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**Department of Forestry**

**College of Agricultural Engineering Sciences**

**University of Salahaddin**

**Subject:** Forest Plantation- Practical

**Course Book:** Year 3

**Lecturer's name:** Shilan Abdurrahman Mirsar

**Academic Year:** 2023 - 2024

**Course Book**

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| **1. Course name** | **Forest Plantation – Practical** | |
| **2. Lecturer in charge** | **Shilan Abdurrahman Mirsar** | |
| **3. Department/ College** | **Forestry/Agricultural Engineering Sciences** | |
| **4. Contact** | **e-mail:** shilan.mirsar@su.edu.krd  **Tel: (optional):**07504492684 | |
| **5. Time (in hours) per week** | **Practical: 8** | |
| **6. Office hours** | **10** | |
| **7. Course code** |  | |
| **8. Teacher's academic profile** | * **Date of Birth:** 26 January 1978 * **Place of Birth:** Erbil * **Nationality:** Iraqi * **Marital status:** Single * **Sex:** Female   **Education:**   * **B.Sc:** Plant Production / College of Agriculture (2001-2002) / University of Salahaddin / Kurdistan Region/ Iraq. * **M.Sc:** Forestry/ Agroforestry/ College of Agriculture (2007) University of Wales, Bangor/ UK   **Work History:**   1. College of Agricultural Engineering Sciences , Forestry department/ University of Salahaddin /Iraq   from 2008 until date (Lecturer)  As an lecturer, I am teaching:   1. Forest Plantation (Practical) for Third stage students/ Forestry Department/ Second Semester 2. Principle of forestry for Second stage students/ Forestry Department | |
| **9. Keywords** | Forest Plantation, doing plantation by seeds and seedlings | |
| **10. Course overview:**  Forests are the main source of many products and the most important wood as a raw material used in many important industries such as the production a major forest in addition to the benefits of other important preventive regard to the maintenance of soil and water sources, and because of increased population density in the world and the worsening problems of industrial pollution due to emissions from factories, cars and increasing problems climate change, drought and desertification in the world, where landscaping is one of the most important steps important to confront these dangers and increasing plant density and air purifier air and prevent water and wind erosion. | | |
| **11. Course objective:**  Goal of teaching planting forest trees is practical:  1- Familiarity with the student process of tree plantation and tactics.  2- Get the most important forest reforestation projects in the province.  3- A comparative study of the state of forests in natural and synthetic region.  4- Learn how to create windbreaks and selection of tree species suitable for the establishment and the environmental benefits of Governorate.  5- How to plant trees in the mountainous and rugged. | | |
| **12. Student's obligation**  The objective is for the student to understand what is plantation and how they can to plant trees by seeds and seedlings? | | |
| **13. Forms of teaching**  **Teaching Methods**  1. Lecture  2. Self‐study  **Teaching Media**  1. PowerPoint presentations  2. Texts and teaching materials | | |
| **14. Assessment scheme**  We will start most class periods with a short quiz. The quizzes could cover any information presented before that date, but will usually cover information presented in the most recent lectures. The quizzes will be given during the first 5 to 10 minutes of the class period.  Exams will consist of a variety of questions, including multiple definitions, true/false, definition, and differences, occasionally short answer.  **Note:** Number of exams and lectures for each exam did not specify. **Each student attends a report within the lecture program at the end of the course.**‌ | | |
| **15. Student learning outcome:**  They understand what is tree plantation? And methods of plantation and they can do plantation in filed or mountains by seeds or seedlings. | | |
| **16. Course Reading List and References‌:**  1- Community Tree Planting and Care Guide. (2007) university of IOWA,USA.  2- Planting & Transplanting Landscape Trees and Shrubs. Purdue University, USA.  3- Planting and establishing trees. University of Florida, USA. | | |
| **17. The Topics:** | | **Lecturer's name** |
| In this section The lecturer shall write titles of all practical topics he/she is going to give during the term. This also includes a brief description of the objectives of each topic, date and time of the lecture | | Lecturer's name  ex: (3hrs) |
| **18. Practical Topics (If there is any)**  **1st week:** Definition of forest plantation, Afforestation, Reforestation, Deforestation, benefits of tree plantation  **2nd week:** Types of seedling   1. Bare-root trees 2. Machine-balled 3. Balled and burlapped (B & B) 4. Containerized plants:   Technique of Planting  **3rd week:** Planting Methods:   1. Planting in hole 2. Compression method   **Planting methods used in Iraq:**   1. Planting in hole 2. Crescent-shaped holes 3. Gradonies (contour line) 4. Terraces   Planting Seasons  Care Before Planting  **4th week:** Field project  **5th week:** Type of planting   1. **Regular planting**   a: Square planting  b: Rectangular planting  c: Triangular planting   1. **Irregular planting**   **6th week:** Scientific Trip to Paulownia Plantation  **7th week:**  Deep of planting stocks   1. Shallow planting 2. Normal planting 3. Deep planting   **Forms of mixing species**   1. Single tree mixing 2. Row mixing 3. Strip mixing 4. Patch (group) mixing   **8thweek:** Field project  **9th week:** Sustaining the Newly Planted Tree (mulching, fertilization, pruning, Staking or guying)  **10th week**: Sustaining the Newly Planted Tree (watering, trunk protection)  **11th week**: Scientific Trip to Kasnazan | |  |
| **19. Examinations:**  In regard to this subject the type of exam will be as follow:  1- Definitions  2- Benefits  3- True or False  4- Fill the following blanks with the correct word  5- About the scientific trips  6- Drawing  e.g: draw levels of deeps for planting  7- Differences | | |
| **20. Extra notes:**  Some of the lectures will be presented in PowerPoint lecture will be provided in class. Also, the best wishes to the development of field in the department. | | |
| **21. Peer review**  I am as a lecturer at Forest Department looked at this course book. The topics that were written per week are consented to meet the objectives that have been mentioned here.  Dr. Sherzad Omar  Assist Prof. | | |