

BS (4 Years) for Affiliated Colleges



Code	Subject Title	Cr. Hrs	Semester
BOT-414	Challenges of a Changing Earth (Lab.)	1	VIII
Year	Discipline		
4	BOTANY		

Syllabus Outline: Impact of Air Pollution on Plant Growth, Impact of Industrial Waste Effluents on Plant Growth, Climate Change in Pakistan.

Course Outline:

1. Impact of Air Pollution on Plant Growth.
2. Impact of Industrial Waste Effluents on Plant Growth.
3. Climate Change in Pakistan.

Module aims: This course is designed to provide the knowledge about the Present Conditions of the Earth, Major Challenges and Possible Strategies to Coup the Present Day Earth's Crisis.

Learning Strategies:

1. Lectures
2. Group Discussion
3. Laboratory Work
4. Seminar/ Workshop

Learning Outcome: After performing Practical work, students may have ability of understanding the Air and Water Pollution caused by various agencies and their effects on plants growth.

Assessment Strategies:

1. Lecture Based Examination (Objective and Subjective)
2. Assignments
3. Class Discussion
4. Quiz
5. Tests

Books Recommended:

1. **Bell, J.N.B. and Treshow, M. (2002).** *Air Pollution and Plant Life*. John Wiley and Sons, Inc. New York.
2. **IGBP New Letter, (2002).** The Newsletter of the International Geosphere Biosphere Programme: A study of Global Change. The Royal Swedish Academy of Science, Stockholm, Sweden.
3. **Newman, E.I. (2000).** *Applied Ecology and Environmental Management*. Blackwell Science Ltd., Oxford.
4. **Burrough, T. (2001).** *Climate Change: A Multidisciplinary Approach*. Cambridge Univ. Press, Cambridge, U.K.
