

**K. J. SOMAIYA COLLEGE OF SCIENCE AND COMMERCE , AUTONOMOUS**

# Certificate course in Basic Field Biology

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## Course Details

**Department of Zoology**

**2019-2020**

This document contains the structure of course, details of syllabus and evaluation pattern.

## Course Details

- ❖ **Course type** : Certificate  
❖ **Course Title** : Certificate Course in basic field biology

❖ **Objectives of course :**

1. To inculcate fascination for the outdoor in the minds of the student
2. To deliver expert knowledge about the field
3. To give hands-on experience of various ecosystems
4. To help the student understand identification of various flora and fauna
5. To prepare the student for an advanced course in Field Biology

❖ **Learning Outcomes :**

1. Student will learn how to behave on the field, thereby creating awareness and compassion for the environment
2. Student will inculcate basic identification skills
3. Student will know how to read and comprehend a field guide
4. Student will develop intrigue and respect for the field and its component flora and fauna

❖ **Prerequisites / Eligibility Criteria :** SY pass outs from any stream

❖ **Intake Capacity** : 20

❖ **Duration** : 12 weeks

❖ **Course Coordinator** : Name : Dr. Amol Patwardhan

Sadaf Zakariya

❖ **Syllabus** :

MODULE	CONTENT	CONTACT HOURS
<b>I) Understanding the Field</b>	Various habitats and ecosystems Components of Ecosystem Food web and Food chain Animal Interactions Rules of the Field [Do's and Don't's]	04
<b>II) Terrestrial Habitat</b>	<ul style="list-style-type: none"><li>▪ Types of Terrestrial habitats</li><li>▪ Zoogeography</li></ul>	04

	<ul style="list-style-type: none"> <li>▪ Introduction to Taxonomy</li> <li>▪ Study of Flora[ basic anatomy, classification, key to identification]</li> <li>▪ Study of Fauna [ basic anatomy, classification, key to identification]</li> </ul>	
<b>III) Aquatic habitat</b>	<ul style="list-style-type: none"> <li>▪ Types of Aquatic habitats</li> <li>▪ Zonation of the Sea</li> <li>▪ Shore [ types, organisms found, key to identification]</li> <li>▪ Intertidal Zone [ organisms found, key to identification]</li> </ul>	04
<b>IV) Documentation of Fieldwork</b>	<p>Tools of the Field –</p> <ul style="list-style-type: none"> <li>▪ Gadgets like Binocs, Monocs, Camera</li> <li>▪ Field guides [how to use]</li> <li>▪ Monitoring devices- hygrometer, pH meter, thermometer, Balance etc</li> <li>▪ Field Kit</li> </ul> <p>Field Data Collection Techniques</p> <ul style="list-style-type: none"> <li>▪ Manual</li> <li>▪ Digital</li> <li>▪ Camera traps, light traps</li> </ul> <p>Field data Analysis Techniques</p> <ul style="list-style-type: none"> <li>▪ Sampling Methods</li> <li>▪ Data entry techniques</li> <li>▪ GIS and new digital software</li> </ul>	04
<b>FIELD WORK</b>	<ul style="list-style-type: none"> <li>▪ Trails</li> <li>▪ Bird walks</li> <li>▪ Shore walks</li> <li>▪ Insect / butterfly walks</li> <li>▪ Visits</li> </ul>	14

❖ **Evaluation Pattern** : Assignments  
Viva  
Report of visits

❖ **Reference Books** : Ecology – Odum  
Field guide in Ornithology – Salim Ali, Grimmet  
Field guide in Entomology – Issac Kehimkar  
Field guide in marine Zoology- Deepak Apte