



# Central University of Kerala

Established by the Parliament of India vide the Central University Act, 2009(No.25 of 2009)

Kasaragod, Kerala, India, 671123

## DEPARTMENT OF GEOLOGY

No. CUK/GEO/BOS/MIN/2021/01

Dtd: 17/08/2021

### **Minutes of the 2<sup>nd</sup> Meeting of the 2<sup>th</sup> Board of Studies in Geology held online at 10.00 a.m. on 17/08/2021**

The Department of Geology, Central University of Kerala conducted the Board of Studies (BoS) meeting on 17<sup>th</sup> August, 2021. It was the Second BoS meeting of the second Board of Studies. Due to the COVID-19 pandemic situation the meeting was conducted through online via Google Meet platform. The panel members included invited subject experts, Head of the Department, internal members and department faculties as special invitee. The attendees of the meeting were as follows: -

#### **BoS Attendees:**

##### **Invited subject experts**

- Prof. (Dr.) Rajneesh Bhutani, Professor, Department of Earth Sciences, Pondicherry University
- Prof. (Dr.) Rajesh Raghunath, Professor, Dept .of Geology, University of Kerala,
- Prof. (Dr.) Prakash Narasimha, K.N., Professor, Department of studies in Earth science, University of Mysore, Manasagangotri
- Dr. A. Anil Kumar, Director, Marine & Coastal Survey Division, Geological Survey of India, Manglalur.

##### **Internal members from the Central University of Kerala**

- Dr. Pratheesh P., Assistant Professor and HOD (i/c), Dept. of Geology.
- Dr. Sijinkumar A.V., Assistant Professor, Dept. of Geology.
- Dr. S. Anbazhagi, Assistant Professor, Dept. of Environmental Science.

##### **Special invitee from the Central University of Kerala**

- Dr. Sandeep K., Assistant Professor, Dept. of Geology.
- Dr. Chandan Kumar B., Assistant Professor, Dept. of Geology.



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The BoS meeting started with the welcome address by Dr. Pratheesh P., Head of the Department (i/c). Dr. Pratheesh P. gave a brief introduction on the objectives of the BoS meeting. Thereafter, he welcomed all experts and faculty to the meeting, and briefed the agenda of BoS meeting.

The agenda for discussion in the BoS meeting was proposed by the Head of the Department. The main items discussed in the BoS are given below:

- (a) The inclusion of programme outcome and course outcomes in the syllabus of department of geology, central university of Kerala thereof.
- (b) Consider the revised syllabus for 2021 admission
- c) Inclusion of employment oriented courses in syllabus

The details of agenda-wise discussion and the final recommendation by the BoS are given below.

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### **Agenda 1: The inclusion of programme outcome and course outcomes in the syllabus of department of geology, central university of Kerala thereof.**

Dr. Pratheesh P. has explained the Faculty Council discussion regarding inclusion of programme outcome and course outcomes in the syllabus. Then Dr. Pratheesh P. invited the Board of Studies opinion. BoS members have accepted the proposed programme outcome and course outcome. Prof. Rajneesh Bhutani opined that there should be some integration of thinking skills in the programme outcome.

**Recommendation:** Following a detailed discussion on the contents, the members approved the inclusion of programme outcome and course outcomes in the Department of Geology, Central University of Kerala curriculum.

### **Agenda 2: Consider the revised syllabus for 2021 admission.**

Dr. Pratheesh P. has presented the revised syllabus for 2021 along with proposed programme structure. BoS members have accepted the proposed programme structure with some small suggestions.



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Prof. Rajneesh Bhutani pointed that Geochemistry was missing from the curriculum, which is very much essential for an earth science. After a long discussion, BoS has decided to incorporate Geochemistry as a compulsory elective paper. Prof. Prakash Narasimha has suggested the usage of 'Planetary Sciences' instead of 'planetary Geosciences'. Dr. A. Anil Kumar has suggested a title change for Oceanography as 'Oceanography and Marine Geology'. Prof. (Dr.) Rajesh Raghunath has recommended some modifications in sequence stratigraphy. Apart from this BoS has recommended a number of additions in the core course discussion.

**Recommendation:** After a detailed discussion on the revised syllabus, the members unanimously approved the new syllabus for MSc Geology programme in Department of Geology Central University of Kerala. All the recommendations from the experts have incorporated in the revised syllabus.

### **Agenda 3: Inclusion of employment oriented courses in syllabus.**

Dr. Pratheesh P. has explained the feedback received from the Alumni through the Alumni Coordinator, on the inclusion of employability oriented courses. He also pointed that the faculty council has discussed the same and incorporated a new core course 'Geospatial Technology and Engineering Geology' in the proposed syllabus. BoS had a fruitful discussion on the syllabus framework of the newly inducted course.

**Recommendation:** Following a detailed discussion on the contents, the members approved inclusion of 'Geospatial Technology and Engineering Geology' as core course in the proposed curriculum.

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After this, overall agenda discussed in the BoS were summarised by Dr. Pratheesh P. Thereafter, Dr. Sijinkumar A.V. offered the vote of thanks, which concluded the BoS meeting.

**Dr. Pratheesh P.**

Head (i/c), Department of Geology

**CENTRAL UNIVERSITY OF KERALA  
DEPARTMENT OF GEOLOGY  
M.Sc. GEOLOGY**

Course Code	EGE 5191	Semester	I
Course Title	Structural Geology and Geological Field Mapping		
Credits	3	Type	Core

This is a participatory, experimental, problem solving and employability based course for Geotechnical skills & Geological mapping skills.

***Course Description***

This course deals with various structural analysis and geological field studies. It will offer the preparation and interpretation of geological maps and sections for the understanding of complex geological history in an area. Stereographic projection or stereonet will enable the students to interpret the deformational events. Geological field work will provide a real life experiences towards the proper understandings of various geological phenomenon.

***Course Outcome***

By the end of the course, students are expected to be able to:

- Understand the interpretation of geological maps and sections.
- Solve various stereo net based problems.
- Interpretation of geological history and deformational events.
- Perform field identification of geological structures.
- Interpretation and classification of geological terrain based on field work.

***Course Structure***

***Module - 1***

Preparation and interpretation of geological maps and sections. Structural problems. Recording and plotting of field data. Study of deformation structures in hand specimen. Study of dip isogons from fold profiles.

***Module – 2***

Stereographic projection in structural analysis. Application of stereographic projection in solving structural problems. Beta diagram and Pi diagram. Solving problems relating to faults and shear zones.

***Module – 3***

Topo sheets: Map scales, features in toposheet, finding the coordinates of points. Surveying - Chain Survey- Plane Table Survey – Leveling- Dumpy Level surveying, Total Station and GPS surveys. Geological field visit and mapping of litho-units in igneous, metamorphic and sedimentary terrains. Identification and Mapping of Faults, folds, foliations, cleavages, lineations, joints and shear zones

***Evaluation & Grading***

Lab assessment – 10 %

Skill development (Analytical and lab skills) – 10%

Field work – 20%

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