Programme: M. Sc. (Marine Sciences)
Course Code: MSC 167 **Title of the Course: Marine Biology Practical I**
Number of Credits: 01
Effective from AY: June, 2018-19

Prerequisites for the course:	Degree of Bachelor of Science of this University or an examination of any other University recognized as equivalent.	
Objecive:	This course provides information on the sampling devices used for collection of marine organisms from the environment and thereafter identification of biological samples of some of the major groups.	
Content:	1.Introduction to standard sampling devices / instruments employed for collection and analysis of biological parameters in water and sediments used in oceanographic studies (2 hrs; Ref 2) 2.Design and execution of field / sampling surveys for collection and analysis of biological communities (water and sediment), their preservation and storage techniques using standard methods (2 hrs; Ref 3) 3.Identification of marine phytoplankton, their life cycle and role in food chain (2 hrs; Ref 1) 4.Identification of marine zooplankton, their life cycle and role in food chain (2 hrs; Ref 10,11) 5.Identification of mangroves, their life cycle and few biological characteristics (2 hrs; Ref 5)	24 hours
Pedagogy:	Identification of sampling devices, marine flora and fauna	
References/ Readings	1. Phytoplankton Identification Catalogue - Saldanha Bay, South Africa, April 2001, 2013 - Botes, L. (2003), GloBallast Monograph Series No. 7. IMO London. 2. Drawing Techniques for Publication, 2013 - Bowestead D. &EcclesT. M. 3. Museum of Natural History, Oxford University, 23 pp. 4. Available at: http://www.oum.ox.ac.uk/collect/Drawing%20Techniques.pdf 5. Monograph of Shallow-Water Indo-West Pacific Echinoderms, 1971 - Clark A. M. & Rowe F. E. W, Trustees of the British Museum of Natural History, London, 238 pp.	
Learning Outcomes	Develop ability to identify the biological specimens at species level.	