

**MINUTES OF MEETING OF THE BOARD OF STUDIES IN GEOLOGY
HELD ON MARCH 09, 2019 AT 10:00 a.m.**

Vide Chowgule College notice F.133C/1945 dated. 23-02-2019 a meeting of this Board of Studies (BoS) was convened on March 09, 2019 at 10.00am at the Conference Room, Parvatibai Chowgule College of Arts & Science (Autonomous), Margao – Goa. Since the number of members present represented the Quorum, the BoS began its proceedings.

Minutes are presented in the format.

Members present:

1. Shri Harish S S Nadkarni– Chairman
2. Dr. Hrishikesh Samant – Academic Council Nominee
3. Shri Allan Rodrigues– Member
4. Dr. Meghana S Devli – Member
5. Mrs. Swati S Ghadi – Member
6. Mrs Magnolia Aurea Miranda – Member
7. Shri Malcom Lelis Afonso – Member Secretary
8. Ms Delia Cardozo – Postgraduate Meritorious Alumnus

Members Absent with prior intimation

1. Dr. R. A Duraiswami - Academic Council Nominee

Members Absent without intimation

1. Dr. (Prof.) Mahender Kotha – Nominee of the Vice-Chancellor of Goa University
2. Shri Kiran Sawant Dessai – Representative from the Industry/Corporate Sector

Proceedings

The Chairman welcomed the members of the Board of Studies (BoS). The minutes of the previous BoS meeting in Geology held on 23 March 2018 and 24 March 2018 were read out by the Chairman and approved by the members of the board. The Chairman inducted the new member Mrs. Swati S Ghadi on the board which was unanimously accepted by the members present. The Chairman introduced and explained the agenda for this meeting and Board transacted the following business:

Agenda Items:

1. To approve the Programme Outcomes for all courses offered in the subject.
2. To approve the Course Outcomes for all courses offered in the subject.
3. To decide on Skill Enhancement Course in Geology.
4. Any other Business (A.O.B) with the permission of the Chair.

AGENDA 1

1. **To approve the Programme Outcomes for all courses offered in the subject.**
The proposed Programme Outcomes for B.Sc. Geology was presented and discussed at the meeting. The BoS approved the Programme Outcomes for the subject in Geology (ANNEXURE I)
2. **To approve the Course Outcomes for all courses offered in the subject.**
The proposed Course Outcomes for all the courses taught in Geology was presented and discussed at the meeting. The BoS approved the Course Outcomes for the subject in Geology (ANNEXURE I)
3. **To decide on title of Skill Enhancement Course in Geology.**
The course titled "*Techniques in Land Surveying and Mapping*" was decided to be offered as a Skill Enhancement Course by the members of the board.

AGENDA 2: Any other Business (A.O.B) with the permission of the Chair.

PART A: Resolutions

- i. The 1st revised syllabus of B.Sc. Geology was presented and discussed at the meeting for changes in course titles. After the following changes the BoS approved the course titles and syllabus for the following courses.
 - a. During the discussion on the syllabi of the courses, members of the BoS felt the need to modify the titles in the core and elective courses to be offered. These were approved and a resolution was passed accordingly to bring in the change. The revised list of core and elective courses for the undergraduate program in Geology at Semester I, II, III, IV, V and VI is presented in ANNEXURE II below.

**ANNEXURE II
ODD SEMESTERS**

Semester	CORE COMPULSORY		CORE ELECTIVES			
V	GEL-V.C-7A Sedimentary Petrology		GEL-V.E-9B <i>Precambrian Stratigraphy of India</i>	GEL-V.E-10 Petroleum Geology	GEL-V.E-11A Metamorphic Petrology	GEL-V.E-12 Remote Sensing and Digital Image Processing

EVEN SEMESTERS

Semester	CORE COMPULSORY		CORE ELECTIVES			
VI	GEL-VI.C-8A Igneous Petrology		GEL-VI.E-13B <i>Phanerozoic Stratigraphy of India</i>	GEL-VI.E-14A Rock Structures and Deformation Microstructures	GEL-VI.E-15A <i>Surveying, Mapping and Field Geology</i>	GEL-VI.E-16A Principles of Geophysical Exploration and Mining

b. A resolution was passed for a change as under:

SEMESTER V

1. The Elective course **GEL-V.E-9A**: "STRATIGRAPHY OF INDIA – PART I" was renamed as **GEL-V.E-9B** "PRECAMBRIAN STRATIGRAPHY OF INDIA".

