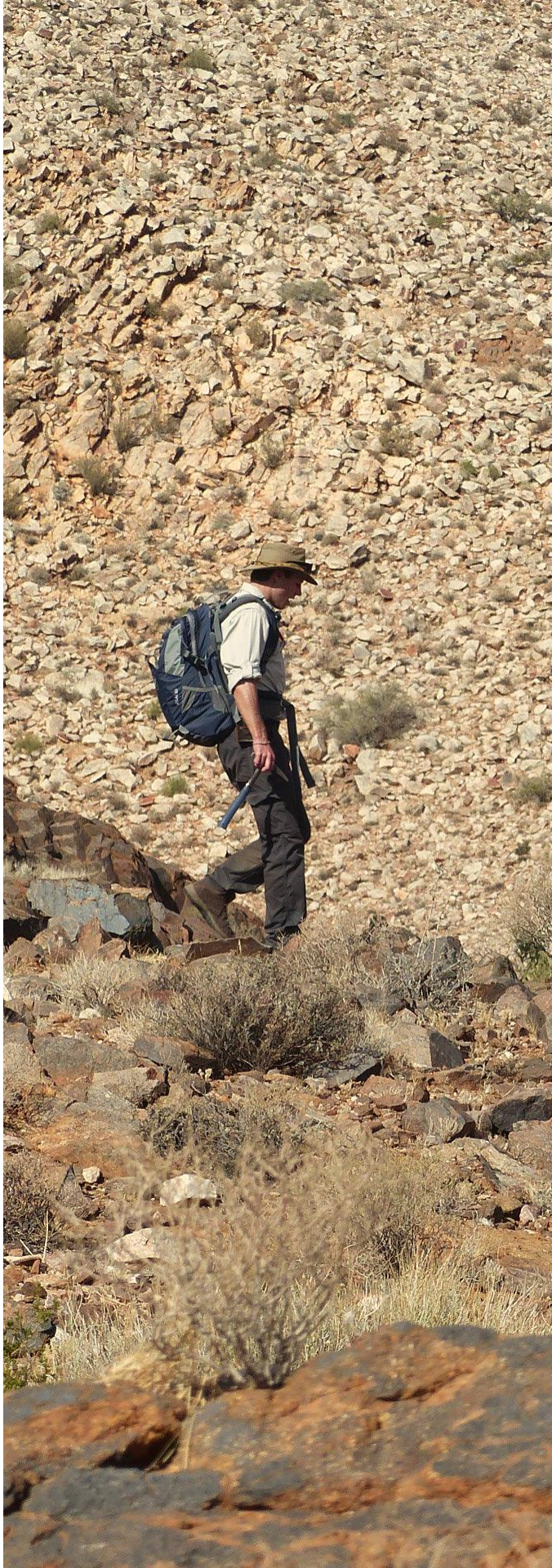
1) **The Mesozoic Oudtshoorn Basin** comprises immature Jurassic/Cretaceous sedimentary rocks, including conglomerates of the Enon Formation. Describe them briefly and note the attitude of bedding.

2) **Kango Fault.** Assess the tectonic features of the outcrop. The fault separates the Cretaceous rocks of the Oudtshoorn Basin from the Neoproterozoic rocks of the Kango Inlier.

3) **Schoemanspoort**, about 16 km north of Oudtshoorn. Kango Group rocks exposed in roadcut. Describe the rocks and note the relationships between bedding, foliation, and pebble orientation, and the relationship between pebble shape and pebble type.

4) **Kombuys area**. Describe the rocks and the various structural features. Identify the rock types. This rock unit, the Kombuys Member of the Matjies River Formation, is the host rock of the Kango Caves nearby.

5) **Swartberg Pass & road to Prince Albert**. Overview across the CFB. Correlate topography, lithology and structures with the geological map.



Day 4

Wilgemond / Meiringspoort area:
Examine, draw and interpret structures exposed in road cuts north of Meiringspoort, in Bokkeveld Group rocks along the national road.

Main Topics:
Faults and folds in the 10-200 m scale; identification of bedding and foliation in shales, relationships between foliation and layering in fold structures; cleavage refraction depending on rock competence.

Afternoon: Introduction to the field mapping area.

Day 5

Start of independent field mapping exercise in the **Bokkeveld Group** (teams of 2-3).

Day 6

Complete independent field mapping exercise and travel to **George airport and Cape Town**.

