

| Programme                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | BS Botany | Course Code | Bot-201L | Credit Hours | 1 |
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| <b>Lab Course Contents</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |             |          |              |   |
| <ul style="list-style-type: none"> <li>Collection and preservation of algae from various habitats.</li> <li>Identification of algae.</li> <li>Preparation of temporary slides.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           |             |          |              |   |
| <ul style="list-style-type: none"> <li>Study of various available genera of algae (live and herbarium). For example; <i>Sargassum</i>, <i>Stechospermum</i>, <i>Padina</i>, <i>Ectocarpus</i> <i>Stychoglosum</i>, <i>Dictyota</i>, <i>Ulva</i>, <i>Culerpa</i>, <i>Helimeda</i> etc and available as seasonal collection.</li> <li>Study of various available genera of bryophytes. For example; <i>Pellia</i>, <i>Porella</i>,</li> <li><i>Riccia</i>, <i>Marchantia</i>, <i>Anthoceros</i> and <i>Polytrichum</i></li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |             |          |              |   |
| <b>Textbooks and Reading Material</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |             |          |              |   |
| <b>Recommended Books:</b> <ol style="list-style-type: none"> <li>Bold, H.C. and Wynn, M.J 1985. <i>Introduction to Algae Structure and Reproduction</i>. Prentice Hall Inc. New York.</li> <li>Lee, R.E. 2008. <i>Phycology</i>, 4<sup>th</sup> Edition. Cambridge University Press, Cambridge.</li> <li>Dawson, E.Y. 1996. <i>Marine Botany: An Introduction</i>. Holt, Reinhart and Winstan, New York.</li> <li>Chapman, V.J. and Chapman D.J. 1983. <i>Seaweeds and Their Uses</i>. McMillan and Company Ltd. London.</li> <li>Vashishta, B.R. 1991. <i>Botany for Degree Students: Bryophytes</i>, 8<sup>th</sup> Edition. S. Chand and Company, Ltd, New Delhi.</li> <li>Schfield, W.B. 1985. <i>Introduction to Bryophytes</i>. MacMillan Publishing Company, Landon.</li> <li>Hussain F. and Ilahi, I. 2004. <i>A Textbook of Botany</i>. Department of Botany, University of Peshawar, Peshawar.</li> <li>Sharma, O.P. 2016. <i>Algae</i>. MCFraw Hill Education, New Dehli, India.</li> </ol> |           |             |          |              |   |
| <b>Teaching Learning Strategies</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |           |             |          |              |   |
| <ul style="list-style-type: none"> <li>Lecture Based Examination (Objective and Subjective)</li> <li>Assignments</li> <li>Class discussion</li> <li>Quiz</li> <li>Tests</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |             |          |              |   |
| <b>Assignments: Types and Number with Calendar</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |             |          |              |   |
| <ul style="list-style-type: none"> <li>Theoretical/ Innovative</li> <li>Practical</li> <li>Projection</li> <li>Paper reading</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |             |          |              |   |