

Course Book of (2nd stage forestry)

1. Course name	Forest Conservation - Theory
2. Lecturer	Ph.D. Dr. Zana Abubakr Ahmed Lak MSc. Lect. Shayma Abdulkhalq
3. Department/ College	Forestry/Agriculture
4. Contact	E-mail: zana.ahmed @su.edu.krd Tel: 07504520548
5. Time (hours) per week	Theoretical: 2 hours
6. Office hours Ph.D. Dr. Zana Abubakr Ahmed Lak	<i>I often present in my office from Sunday to Thursday.</i>
7. Course code	
	<p>Awarded Ph.D. Forest Ecophysiology, Department of Forest & Soil, Institute of Forest Ecology ,University of Bodenkulture – Vienna - Austria in 2021. Awarded MSc. in Forest Protection, Forestry Department, Agriculture College, University of Salahaddin - Erbil, Kurdistan region government in 2007. Awarded B.Sc plant production college of Agriculture Salahaddin University in 2003. Took baccalaureate, Sheikh Mahmoud Hafid Secondary School in 1999.</p> <p>Demonstrator at the Department of Plant Production, Salahaddin University in 2004.. Assist. Lecturer, Plant Production Department, College of Agriculture, Salahaddin University in 2007 – 2013. Lecturer, Department of Forestry, College of Agriculture , Salahaddin University 2014 – 2022. Teaching staff member (Assistant Lecturer), Plant Production, College of Agriculture, Salahaddin University in 2007 – 2014. (Lecturer), forestry, College of Agriculture, Salahaddin University in 2014 – 2015.</p> <p>Publishing (8) papers in journal, Agri. Sci. Basrah University, Agri. Sci. Journal Kirkuk University, Sci. Jour. Raparen Uni., Journal Plant & Soil Austria, Forests IMDB Journal Switzerland. Participated in Scientific Conference of Plant Protection Beirut-Lebanon (2009). Participated in Scientific Conference of Mediterranean plant Pathology Rome-Italy (2010). Participated in workshop of Compact Desertification, Vienna Austria (2017). Participated in workshop of geo science and satellite data, Vienna (2016). Participated in workshop of mountain Forestry Conservation, Vienna (2018). Participated in workshop of Biodiversity, Vienna (2019).</p> <p>I completed my (B.Sc.) in Salahaddin University - Erbil, Iraq – Agriculture College - Department of Plant Production in 2007.</p>

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	I got my (M.Sc.) in Salahaddin University - Erbil, Iraq – Agriculture College - Forestry Department in 2015 and my.
9. Keywords	Forest Conservation, Forest health, Forest natural resources, Sustainable forest management
10. Course overview: ➤ Theoretical Part:	<p>This Course is about Forest Conservation, Forest conservation is the practice of planting and maintaining forested areas for the benefit and sustainability of future generations. The importance of forests cannot be underestimated. We depend on forests for our survival, from the air we breathe to the wood we use. Besides providing habitats for animals and livelihoods for humans, forests also offer watershed protection, prevent soil erosion and mitigate climate change. To protect forests from uncharacteristic and economically or environmentally undesirable wildfire, pests, diseases, and other damaging agents and thus maintain and improve long-term forest health and productivity. Long-term Forest and Soil Productivity. To protect and maintain long-term forest and soil productivity.</p>
11. Course objective: ➤ Theoretical Part:	<p>should conserve forests and wildlife to preserve biodiversity to prevent endangered species from becoming extinct, and to maintain ecological balance in nature.</p> <p>Aims and Objectives:</p> <ul style="list-style-type: none">a- Protection and conservation of flora, fauna, forests and wildlife.b- Afforestation and regeneration of degraded areas andc- Protection of environment in order to promote sustainable development. <p>4- Learn how to create windbreaks and selection of tree species suitable for the establishment and the environmental benefits of Governorate.</p>
12. Student's obligation ➤ Theoretical Part:	<p>Students are required to attend at the class, Lectures, Field camp and two exams in the semester in Forest Conservation theoretical part.</p>

13. Forms of teaching

➤ Theoretical & Practical Part:

Direct method following for teaching with student. All lectures will be explained by using PPT. Software with connecting to projector. White board will be used for more explanation. A copy of hand out will give to the students to write their notes.

14. Assessment scheme

➤ Theoretical Part:

The sum of two exams will be out of (15) marks. The final exam will be out of (50) marks.

First Exam	Second Exam	Annual Average	Final Exam	
7.5	7.5	15	50	Theory part

5. Student learning outcome:

➤ Theoretical part

The student should get the scientific information about forest Conservation. The student should learn the effect **planting and maintaining forested areas for the benefit and sustainability of future generations**. ... Forest conservation involves the upkeep of the natural resources within a forest that are beneficial to both humans and the environment.

16. Course Reading List and References:

Edmonds,R.L. james K. Agewe & Robert I. Gara .(2012). Forest Health and Protection,University of Washington,Waveland Press.

Kimmins,J.P. (2004) forest ecology. Prentic Hall. New jersey

Robert and R.Gara.(2011) Forest health. Wave land press Illinois.

Shukla R. and chand& company LTD.

E. Röhrig, N. Bartsch (2016). Waldökologie: Einführung für mitteleuropa. Springer,Germany, Berlin.

E. Pedro. Forest conservation, methods, management and challenges (2019). environmental research advances forestry, Nova publisher. Brazil.

17. Theoretical Topics	
Week 1: Forest Conservation: (2hr) Definitions, Importance of forest conservation, why forest disappear. Week 2: Deforestation; Causes, effect on climate & Biodiversity. (2hr) Week 3: Forest conservation methods: Forest fires; causes, Detection, Control fire. (2hr) Week 4: Forest conservation methods: Overgrazing? Impact on natural regeneration, , control. (2hr) Week 5: Forest conservation methods: Reforestation & Afforestation Planting trees methods. (1hr)+ (1hr) first exam Week 6: Forest conservation methods; Forest Abiotic stress. Week 7: Forest conservation methods: Air Pollution Week 8: Forest conservation methods: Soil conservation Week 9: Governmental role in forest conservation. Rules and educate people how to conserve forest. (1hr)+ (1hr) second exam.	
18. Examinations: ➤ Theoretical Part: 1-Definitions. 2- Multiple choices. 3- Correct the underlined parts if they are falls. 4- Write the reason to the following statements. 20. Extra notes: Here the lecturer shall write any note or comment that is not covered in this template and he/she wishes to en the course book with his/her valuable remarks.	

21. Peer review: پيداچوونه وهى هاوهن

This course book has to be reviewed and signed by a peer. The peer approves the contents of your course book 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 professor, assistant professor, a lecturer or an expert in the field of your subject).

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