Kurdistan Regional Government
Salahaddin University
College of Agriculture Engineering Science
Department of Plant protections
Subject: Post Harvest Diseases/year 3
Lecturer's name: Dr Tahsein A. M. Amein
Academic Year: 2023 - 204

# Course Book

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| **1. Course name** | Post Harvest Diseases |
| **2. Lecturer in charge** | Dr Tahsein A.M.Amein |
| **3. Department/ College** | Plant protection/ Agriculture |
| **4. Contact** | e-mail: tahsin.mohammad@su.edu.krd<br>Tel: (optional) 0750 7422500 |
| **Time (in hours) per week** | 2 |
| **6. Office hours** | Sunday (9 - 12) and Tuesday (9 - 12) |
| **7. Course code** | |
| **8. Teacher's academic profile** | **Education and**<br>**Academic degrees:**<br><br>2014 – Assistant Professor<br>1988 – Ph D Plant Pathology, University of Agriculture, Poznan, Poland.<br>1984 – M Sc Plant Pathology, University of Agriculture, Poznan, Poland.<br>1981 – B Sc Plant Pathology, University of Agriculture, Alexandria, Egypt.<br>**Title of Ph D thesis:**<br>" Etiology and ecology of root and stem base diseases of wheat" |

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| | **M Sc project:**<br>Susceptibility of two seed- potatoes varieties on bacteria *Erwinia carotovora* ssp *atroseptica* infection and occurrence of other diseases.<br><br>**Employment / Working experiences:**<br>- Undergraduate teaching in Poland and in Sweden (Plant Pathology).<br>- Responsible for postgraduate courses (Plant Pathology). (Sweden)<br><br>- M Sc students in Sweden.<br>- Projects leader and researcher.<br>- International collaboration experience<br>➢ Working with a European Union (EU) project, were Universities from five EU – country members were involved in this project; Germany, Italy, Netherlands, England and Sweden besides of some seed companies.<br>➢ Teacher exchange (collaboration programs).<br>- October 2012 – Present. Salahaddin University, College of Agriculture, Plant Protection Department.<br>- Sep. 2009 – Oct. 2012. Swedish University of Agricultural Sciences (SLU), Department of Plant Biology & Forest Genetics.<br>- July 2003 – Sep. 2006. Goteborg's University. Department of Cell and Molecular Biology.<br>- Feb. 2004 – Dec. 2005. The Mase laboratories (MASE – Microbial Activity for a Sound Environment).<br>- Oct. 1991 – June 2003. Linked (with some exclusion for different periods) to Swedish University of Agricultural Sciences (SLU), Plant Pathology and Biocontrol Unit.<br>- Sep.1997 - March 1998. Product development manager at Bio Agri AB. Research Company, Sweden.<br>- June - July1990. Field assistant at Hushållningssällskapet. (Farmer's local organization). Borås. Sweden.<br>- Oct. 1984 – June 1988. University of Agriculture, Poznan, Poland. |
| **9. Keywords** | Field crop diseases, cereal diseases, rusts, smuts, powdery mildew, fusarium, rice, corn diseases, pea diseases, diseases symptoms and sings. |

**10. Course overview:**

Postharvest loss: Is defined as any change in the quality or quantity of the product after harvest that decreases its value.

Heavily annual losses are caused by plant pathogens that attack these crops wherever they are grown. Control programs request studying these pathogens and depending upon symptoms appearance and microscopic features, disease cycles and their developments, the disease diagnoses of the causals are possible.

**11. Course objective:**

Recognition of the disease, and understanding of the pathogen(s) responsible, is the first step in successful disease control. As a result of this course, the student will learn the importance of postharvest crop diseases. Get knowledge about many worldwide important diseases, particularly the most common crops grown under local conditions. Description of the disease, including the causal agent, symptoms, environmental conditions favorable for the disease development and provide a good control working knowledge.

**12. Student's obligation:**

Should be prepared for 10 min quizze in the begging of each lecture for the previous lecture's content.
Collect diseased plants samples and identify in the lab.
Write a report about a plant disease.

## 13. Forms of teaching

Teaching methods are, using data show, power point, white board, giving hand note, video reports.

## 14. Assessment scheme

**Grade distribution of 15**

| **Test** | **Mark 15** |
|---|---|
| Exam | 10 |
| Quiz | 2 |
| Report | 3 |
| | |
| Total | 15 |

**Final examination out of (50%)**

| **Monthly exam** | **Mark%** |
|---|---|
| Theoretical exam | 50 |

## 15. Student learning outcome:

As a result of this course, the student will learn the importance of postharvest crop diseases. Get knowledge about many worldwide important diseases, particularly the most common crops grown under local conditions. Description of the disease, including the causal agent, symptoms, environmental conditions favorable for the disease development and provide a good control working knowledge.

## 16. Course Reading List and References:

| Main reference | Useful references | Magazines and review (Internet) |
|---|---|---|
| 1. Agrios , G.N. (2005) . Plant Pathology . 5th ed . Academic press p.952<br>2. Fungi and Fungus – like Organisms The American Phytopathology Society. 2010 (internet) | | Plant Pathology<br>Articles and reviews |

## 17. The Topics:

## Lecturer's name

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

Dr Tahsein A.M.Amein

*POSTHARVEST DISEASES*

| **Subjects:** | **Weeks** |
|---|---|
| - Background (General Informations) | 1 |
| - Post Harvest Diseases And | |
| - Disorders Of Vegetables | |
| - Tomato | 2 - 3 |
| - Post Harvest Diseases Of Potato | 4 |
| - Post Harvest Diseases Of Cucurbits | 5 |
| - Exam | 6 |
| - Family: Amaryllidaceae | 7 |
| - Strawberry diseases | 8 |
| - Post Harvest diseases of Apple and pear | 9 – 10 |
| - Postharvest diseases of Banana | 11 |
| - Postharvest diseases of Citrus) | 12 |

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| **18. Practical Topics (If there is any)** | |
| **Plant Disease Collection**: Visiting different fields and collecting diseased plant samples to identify in the lap. (Practical lect.). | |
| **19. Examinations:**<br>1- Define the following?<br>2- What is the differences between?<br>3- How important this disease?<br>4- Write the scientific name of?<br>5- Which environment condition favour this disease? | |

**20. Extra notes:**

**1- Quizzes**: All quizzes require integration of the materials presented in lectures and in laboratories.
10 min. quizze at the beginning of each lect.

**21. Peer review** **پێداچوونەوەی هاوەڵ**

This course book has to be reviewed and signed by a peer. The peer approves the contents of your course book by writing few sentences in this section.

*(A peer is person who has enough knowledge about the subject you are teaching, he/she has to be a professor, assistant professor, a lecturer or an expert in the field of your subject).*

ئەم کۆرسبووکە دەبێت لەلایەن هاوەڵێکی ئەکادیمیەوە سەیر بکرێت و ناوەڕۆکی بابەتەکانی کۆرسەکە پەسەند بکات و جەند ووشەیەک بنووسێت لەسەر شیاوی ناوەڕۆکی کۆرسەکە و واژووی لەسەر بکات.

هاوەڵ ئەو کەسەیە کە زانیاری هەبێت لەسەر کۆرسەکە و دەبیت پلەی زانستی لە مامۆستا کەمتر نەبێت.