

## $1) Course\ Title: Geology\ Bridge\ Course$

2) Course description:

Geology is fundamental to understanding resources and risk, the nature of diversity, possible infrastructure on Earth. Like all forms of science, we study geology to make new discoveries and learn more about the world around us. Geology looks at some of the most important issues in society today including energy sources and sustainability, climate change, the impacts of developments on the environment, water management, mineral resources and natural hazards. A Bridge Course for newly admitted students will be conducted before the commencement of the first semester classes. It is a preparation course with an academic curriculum that is offered 12<sup>th</sup> class students as a means of preparing for the intercellular challenges of a university education. This Bridge course on Geology, is in towards making students aware about introductory requirement to understand Geology for B.Sc. First year students. This course will cover building block contains to understand geology and its integral relationship with other sciences.

Necessity: Bridge course is Necessary for B.Sc. I year students, reason is as they are entering for Graduation after successfully completion of their 12<sup>th</sup>. We have notices that the subject Geology is new subject for them. Thus, students are unable to cope with new Academic Environment and concept of the subject. Bridge course will help them to cope up from the pressure build in the minds of students.

3) Course Objectives:

The Bridge Course aims to act as a buffer for the new entrants with an objective to provide adequate time for the transition to hard core of degree course. This gives them a breather, to prepare themselves before the onset B.Sc. Geology. During this interaction of one hours with the expertise members and their classmates the students will be equipped with the knowledge and the confidence needed to take on bigger challenges in future.

- 4) Instructional Strategies: Animation Videos
- 5) Instructional Material: Instructor's videos supported with slides and graphics
- 6) Summary: Flow-charts and text form
- 7) Evaluation Strategies: Summative auto-graded tests and assignments for E-Tutor feedbacks.
- 8) Duration of course: Two Weeks
- 9) Credits: 4
- 10) Components: Course Outcomes (COs):

As the students for B.Sc. program have come from various places the

purpose of Student Bridge Course is to help these new students to adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution and department. Mainly to help them build bonds with other students and faculty members and expose them to a sense of larger purpose and self-exploration. The major outcomes are-

- 1) To understand what is Geology.
- 2) To understand importance of Geology in life.
- 3) To understand branches of geology and their relation with other sciences.
- 4) Primary identification of minerals, rocks and their types and properties.
- 5) To understand plate tectonics and their related activities.
- 6) To understand natural disaster and linkage to Geology.
- 7) To understand Field work in Geology.
- 8) To understand Career opportunities in Geology

## 11) Course outline: Course Outlines:

- 1) What is Geology?
- 2) Importance of Geology
- 3) Branches of Geology and its relation to other sciences
- 4) Minerals
- 5) Rocks
- 6) Plate Tectonics
- Natural Disaster and linkage to Geology
- 8) Agents of landform development
- 9) Field work in Geology
- Career opportunities in Geology

Week 1: Introduction Geology		
Content	Activities	Assessments
Videos multimedia e-content, Textural handout reading material	Assessment's discussion, Practical assessments	Quiz Assessments & Assignment
Week 2: Linkage to Geology		
Videos multimedia e-content, Textural handout reading material	Assessment's discussion, Practical assessments	Quiz Assessments & Assignment

## UNDERSTANDING PROGRAMME AND COURSE Course: 11 hours of teaching in a week 5 hours theory

2) Shri S. K. Paunikar, Asst. Prof. Dept. of Geology, Shri Shivaji

- 6 hours practical 4 credit course
- 1) To understand what is Geology.
- 2) To understand importance of Geology in life.
- 3) To understand branches of geology and their relation with other sciences.
- 4) Primary identification of minerals, rocks and their types and properties. 5) To understand plate tectonics and their related activities.
- 6) To understand natural disaster and linkage to Geology.

**Course Outcomes** 

- 7) To understand Field work in Geology. 8) To understand Career opportunities in Geology
- Online classes will be offered
  - Faculty: 1) Dr. M. M. Deshmukh, Head & Asst. Prof. Dept. of Geology, Shri
  - Shivaji Science College, Amravati
- Science College, Amravati Syllabus:
- Theory:

Practical:

- a. What is Geology?
- b. Importance of Geology
- c. Branches of Geology and its relation to other sciences
- d. Minerals e. Rocks
- f. Plate Tectonics
- g. Natural Disaster and linkage to Geology h. Agents of landform development
- Field work in Geology i. i. Career opportunities in Geology
- **Minerals** 
  - Rock