



**MANGALORE UNIVERSITY**  
**DEPARTMENT OF MARINE GEOLOGY**  
**MSc GEOINFORMATICS**

**GIS 406: FUNDAMENTALS OF GEOLOGICAL SCIENCE**

**Course Outcome:**

- CO1:. Students from different disciplines will come to know the fundamental concepts of Geology and Geological processes.
- CO2: Mineralogy: Introduction to Rock forming Minerals They will learn about formation of the earth, composition of earth crust, mantle core, plate tectonics Major and Minor plates, continental drift, ocean floor spreading.
- CO3: Outlines of Igneous Rocks: Granites, Basalts, Dolerite, Andesite etc. **Structural Geology:** Primary and Secondary Structures. Folds, Faults, Joints & Unconformities

Unit 1	<b>Introduction, Formation of the earth, composition of earth crust, mantle core, plate tectonics Major and Minor plates, continental drift, ocean floor spreading.</b>	08 hrs
Unit 2	<b>Mineralogy: Introduction to Rock forming Minerals</b>	08 hrs
Unit 3	<b>Outlines of Igneous Rocks: Granites, Basalts, Dolerite, Andesite etc.</b>	08 hrs
Unit 4	<b>Outlines of Metamorphic Rocks: Gneiss, Schist, Quartzite, Granulites, Marble, Slate, etc.</b>	08 hrs
Unit 5	<b>Outlines of Sedimentary Rocks: Origin of sediments. Breccia, Conglomerate, Sandstone, Limestone, Shale Morphology &amp; Origin of Laterites.</b>	08 hrs
Unit 6	<b>Structural Geology: Primary and Secondary Structures. Folds, Faults, Joints &amp; Unconformities.</b>	08 hrs

## References

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6. Head, J. W., C. A. Wood, and T. A Mutch. 1977, *Geological Evolution of Terrestrial Planets*, 65-19-21.
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- 11 Windley, B. F. *The Evolving Continents*, John Willey & Sons, 1-3085.
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