Quick Facts

Course Duration
- 6 Days

Course Requirement
- Honours Degree in Geoscience

Course Target Audience
- Post Graduate Geoscience Students and early Career Professionals

Course Location
- The Central Cape Fold Belt

Course Presenters
- RESPRIME, RES & Prof. Büttner

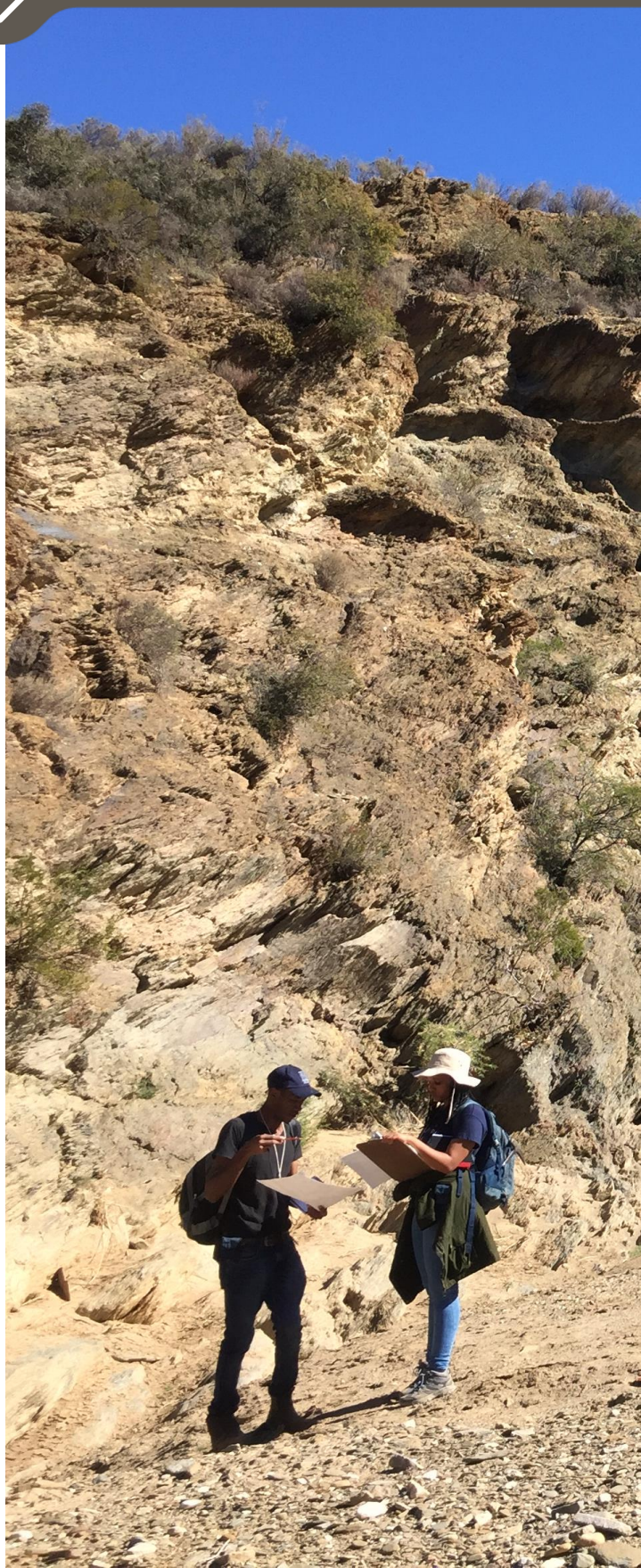
Course Fee
- R 15 000.00
  (LESS 20% for Students)

Course Recognition
- GSSA Accredited, &
- SACNASP Accredited

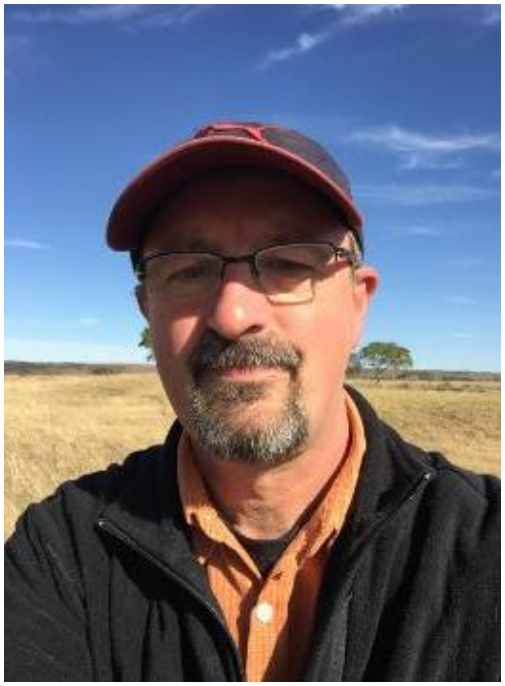
Course Group Size
- 10 – 12 Participants

Registration Deadline
- 15 January 2025

Course Registration
Register at resprime.org.za



Course Presenters



Prof. Steffen Büttner

Prof. Steffen Büttner is the lecturer for Structural Geology and Tectonics at Rhodes University. He has extensive field experience in the Variscan Belt of Europe, the Alps, the Central Andes, parts of East Africa and the Cape Orogen and the Namaqua Belt in South Africa.

