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**Department of Forestry**

**College of Agriculture**

**University of Salahaddin**

**Subject: Meteorology**

**Course Book – Second year students**

**Lecturer's name: Payman Hussein A.**

**Academic Year: 2021/2022**

**Course Book**

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| **1. Course name** | **Meteorology, practical**  |
| **2. Lecturer in charge** | **Payman Hussein A.** |
| **3. Department/ College** | **Forestry**  |
| **4. Contact** |  |
| **5. Time (in hours) per week**  | **Practical: 3 hours/week**  |
| **6. Office hours** |  |
| **7. Course code** |  |
| **8. Teacher's academic profile**  | Master of Science (Master) in Agricultural and Environmental Science, Newcastle University School of Environment (England) UK, in 2013-2014. In 2015 I was starting teaching in Environment department, Science College. In 2016 I was starting teaching in Forestry department \College of Agriculture/ Salahaddin University. |
| **9. Keywords** | **Meteorology, Environment, Climate, Weather** |
| **10. Course overview:** Based on this course students can learn what are the most important terms about the Meteorology. Students at the first lecture will learn what is meteorology and the main elements in weather station and how these elements can be measured by using different instrumens which are presented in those station some of them are classic and others are automatic. We have managed two or three field trips in terms of weather station.  |
| 11**. Course objective:**The meteorology is a most important science because it is directly linked to human life, plants and animals. The goal of this subject itself as linked to ecology and climate closely linked with agricultural science, because of that we need to measure climate elements during planting any plants and agriculture operations, How we can use the instruments to measure all the factors and contains practical part of the decision climate elements on these types of factors. |
| **12. Student's obligation**Students are required to conduct two exams in Fall semester in Meteorology practical part.  |
| **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**They also require bringing a PPT in this semester.All students should be presented in the lab. 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 (5) marks for Actives’ for practical part with general total (15 marks). The final exam will be out of (20).  |
| **15. Course Reading List and References‌:*** [**https://atmos.washington.edu/academic/atmosdyn.html**](https://atmos.washington.edu/academic/atmosdyn.html)
* [**https://www.papermasters.com/meteorology.html**](https://www.papermasters.com/meteorology.html)
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| **16-Course program By Payman Hussein A.** |
| 1st Week | **Some Important Terms in Meteorology** Like (**Environment – Climate elements and Weather).** |  |
| 2nd Week | **A-Climate Elements****b- Meteorology and Station of Meteorology****c- Stivenson Box** |  |
| 3rd Week | **Temperature** **Calculating of temperature.** **(Daily – monthly – yearly), Units of temperature** |  |
| 4th Week | **Precipitation (Types, Instruments for measuring rainfall)**  |  |
| 5th Week | **1st  exam**  |
| 6th Week  | **Visit kasnazan classic Meteorological station** |  |
| 7th Week |  **Humidity (Types, instruments)**  |
| 8th Week | **Atmospheric pressure.****Factors affecting the amount of atmospheric pressure.****Instruments for measuring atmospheric pressure.****Units of atmospheric pressure**  |  |
| 9th Week | **Visit Ankawa Automatically Weather station** |
| 10th Week |  **Wind**  **1 -Instruments of wind speed measuringا** **2 - Instruments of wind direction measuring**  |
| 11th Week |  **Solar Radiation ;** **(Instruments for measuring solar radiation)**  |  |
| 12th week | **Visit Grdarash**  |  |
| 13th week | **Pollution** |  |
| 14th week | **Second exam** |  |

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| **17. Examinations:****Type and sample of Exam** **Q1- Complete Following sentences** **-** Environment:- the physical, ------------, ----------- factors affecting on organisms.Environment: - Is the physical, chemical and biological factors affecting on organisms.**Q2- What is different between:**

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| **Weather** |  **Climate** |
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**Q3- Draw the following instruments** **1**- Rainfall gauge 2- Evaporation pan |
| **18. 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. |
| **19. Peer review** 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).*  |