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**Department Horticulture**

**Salahaddin University**

**College of Agricultural Engineering Sciences**

**Subject: Horticulture Seed production**

**Course Book –**

 **Fourth Year – First Semester**

**Academic Year: 2021- 2022**

**Course Book**

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| **1. Course name** | **Horticulture Seed production** |
| **2. Lecturers in charge** |

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| **Dr Noura Masseh Ellya Kka, Dr. Kharman Khalid Qader and Mrs. Kaniaw Najmadin Sharif**  |

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| **3. Department/ College** | **Department of Horticulture / College of Agricultural engineering sciences**  |
| **4. Contact** | **e-mail: kharman.qader@su.edu.krd**  |
| **5. Time (in hours) per week**  | **Theory: 2 h/w, Practical: 3h/w**  |
| **6. Office hours** | **I am usually available before class or you can arrange an appointment. It is best to email me to set up a meeting time.**  |
| **7. Course code** |  |
| **8. Teacher's academic profile**  | https://academics.su.edu.krd/noura.kka https://academics.su.edu.krd/kaniaw.sharif https://academic .su.edu.krd/kharman.qader |
| **9. Keywords** | **Seed origin, development, composition, function, seed production, evaluation and distribution.**  |
| **10.Course objective:**Describe what seed is and the importance of seed production of horticultural crops.- Introduce the basic principles of quality seed production.- Provide an insight into physiological processes controlling seed quality and its survival.- To provide a comprehensive knowledge on all aspects of seed quality evaluation and their relevance to crop performance.- To explain the purpose of seed certification.**11. Course overview:**- The course presents the seed as a biological system and cover its origin, development, composition, function, seed ecology, fundamentals of how seeds are produced, conditioned, dried, evaluated and distributed in our modern agricultural society.  |
| 12. Student's obligationAttendanceAttendance for this class is mandatory. Attendance will be confirmed with evaluation sheets. Each unexcused absence will result in the lowering of your final grade by one grade.Academic Honesty and IntegrityCheating of any kind will not be tolerated. Copying of others’ work, use of disallowed material, plagiarism in assignments, or cheating in any other form as defined by the instructor will result in a grade of zero for that assignment. Multiple infractions will result in a grade of ‘Fail’ for the course.Student ConductStudents are expected to respect the rights of others in the class. Cell phones and other electronic equipment should be turned off prior to the beginning of class. Use of these items during class time, or any other unwarranted classroom disruption, will result in your immediate excusal from class for the remainder of the period.You may bring drinks to class. Please finish any meals before class begins. The use of tobacco products during class time is strictly prohibited. |
| **13. Forms of teaching**Lectures (Teaching by presentation), classroom teaching (class discussion),Practice section involves visits to seed processing sites in Erbil to observe/experience and learn from seed producer how seeds get sorted and storedEnglish is the main language for teaching in addition to Arabic and Kurdish. |
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| **14. Assessment scheme:**

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| **Exam**  | **Thioretical** | **practical** | **total** |
| **During semester** | **15** | **35** | **50** |
| **Final exam** | **50** | **-** | **50** |
| **Total** | **65** | **35** | **100** |

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| **15. Course Reading List and References‌:**

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| Course Reading List and References: - Copeland, L.O. and McDonald, M.B., 2001. Principles of seed science and technology. - McDonald, M.B. and Kwong, F.Y., 2005. Flower seeds: biology and technology. CABI publishing. -George, R.A., 2009. *Vegetable seed production*. CABI. - Cohn, M.A., 2008. Seed development, dormancy and germination. Annual Plant Reviews, Volume 27.  |

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| **17. The Topics:** |
| In this section the lecturer shall write titles of all 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 Each term should include not less than 16 weeks  |
| **18. Theoretical Topics :** |
| **1stweek:** Importance of seed**2ndweek:** Floral induction and flower structures**3rdweek:**.Fertilization, development, and maturation**4th week:** Chemical composition of seeds**5th week: First midterm test****6th week:** Seed Germination**7th week:** Seed Dormancy**8th week:** Vegetable seed production**9th week:** Ornamental Seed Production **10th week: Second midterm test****11th week:** Turf grass seed production**12th week:** Seed certification**13th week:** Seed Quality Control**14th week:** Seed Handling and Distribution |
| **19. Sample examination questions and answers:**Multiple choiceShort answerTrue or FalseFill in the blanks |
| **20. Peer review**Standard guidelines were followed and it is clear.- There are sufficient topics and examples.- References are relevant, recent and available. |