His research interests are broad, covering aspects of the evolution of the continental crust from the micro- to the orogenic scale, but with increasing interest in pegmatitic and hydrothermal ore deposits in recent years. Every now and then he is involved in consulting for the minerals industry in a variety of fields. He is a member of the GSSA and the DGGV (German Geological Society) and he is currently the president of the Igneous and Metamorphic Studies Group of South Africa. Steffen has led Field Schools in the Variscan Belt, the Alps, and in South Africa for more than 25 years.

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RES serves the global mining and exploration industry through the design, execution and analysis of early and advanced stage mineral exploration projects across Africa.

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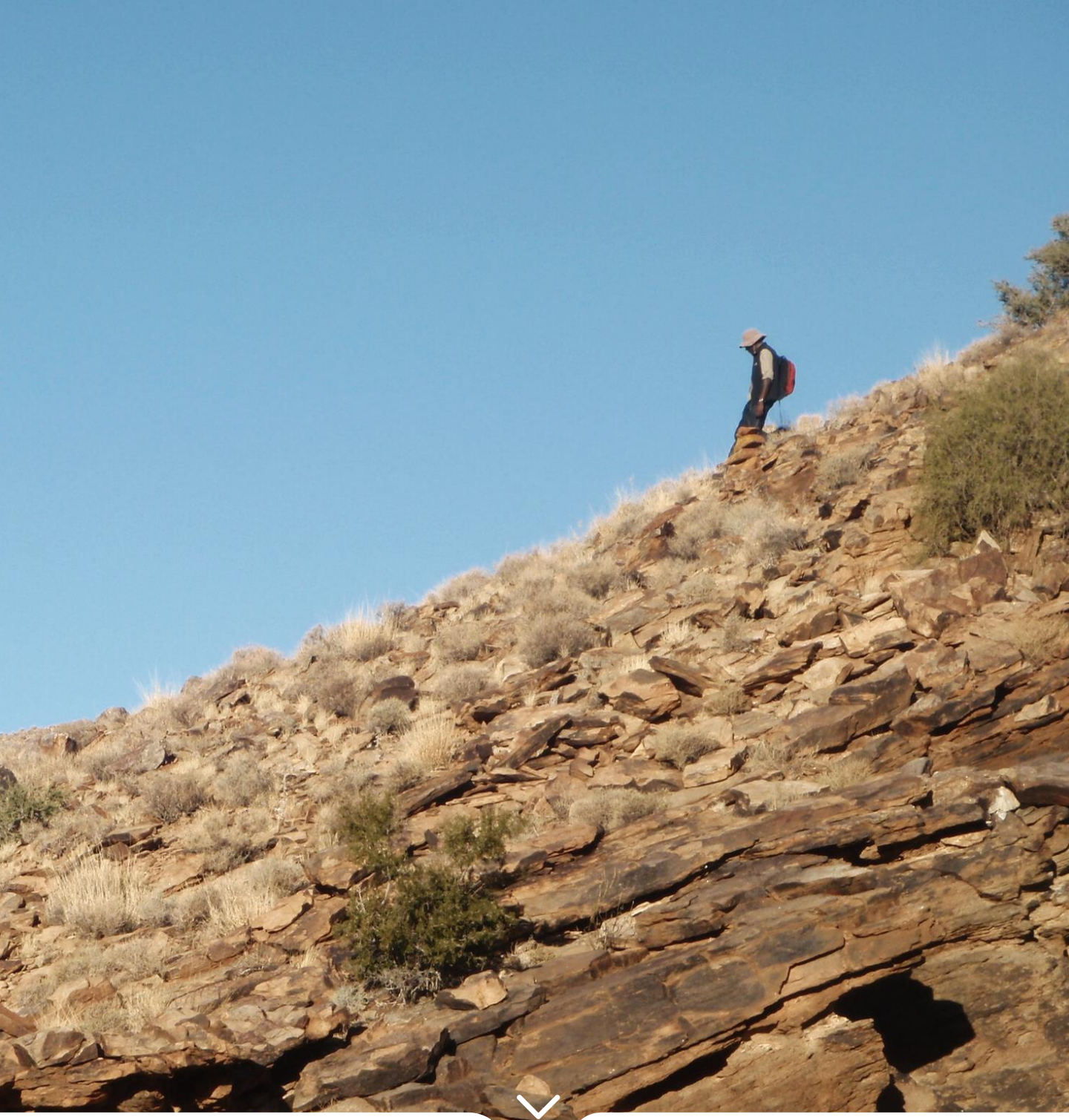
RESPRIME NPC is a non-profit training and development company providing accredited, practical and relevant geoscience training to industry, early career professionals and recent graduates with a focus on fieldwork, geophysics, surveying and exploration geology.



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