SEMESTER VI

1. The Elective course **GEL-VI.E-13A**: "STRATIGRAPHY OF INDIA – PART I" was renamed as **GEL-VI.E-9B** "PHANEROZOIC STRATIGRAPHY OF INDIA".
2. The Elective course **GEL-VI.E-15**: "SURVEYING AND FIELD GEOLOGY" was renamed **GEL-VI.E-15A**: "SURVEYING, MAPPING AND FIELD GEOLOGY" and the syllabus was discussed and revised and a resolution was passed to revise the course as **GEL-VI.E-15A**: SURVEYING MAPPING AND FIELD GEOLOGY which was approved by the members of the board (ANNEXURE I).

- c. After incorporating the suggested changes, the BoS approved the revised titles of the courses for Semester V & VI is given below (ANNEXURE III)

ANNEXURE III
ODD SEMESTER

Sr No	COURSE	SEMESTER	Nature of the course
1	FUNDAMENTALS OF MINERALOGY	I	CORE
2	EARTH'S DYNAMICS AND TECTONICS	I	CORE
3	ADVANCED MINERALOGY AND GEOCHEMISTRY	III	CORE
4	PHYSICAL GEOLOGY	III	ELECTIVE
5	GROUNDWATER AND HYDROGEOLOGY	III	ELECTIVE
6	ORE GENESIS	III	ELECTIVE
7	MARINE GEOLOGY	III	ELECTIVE
8	SEDIMENTARY PETROLOGY	V	CORE
9	PRECAMBRIAN STRATIGRAPHY OF INDIA	V	ELECTIVE
10	PETROLEUM GEOLOGY	V	ELECTIVE
11	METAMORPHIC PETROLOGY	V	ELECTIVE
12	REMOTE SENSING AND DIGITAL IMAGE PROCESSING	V	ELECTIVE

EVEN SEMESTERS

Sr No	COURSE	SEMESTER	Nature of the course
1	ELEMENTARY PETROLOGY	II	CORE
2	PRINCIPLES OF STRATIGRAPHY AND PALEONTOLOGY	II	CORE
3	STRUCTURAL GEOLOGY	IV	CORE
4	ENGINEERING GEOLOGY	IV	ELECTIVE
5	OPTICAL MINERALOGY	IV	ELECTIVE
6	NATURAL HAZARDS AND MANAGEMENT	IV	ELECTIVE
7	GEOTECTONICS	IV	ELECTIVE
8	IGNEOUS PETROLOGY	VI	CORE
9	PHANEROZOIC STRATIGRAPHY OF INDIA	VI	ELECTIVE
10	ROCK STRUCTURES AND DEFORMATION MICROSTRUCTURES	VI	ELECTIVE
11	SURVEYING, MAPPING AND FIELD GEOLOGY	VI	ELECTIVE
12	PRINCIPLES OF GEOPHYSICAL EXPLORATION AND MINING	VI	ELECTIVE

PART B: Important Points/ recommendations of BoS that require consideration / approval of Academic Council:

1. Modification of the course structure of Semester I, III & V and Semester II, IV & VI of the undergraduate course of Geology as given in **ANNEXURE II** below

ANNEXURE II
ODD SEMESTER

Semester	CORE COMPULSORY		CORE ELECTIVES			
		Project				
V	GEL-V.C-7A Sedimentary Petrology		GEL-V.E-9B <i>Precambrian Stratigraphy of India</i>	GEL-V.E-10 Petroleum Geology	GEL-V.E-11A Metamorphic Petrology	GEL-V.E-12 Remote Sensing and Digital Image Processing

EVEN SEMESTER

Seme ster	CORE COMPULSORY		CORE ELECTIVES			
		Project				
VI	GEL-VI.C-8A Igneous Petrology		GEL-VI.E-13B <i>Phanerozoic Stratigraphy of India</i>	GEL-VI.E-14A Rock Structures and Deformation Microstructures	GEL-VI.E-15A <i>Surveying, Mapping and Field Geology</i>	GEL-VI.E-16A Principles of Geophysical Exploration and Mining

