

**The Islamia University of Bahawalpur**

**Department of Agronomy**

**University College of Agriculture & Environmental Sciences**

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**Tentative Course Plan**

**Class:** B.Sc. (Hons.) Agriculture Agronomy

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| **Instructor** | Dr. Muhammad Aurangzaib | **Email Address** | | maurangxaib@gmail.com |
| **Course Title** | Crop Management Under Stressful Environment | **Program** | | B.Sc. (Hons) |
| **Course No.** | AGR-604 | **Credit Hours** | | 3(2-1) |
| **Lecture** |  |  | |  |
| **Course Objective:**  To introduce and familiarize students with concept, causes and symptoms of biotic and abiotic stresses. | | | | |
| **Course Outcomes:**  The course will improve students understanding about crop stresses and their relationship with field crop production | | | | |
| **Methods of Teaching:**   * Group activities and discussion * Assignments * Audiovisual aids lectures * Web-assisted instruction | | | | |
| **Resource**  **Material** | **Recommended Books:**   1. Arnon, I. 1992 Agriculture in Dry Lands: Principles and Practices. Elsevier Amsterdam. 2. Nosberger, J.H. H.Geiger and P.C. Struik. 2001. Crop Science Progress and Prospects. CABI Pub., Oxon, UK. 3. Pessaraskli, M. A. 2000. A. Hand Book of Stress Physiology, Marker and Deekar. 4. Taize, L., E. Zeiger. 2006. Plant Physiology. Sinauer Pub. U.S.A. 5. Turner, N.C. and P.J. Kramer. 1980. Adaptation of plants to water and high temperature stress. | | | |
| **Office Help Hours** | Monday to Friday : 8:30 am to 04:00 pm | | | |
| **Grading** | Exam (Date to be announced)  Mid exam (30%)  Final exam (50%)  Practical exam (15%)  Assignments (5%) | | | |
| **SEQUENCE OF TOPICS TO BE COVERED** | | | | |
| **Lecture No.** | **Topic** | |  | |
| **1, 2, 3 & 4** | Components of crop productivity | |  | |
| **5, 6, 7 & 8** | Crop environment and its components | | Acquaintance with the symptoms of stresses on crop | |
| **9, 10, 11 & 12** | Environmental optima for crop growth and development | |  | |
| **13, 14, 15, 16 & 17** | Concept of stress and stressful environments under field conditions | |  | |
| **Mid Term Exam** |  | |  | |
| **18, 19, 20, 21 & 22** | Modifications in growth and developmental patterns of crop plants under biotic and abiotic stresses. | | Visits to affected areas and noting the patterns of vegetative and reproductive growth of crop plants. | |
| **23, 24, 25, 26, 27, 28 & 29** | Approaches for ameliorating the stress effects for crop production. | |  | |
| **30** | **Final Term Exam** | | | |

**Student Evaluation criteria:**

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| Attendance | 5% |
| Workshop / Assignments / Case study | 5% |
| Surprise test / Quiz test | 5% |
| Class participation | 5% |
| Mid term paper | 30% |
| Final term paper | 50% |
| Total | **100%** |

**Student Responsibilities:**

Absent to attend the class may result in failure in the course. Students must also arrive on time and remain in class for the entire period. Cell Phones must be Turned off (Proper classroom decorum adopts, Course outlines and calendars explain requirements and assignments, students are responsible for knowing what they say. Students are also responsible for doing all assigned work on time. Excessive absences (more than 03) will result in “F Grade”. Students may prepare Sketchbook for taking notes and for references.

**Instructor/Tutor**

**Approved by: Dean/ Chairman/ HOD/ Subject Specialist/ Program Coordinator**