



Department of Plant protection

College of Agricultural Engineering Sciences

Salahaddin University

Subject: Agricultural Extension

Course Book – (Year 2)

Lecturer's name: Karzan Kazm Mahmud, PhD

Dr. Pshtiwan Abdullah Jalil

Academic Year: 2022/2023

Course Book

1. Course name	Agricultural Extension
2. Lecturer in charge	Dr. Karzan K. Mahmud-Dr. Pshtiwan A. Jalil
3. Department/ College	Plant protection department/ Agricultural Engineering Sciences college
4. Contact	e-mail: karzan.mahmud@su.edu.krd Tel: 009647504523086
5. Time (in hours) per week	Theory: 2 Practical: 3
6. Office hours	Available 4 hours in a week
7. Course code	
8. Teacher's academic profile	My name is Karzan K Mahmud, and I am teaching staff at Plant Protection department- College of Agricultural Engineering science. I have got BSc. degree in this department in 2008-2009, and then I have taken MSc degree in Sheffield University - UK in 2014. I have studied MSc in Bio-science department- faculty of health and wellbeing. My specialist is Biotechnology in Microbiology. I have published 3 scientific papers during studying MSc and 2 papers during my PhD. studying. Totally, I have published 6 papers so far. Currently I am under Researching in practical stages in some different areas regarding my specialist. Also, I am PhD. holder in Biotechnology in Soil Microbiology at Salahdding University-Erbil.
9. Keywords	Agricultural Extension, Extension in Pesticides, Mechanization, Agricultural Marketing. Agricultural packaging...
10. Course overview:	Is the application of scientific research and new knowledge to agricultural practices through farmer education. The field of 'extension' now encompasses a wider range of communication and learning activities organized for rural people by educators from different disciplines, including agriculture, agricultural marketing, health, and business studies. Agricultural extension (also known as agricultural advisory services) plays a crucial role in boosting agricultural productivity, increasing food security, improving rural livelihoods, and promoting agriculture as an engine of pro-poor economic growth. Extension provides a critical support service for rural producers meeting the new challenges confronting agriculture: transformation in the global food and agricultural system, including the rise of supermarkets and the growing importance of standards, labels, and food safety; growth in nonfarm rural employment and agribusiness. Therefore, this course is concerned to explain the best communication methods for the farmers and educate them regarding using pesticides, fertilizers, increasing their products, best methods of packaging of their product, marketing.

11. Course objective:

- Try to make students to be familiar with all most all areas of Agricultural Extension
- Make students to learn how to progress the communications methods with farmers.
- Make students to be educated regarding how explain the methods of using pesticides and chemical substances or avoid them to use them.
- Make students to learn the importance of packaging of agricultural products and how to convince the farmers for packaging their products.
- Make students to learn how to work with smart agriculture and how to explain the importance of smart agriculture for farmers.
- Make students to have ability for explaining the importance of mechanization for the farmers and how to be advanced in agricultural mechanization.

12. Student's obligation

Students must complete Learning assessments based on lecture materials and supplementary lecture-related materials. Conducting several seminars and presentations. Research and reading is required to complete these. Preparing reports after each scientific trip.

13. Forms of teaching

The lecturer will uses data show by preparing PowerPoint presentations in which outlines of each lecture will be shown however the details of the lecture will be narrated by the lecturer his self. In some cases, samples will be shown to students to have a close and real idea on the subject.

14. Assessment scheme

Students are evaluated during the semester for the theory part by daily short quizzes which giving 5% marks out of 15%. One term exam 10% marks each out of 15% in mid-term. The practical part is given 35% marks in total 50% of mid-term marks. Final exam is 50% marks.

15. Student learning outcome:

Students will be learned:

- Basis of Agricultural extension.
- Methods of communication with farmers.
- Concepts of packaging, marketing of agricultural products,
- How to make farmers to be educated?
- Methods of educating farmers for using chemical substances.
- How to make farmers to be far of using pesticides.
- How to encourage farmers for using smart agriculture.
- How to learn farmers for protecting their products without using chemical substances.

16. Course Reading List and References:

Key references:

- Aker, J. C., & Fafchamps, M. (2010). How does mobile phone coverage affect farm-gate prices? Evidence from West Africa. *Department of Economics and the Fletcher School, Tufts University*, 1-50.
- Akram-Lodhi, A. H., & Kay, C. (Eds.). (2012). *Peasants and globalization*. Routledge.
- Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2019). *Trends in global higher education: Tracking an academic revolution*. Brill.
- Angkasith, P. (1984). Training for Extension Workers: An Evaluation. *Community*

<p><i>Development Journal</i>, 19(4), 261-265.</p> <ul style="list-style-type: none"> • Bartlett, A. (2010). An introduction to real-world extension. <i>Rural Development News</i>, 1(2010), 7-14. • Benor, D., & Harrison, J. Q. (1977). Agricultural extension; The training and visit system. • Anderson, J. R. (2006). <i>The rise and fall of training and visit extension: an Asian mini-drama with an African epilogue</i> (Vol. 3928). World Bank Publications. 	
17. The Topics:	Lecturer's name:- Dr Karzan K Mahmud
1. Introductory of Agricultural Extension	(2 hrs) 3/1/2023
2. Some definitions of Agricultural Extension. What is Agricultural Extension	(2 hrs) 10/1/2023
3. How to educate the farmers to use pesticides and chemical fertilizers? I	(2 hrs) 17/1/2023
4. How to educate the farmers to use pesticides and chemical fertilizers? II	(2 hrs) 24/1/2023
5. How to advice the farmers for packaging their products? I	(2 hrs) 31/1/2023
6. How to advice the farmers for packaging their products? II	(2hrs) 7/2/2023
7. How to advice the farmers for marketing of their products? I	(2 hrs) 14/2/2023
8. How to advice the farmers for marketing of their products? II	(2 hrs) 21/2/2023
9. How to make the farmers to be familiar with agricultural mechanization professionally? I	(2 hrs) 28/2/2023
10. How to make the farmers to be familiar with agricultural mechanization professionally? II	(2 hrs) 7/3/2023
11. Extension Programme Planning Process	(2 hrs) 14/3/2023
12. Steps in Extension Programme Planning Process	(2 hrs) 28/3/2023
13. Mid-Term Exam 10%	(2 hrs) 7/4/2023
14. Scientific Trip	(2 hrs) 14/4/2023
15. Phase-test Exam	(2 hrs) 21/4/2023
16. Revision	(2 hrs) 28/4/2023

18. Practical Topics (If there is any)	
Introductory	Mr. Omer
Using Pesticides	
Scientific trip	
How educate farmers and communicate with farmers?	
Scientific trip	
Mid-course examination	
Scientific trip	
How to marketing	
Scientific trip	
Smart Agriculture	
Scientific trip	
Communicate with rural people	
Second exam & Revision	
19. Examinations:	
What is Agricultural Extension?	
Reasons of studying this course.	
What is the importance of packaging?	
How can you make farmers to be educated for using pesticides?	
Which technique do you use for convincing farmers for not using chemical substances?	
What...? Why...? How...? All critical questions	
20. Extra notes:	
Here the lecturer shall write any note or comment that is not covered in this template and he/she wishes to enrich the course book with his/her valuable remarks.	
21. Peer review پیداچوونہوہی ھاوہل	
I approve that the course is comprehensive and cover all the aspects of the course.	
Name:	
Degree:	
Specialty:	
Sign:	
Date:	