

Module(Course Syllabus)Catalogue 2023-2024

College/ Institute	Khabat Technical Institute	
Department	Medicinal Plants Production - Evening	
Module Name	Soil Science	
Module Code	SOS 20	
Semester	2	
Credits	6	
Module type	Prerequisite <input type="checkbox"/>	Core <input checked="" type="checkbox"/> Assist. <input type="checkbox"/>
Weekly hours	4	
Weekly hours (Theory)	(1)hr Class	(30)hr Workload
Weekly hours (Practical)	(3)hr Class	(90)hr Workload
Lecturer (Theory)	Nazar Mohammed Samein	
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Lecturer (Practical)	Hazar	
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Course Book

Course Description	Students benefit from so to identify soil sciences.
Course objectives	<p>The plant and its parts, and the knowledge of the types of plant tissues and types of cellular divisions and roots and their movements and stems and types.</p> <p>and parts of the paper and types, flowers, fruits and seeds and identify .</p> <p>the effects of the environment on the structure and the appearance of the plant.</p> <p>Students become able to distinguish the parts of the plant and the types .</p> <p>of each part and its variations.</p> <p>Identify the chemical reactions that occur in plants to determine their effects on plants.</p> <p>At the end of the course, students will become understand the mechanism .of physiological interactions that affect plant life.</p>
Student's obligation	<p>Attendance of students in classes is necessary, as non-attendance has negative effect on student's perception.</p> <p>Writing reports particularly in practical lessons as well as to scientific excursion.</p>
Required Learning Materials	<p>Use white board. Data show .Power point. Internet.Use parts of plant</p> <p>The lectures are presented in classes to students in different ways including data show, PowerPoint, manual papers and white boards.</p> <p>However, they are presented to student via lecturers' portal in university's website.</p>
Assessment scheme	<p>16% Mid Term (Theory and practical)</p> <p>4% Quiz</p> <p>40% Assignment (report, paper, homework, seminar..)</p> <p>20% final practical</p> <p>20% final theory</p>
Specific learning outcome:	<p>There are different methods to evaluate students in lessons; involving:</p> <p>1- Quiz the students or debate the subject to be more students included in the discussions.</p>

	<p>2- Writing reports for most subjects especially student projects to be ready for seminars.</p> <p>Testing students is required seasonally as well as final exam of year.</p>
Course References:	<ol style="list-style-type: none"> 1. محمود الباز واخرون(2008)النباتالعام 2. محمد عبد الوهاب و وفاء عامر(2005)اساسياتعلمالنباتالعام مكتبة الدار العربية ,الناغى للكتاب 3. العريض والعسكر وعياش(2001)اساسياتعلمالنباتالعام 4. اساسياتعلمالنبات(2000),عبد العزيز السعيد ويسرى السيد صالح واسامة سيد.البيومي 5. Schmidt, Diane., Davis, Elisabeth B. (Eds.) (2006) Guide to reference and information sources in plant biology. 6. Taiz&Zeiger (2006) Plant Physiology. 4th Edition. Sinauer. 7. Taiz L &Zeiger E (2002) Plant Physiology. 3 rd Edition . 8. Curtis, Lersten and Nowak(2002) PLANTS AND THEIR STRUCTURE.

Course topics (Theory)	Week	Learning Outcome
1- Soil Sciences	1	
2 - -Define soil in agronomic terms	2	
3 - -Describe the origin and development of soil	3	
4 - Distinguish the physical properties of soil	4	
5 - Study the forms of soil water	5	
6 - Describe the importance of organic matter to soil	6	
7 - Demonstrate knowledge of fertilizer grades	7	
8- Define action exchange capacity	8	
9 - Soil Fertility and Plant Nutrition	9	
10 - Basic Soil-Plant Relationships	10	
11 - Nutrient Transport in Plants	11	
12 - Nitrogen	12	

<u>Practical Part</u>	Week	Learning Outcome
1 - Soil color	1	
2-Soil texture -	2	
3 - -Soil Structure	3	
4 - -Density and Pore Space	4	
5 - Soil Water	5	
6 - Soil water potential	6	
7 - Soil Acidity	7	
8 - Determination of pH	8	
9 - Buffers	9	
10 - Liming Soils	10	
11 - Soil organic matter	11	
12- Soil Profile.	12	
<p>Questions Example Design Q1/ Define the following phrases? Q2/ Write the function of Plant Cell Wall and its component? Q3/ What's the structure of Soil ?</p> <p>Extra notes:</p>		
External Evaluator		

