

MANGALORE UNIVERSITY
MSc Geography

HARD CORE COURSE: GYH 403: Advanced Oceanography

Course Learning Outcome:

- CO1. Understand the fundamentals of oceanography and ocean floor.
- CO2. Evaluate ocean relief of submarine and chemical properties.
- CO3. To understand the movements and circulation of ocean water.
- CO4. To understand and evaluate ocean deposits and its impact of human on the marine environment.

Unit 1: Scope and Content of Oceanography: Configuration of Ocean Floor-Continental Shelf, Slope, Ocean Plains and Ocean Deep. **-13**

Unit2: Origin of Submarine: Relief-Submarine Relief of the Atlantic, the Pacific and the Indian Ocean. Physical and Chemical Properties of Ocean waters: Composition, Temperature and Salinity. **-14**

Unit 3: Movements and Circulation of Ocean Water: Waves, Tides, Currents and their Effects. Coastal Ecology-Coastal Dunes and Mangroves. **-13**

Unit 4: Ocean Deposits: Types and Distribution, Coral Reefs: Origin, Types and Theories of Origin of Coral Reefs (Darwin, Dally and Murray). Impact of Humans on the Marine Environment. Recent Trends in Oceanography. **-14**

References:

1. Lal. D.S. (2003) Oceanography, Sharada Pustak Bhavan, Allahabad 02.
2. King Cuchalaine A.M. (2000) Oceanography for geographers, Edward Arnold publications, London.
3. Savindra Singh (2004): physical geography, Prayog Pustak Bhavan, Allahabad -02
4. Siddharth (2005) Oceanography: A brief introduction, Rawat Publishers. New Delhi.
5. Sharma RC (2000) Oceanography for Geographers, Chaitanya Publishers, Allahabad -02
6. Vattal and Sharma (2003), Oceanography for Geographers, Chaitanya Publishers, Allahabad -02
7. Yadav A.S. (2002): Geography of Minerals of Oceans, concept Publishers, New Delhi,
8. Basu S.K. (2003): Hand book of oceanography, Global vision, Delhi.
9. Garisson Tom (1999): Oceanography, Cole, Wadsworth, New York.
10. Sharma and Vattal (1962) Oceanography for Geographers, Chaitanya Publication House, Allahabad.
11. Turman Harold (1985); Introductory Oceanography, Bell & Howell Co. London.
12. <http://drs.nio.org/drs/index.jsp>