

**Programme: M.Sc. Marine Biotechnology**

**Course code: MBO 188:**

**Title of the course: BIOENTREPRENEURSHIP**

**Number of credits: 2**

**Effective from: 2019-2020**

<b>Course Objectives</b>	Research and business belong together and both are needed. In a rapidly developing life science industry, there is an urgent need for people who combine business knowledge with the understanding of science & technology. Bio-entrepreneurship, an interdisciplinary course, revolves around the central theme of how to manage and develop life science companies and projects. The objectives of this course are to teach students about concepts of entrepreneurship including identifying a winning business opportunity, gathering funding and launching a business, growing and nurturing the organization and harvesting the rewards.	
<b>Learning Outcomes</b>	Students should be able to gain entrepreneurial skills, understand the various operations involved in venture creation, identify scope for entrepreneurship in biosciences and utilize the schemes promoted through knowledge centres and various agencies. The knowledge pertaining to management should also help students to be able to build up a strong network within the industry.	
<b>Contents</b>	<p><b>MODULE I</b> Finance and Marketing</p> <ul style="list-style-type: none"><li>• Taking decision on starting a venture; Assessment of feasibility of a given venture/new venture;</li><li>• Approach a bank for a loan; Sources of financial assistance; Making a business proposal/Plan for seeking loans from financial institution and Banks; Funds from bank for capital expenditure and for working; Statutory and legal requirements for starting a company/venture; Budget planning and cash flow management; Negotiations/Strategy With financiers, bankers etc.; With government/law enforcement authorities; With companies/Institutions for technology transfer</li><li>• Assessment of market demand for potential product(s) of interest; Market conditions, segments; Prediction of market changes; Identifying needs of customers including gaps in the market, packaging the product; Market linkages, branding issues; Developing distribution channels; Pricing/Policies/Competition; Promotion/ Advertising; Services Marketing Dispute resolution skills.</li></ul> <p><b>MODULE II</b></p>	<p>12 hours</p> <p>12 hours</p>

	<ul style="list-style-type: none"> <li>• Fundamentals of Entrepreneurship</li> <li>• Support mechanism for entrepreneurship in India Role of knowledge centre and R&amp;D</li> <li>• Knowledge centres like universities and research institutions; Role of technology and upgradation; Assessment of scale of development of Technology; Managing Technology</li> <li>• Transfer; Regulations for transfer of foreign technologies; Technology transfer agencies. E-business setup, management. Human Resource Development (HRD) Leadership skills;</li> <li>• Managerial skills; Organization structure, pros &amp; cons of different structures; Team building, teamwork; Appraisal; Rewards in small scale set up. External environment/changes; Crisis/ Avoiding/Managing; Broader vision–Global thinking.</li> </ul>	
<b>References/ Reading</b>	<ol style="list-style-type: none"> <li>1. Ramsey David (2011). EntreLeadership: 20 Years of Practical Business Wisdom from the Trenches. New York: Howard Books</li> <li>2. Byrne John A. (2011). World Changers: 25 Entrepreneurs Who Changed Business as We Knew it. New York: Penguin.</li> <li>3. Lynn Jacquelyn (2007). The Entrepreneur's Almanac: Fascinating Figures, Fundamentals and Facts at your Fingertips. Canada: Entrepreneur Media Inc.</li> </ol>	