

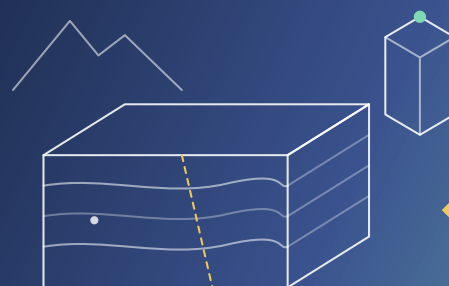
Module code

SPG-2201

Type of module

Undergraduate: Geosciences – Major Core

Palaeontology



Modular credits

4

Total student
engagement

56 hours

Prerequisite

SPG-1202 Introduction
to Sedimentology and
Stratigraphy OR SPG-
1203 Introduction to
Geology

Anti-requisite

None

Aims

To introduce the fundamental principles of palaeontology and fossil preservation, examine major fossil groups and their geological significance and develop skills in fossil identification and interpretation.

Module learning outcomes (MLO)

On successful completion of this module, a student will be expected to be able to:

MLO 1

Analyse the fundamental principles of palaeontology and describe the significance of fossils in reconstructing Earth's geological and biological history.

MLO 2

Evaluate and interpret key palaeontological concepts, including fossilisation processes, taxonomy, evolutionary trends, and paleoecological relationships.

MLO 3

Analyse, evaluate and classify common fossil groups such as invertebrates, vertebrates, plants, and microfossils, and recognise their morphological characteristics and geological ranges.

MLO 4

Apply fossils in basic biostratigraphic correlation and to interpret fossil specimens.

MLO 5

Analyse the systematics and associations of major fossil groups with co-occurring fossils and host sediments, and demonstrate practical competence in fossil identification.

Module contents

Introduction to fossil organisms, geological time scale, mass extinctions and evolution

Taxonomy and systematic study of fossils; trace fossils, microfossils, invertebrates, vertebrates

Systematics and classification

Morphology and Geological range

Fossils, reconstruction of past environments and microfacies analyses

Fieldwork: Observe fossil-bearing rocks, identify fossils and interpret depositional environments

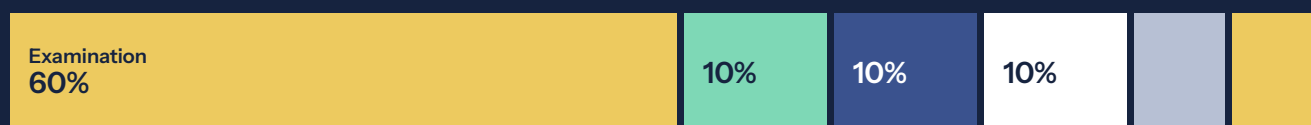
Assessment

60%

Examination

40%

Coursework



■ Examination — 60% ■ Weekly assignment and practicals — 10% ■ Class tests — 10% ■ Practical Exam — 10%
■ Field report — 5% ■ Fieldwork group presentation — 5%

Formative assessment

Weekly quizzes, discussion and feedback

Summative assessment

COMPONENT	WEIGHTING
Examination	60%
Coursework	40%
Individual	30%
Weekly assignment and practicals	10%
Class tests	10%
Practical Exam	10%
Group	10%
Field report	5%
Fieldwork group presentation	5%

Graduate attributes and skills

Programme learning objectives (PLO) addressed

1	PLO 1 (Fundamental Theoretical Knowledge in Geosciences)	2	PLO 2 (Application of Scientific Methods and Data Analysis)
3	PLO 3 (Integrated Laboratory, Field, and Technical Skills)	7	PLO 7 (Independent Learning and Professional Development)

Sustainability concept addressed

4	SDG 4 Quality Education
13	SDG 13 Climate Action
14	SDG 14 Life below Water

Digital skills/software used (not limited to)

- Application software (e.g. Microsoft Word, Microsoft Office, Excel)
- Organisational tools (e.g. Outlook Calendar)
- File sharing platforms (OneDrive, Spreadsheets, Google Docs, Statistical software)

Micro-credentialling option

No

Stackable towards GenBESTARI Undergraduate Degree Programme or other relevant Lifelong Learning Programmes

No

Document details

Office **ODVCE** Document date **23 June 2026** Status **New** Approval **GBF (12/02/2006)**