2. The revised Course titles of the following undergraduate courses (detailed in ANNEXURE III)

**ANNEXURE III
ODD SEMESTERS**

Sr No	COURSE	SEMESTER	Nature of the course
1	FUNDAMENTALS OF MINERALOGY	I	CORE
2	EARTH'S DYNAMICS AND TECTONICS	I	CORE
3	ADVANCED MINERALOGY AND GEOCHEMISTRY	III	CORE
4	PHYSICAL GEOLOGY	III	ELECTIVE
5	GROUNDWATER AND HYDROGEOLOGY	III	ELECTIVE
6	ORE GENESIS	III	ELECTIVE
7	MARINE GEOLOGY	III	ELECTIVE
8	SEDIMENTARY PETROLOGY	V	CORE
9	PRECAMBRIAN STRATIGRAPHY OF INDIA	V	ELECTIVE
10	PETROLEUM GEOLOGY	V	ELECTIVE
11	METAMORPHIC PETROLOGY	V	ELECTIVE
12	REMOTE SENSING AND DIGITAL IMAGE PROCESSING	V	ELECTIVE

EVEN SEMESTERS

Sr No	COURSE	SEMESTER	Nature of the course
1	ELEMENTARY PETROLOGY	II	CORE
2	PRINCIPLES OF STRATIGRAPHY AND PALEONTOLOGY	II	CORE
3	STRUCTURAL GEOLOGY	IV	CORE
4	ENGINEERING GEOLOGY	IV	ELECTIVE
5	OPTICAL MINERALOGY	IV	ELECTIVE
6	NATURAL HAZARDS AND MANAGEMENT	IV	ELECTIVE
7	GEOTECTONICS	IV	ELECTIVE
8	IGNEOUS PETROLOGY	VI	CORE
9	PHANEROZOIC STRATIGRAPHY OF INDIA	VI	ELECTIVE
10	ROCK STRUCTURES AND DEFORMATION MICROSTRUCTURES	VI	ELECTIVE
11	SURVEYING, MAPPING AND FIELD GEOLOGY	VI	ELECTIVE
12	PRINCIPLES OF GEOPHYSICAL EXPLORATION AND MINING	VI	ELECTIVE

3. The members of the board approved the title **“TECHNIQUES IN LAND SURVEYING AND MAPPING”** to be offered as Skill Enhancement Course.
4. Flexibility to the Board of studies in Geology in shuffling/modifying the core/elective courses between/of the semesters of the BSc programme.

The Chairman thanked the members of the Board of Studies in Geology for their valuable contribution and active participation in the meeting.

The meeting ended at 5:30pm with a vote of thanks to the Chair.

The foregoing minutes of the meeting were circulated by the Chairman, Board of Studies in Geology within fifteen days after the conclusion of the BoS meeting.

The following members of the Board of Studies were present for the meeting:

1. Shri Harish S S Nadkarni– Chairman
2. Dr. Hrishikesh Samant – Academic Council Nominee
3. Shri Allan Rodrigues– Member
4. Dr. Meghana S Devli – Member
5. Mrs Swati S Ghadi - Member
6. Mrs Magnolia Miranda – Member
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Members Absent with prior intimation

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Members Absent without intimation

1. Dr. (Prof.) Mahender Kotha – Nominee of the Vice-Chancellor of Goa University
2. Shri Kiran Sawant Dessai – Representative from the Industry/Corporate Sector



Meghana S Devli
(Member)



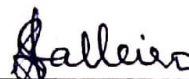
Harish S S Nadkarni
(Chairman, Board of Studies in Geology)

Date: 23 March 2019

PART C: The remarks of the Dean of the Faculty:-

- a. The minutes are in order
- b. The minutes may be placed before the Academic Council with remark, if any.
- c. Important points of the minutes which need clear policy decision of the Academic Council to be recorded.

Signature of the Dean of Physical and Earth Sciences: _____



Dr Sameena Faleiro

Date: 23 March 2019