

Course Book

1. Course name	Forest Engineering-theory and practice
2. Lecturer in charge	Prof. Assist. Halmat A. Sabr and Mr. Sherwan Yassin Hammad
3. Department/ College	Forestry
4. Contact	e-mail: halmat.sabr@su.edu.krd Mr. Sherwan Yassin Email: sherwan.hammad@su.edu.krd Phone : 07504762389
5. Time (in hours) per week	Theory: 2 hours/ week Practical: 3 hours/ week
6. Office hours	I often present in my office on Monday.
7. Course code	
8. Teacher's academic profile	<p>BSc. in Plant production in 2008 – 2009- University of Salahaddin – College of Agriculture – Erbil– Iraq. Master of Science (Master) in Environmental Forestry, Bangor University School of Environment, Natural Resources and Geography, in 2012-2013, Bangor University, Bangor. I was member of Dabbane Company/ Erbil in 2009. In 2009-2010\ Manager for cucumber production at Gerdarasha Research Center/ Agriculture College/ Salahaddin University.In 2009-2011/ became teaching Assistant\ Plant production department/ College of Agriculture/ Salahaddin University. In 2014 became assistant lecturer in Forestry Ecology. I was a decision maker of Forestry department in 2015 \College of Agriculture/ Salahaddin University.In 2018- became a lecturer in Environmental Forestry.</p> <p>Bachelor's degree in Forestry and Horticultural Science in the year of 2011-2012 in College of Agricultural/ Salahaddin University. However I've got my Master</p>

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	Degree in Organic Agriculture in the year of 2015 in Italy. Now, I am working as Assistant Lecturer in the Forestry Department, College of Agricultural Engineering Sciences, Salahaddin University-Erbil. Mr. Sherwan Yassin Hammad
9. Keywords	Urban forest, tree establishment, forest society
10. Course overview: In their normal functions the Foresters have to design, construct and maintain buildings and forest roads. In order that they are able do so with reasonable efficiency, it is necessary that the Foresters should have some basic knowledge in Civil Engineering. The present course materials deal with basic elements of building and forest roads in ten lessons. these course materials on Forest Engineering have been prepared for induction training of the Foresters and Forest Guards..	
11. Course objective: The object of this training manual is to help the frontline forest personnel have a better perception about basic principles and procedures involved in the construction and maintenance of buildings and roads	
12. Student's obligation Students are required to conduct two exams in Spring semester in forest engineering theory.	
13. Forms of teaching 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 Quiz will be conducted every lectures with giving 5 minutes to the students. The mean of two exams will be out of (10) marks and (3) marks for Actives with general total (2marks). The final exam will be out of 15.	

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15. Course Reading List and References:

1. Lecture notes on Forest Engineering – I by K. Muniyathu, State forest Service College, Coimbatore
2. 2.Lecture Notes on Engineering Part- I by M.V. Achar, Forest Rangers' College PWD (WB) Schedule of Rates 2014
3. N.L Masani 1980 Forest Engineering Without Tears Natraj Publishers Dehra Dun
4. 5. <http://www.abuildersengineer.com/2012/11/depth-of-footings-foundations.html>

16-Course program By: Associate Prof. Halmat A. Sabr

1 st Week	Introduction about forest engineering
2 nd Week	Importance Greenery (Forest) in the City
3 rd Week	Design and drawing steps
4 th Week	Forest Landscape Design
5 th Week	Forest Roads
6 th Week	Road Design
7 th Week	Forest Bridges
8 th Week	Sources of Water Supply
9 th Week	Water supply Source of water surface source* underground source springs*
10 th Week	wells-dug well, tube well, artesian well* sinking of wells* cleaning and protection of wells* Purification of water sedimentation*
11 th Week	Preparation of road estimate
12 th Week	Carriageway*, shoulder*, camber, gradient, super Elevation, road curves, retaining wall*, breast wall*, road drainage -Alignment in plains and hills

17. Practical lecture Topics and weeks:

- 1- Introduction of Forest Engineering.
- 2- Forest Engineering Drawing Forest Map, Forest Tree Symbols.
- 3- Forest landscape analysis/design and land management planning processes.
- 4- Forest Roads.

Supervised by:
Assist Lecturer Sherwan
Yassin Hammad

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- 5- Exam (1).
- 6- Scientific Trip to natural forest of Pirmam mountain.
- 7- Road construction.
- 8- What is forest landscape and symbols.
- 9- Harvesting operations.
- 10- Scientific Trip to Kasnazan artificial forests.
- 11- Exam (2).

18. Examinations:

Type of examination *Questions:*

1-Definitions

2- Multiple choices

3- Correct the underlined parts if they are falls:

4- Write the reason to the following statements.

5-Write your notes about our first trip.

19. 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

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 دەبیت لەلایەن ھاوہلێکی ئەکادیمیەرە سەیر بکریت و ناوەرۆکی بابەتەکانی کۆرسەکە پەسەند بکات و جەند ووشەیک بنوسیت لەسەر شیاوی ناوەرۆکی کۆرسەکە و واژووی لەسەر بکات. ھاوہل ئەو کەسەیکە زانیاری ھەبیت لەسەر کۆرسەکە و دەبیت پلە زانستی لە ماموستا کەمتر نەبیت.