

## **COURSES OF LEVEL 1 SEMESTER 1:**

<b>Desert Land Reclamation and Cultivation Program</b>				
<b>Compulsory (Obligatory) Courses:</b>				
<b>Department &amp; Code</b>	<b>Course Name</b>	<b>Unit</b>	<b>Theoretical</b>	<b>Practical</b>
<b>PP . 4 . 1</b>	<b>Zoology</b>	۲	۲	۲
<b>EE . ۶ . ۲</b>	<b>Agricultural Economics and Extension</b>	۲	۲	۲
<b>AB . ۸ ۱ .</b>	<b>Botany</b>	۲	۲	۲
<b>SO . ۵ . ۱</b>	<b>Soil and Water Science</b>	۲	۲	۲
<b>AC . ۹ . ۸</b>	<b>Organic and Analytical Chemistry</b>	۲	۲	۲
<b>CJ ۱۲ . ۱</b>	<b>English ۱</b>	۲	۲	۰
<b>Selective (Optional) Courses (one course to be selected):</b>				
<b>AB . ۸ . ۶</b>	<b>Plant Physiology</b>	۲	۲	۲
<b>CJ ۱۲ . ۳</b>	<b>Computer Science</b>	۲	۲	۲
<b><u>Departmental Codes:</u></b>				
Soil and Water Science (SO) - Agricultural Biochemistry (AC) - Animal Production (AP) - Plant Protection (PP) – Agronomy (AG) – Horticulture (HO) - Agricultural Engineering (AE) - Agricultural Economics and Extension (EE) - Food Science (FS) - Dairy Science (DS) - Plant Pathology (PD) - Genetics and Genetic Engineering (GE) – Agricultural Botany (AB) - Common/Joint (CJ).				



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الكلية معتمده بالقرار (١٥٤) بتاريخ ٢٣/٥/٢٠١٦



Total of ٢٠ Credit hours to be studied by the student (١٢ Compulsory + ٢ Selective = ٢٠)

### **COURSES OF LEVEL 1 SEMESTER 2:**

<b>Desert Land Reclamation and Cultivation Program</b>					
<b>Compulsory (Obligatory) Courses:</b>					
<b>Department &amp; Code</b>	<b>Course Name</b>	<b>Unit</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Pre-requisite</b>
AC ٠٩٠٩	Biochemistry	٢	٢	٢	None
GE ١٠٠١	Genetics	٢	٢	٢	”
AP ٠٣٠١	Animal Physiology	٢	٢	٢	”
PP ٠٤٠٢	Entomology	٢	٢	٢	”
CJ ١٢٠٦	Human Rights and Agricultural Legislation	-	٢	-	”
<b>Selective (Optional) Courses (one course to be selected):</b>					
SO ٠٥١٣	Soil Physics and Sand Dune Fixation	٣	٢	٢	SO ٠٥٠١
GE ١٠١١	Genetically Modified Plants	٣	٢	٢	GE ١٠٠١
AC ٠٩١٠	Chelate & heavy metals Chemistry.	٣	٢	٢	SO ٠٥٠١
<b>Departmental Codes:</b>					
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Total of ١٥ Credit hours to be studied by the student: (١٢ Compulsory + ٣ Selective = ١٥)



### **COURSES OF LEVEL 2 SEMESTER 1:**

<b>Desert Land Reclamation and Cultivation Program</b>					
<b>Compulsory (Obligatory) Courses:</b>					
<b>Department &amp; Code</b>	<b>Course Name</b>	<b>Unit</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Pre-requisite</b>
SO ٠٥٠٧	<b>Fertility and Plant Nutrition in Desert Soils</b>	٢	٢	٢	SO ٠٥٠١
HO ٠٢١١	<b>Desert Aromatic &amp; Medicinal Plants</b>	٢	٢	٢	AB ٠٨١٠
AB ٠٨٠٣	<b>Agricultural Microbiology</b>	٢	٢	٢	AB ٠٨١٠
AG ٠١٠٧	<b>Field Crops</b>	٢	٢	٢	AB ٠٨١٠
AE ١١٠١	<b>Agricultural Engineering</b>	٢	٢	٢	None
CJ ١٢٠٢	<b>English ٢</b>	٢	٢	٠	CJ ١٢٠١
<b>Selective (Optional) Courses (one course to be selected):</b>					
PP ٠٤٠٨	<b>Desert Economic Entomology</b>	٢	٢	٢	PP ٠٤٠٢
SO ٠٥٠٩	<b>Tillage &amp; Conservation of Desert Soils</b>	٢	٢	٢	None
AB ٠٨١١	<b>Soil Microbiology</b>	٢	٢	٢	None
AG ٠١٠٩	<b>Crop Adaptation for Desert Lands</b>	٢	٢	٢	None
<b>Departmental Codes:</b>					
Soil and Water Science (SO) - Agricultural Biochemistry (AC) - Animal Production (AP) - Plant Protection (PP) – Agronomy (AG) – Horticulture (HO) - Agricultural Engineering (AE) - Agricultural Economics and Extension (EE) - Food Science (FS) - Dairy Science (DS) - Plant Pathology (PD) - Genetics and Genetic Engineering (GE) – Agricultural Botany (AB) - Common/Joint (CJ).					



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الكلية معتمده بالقرار (١٥٤) بتاريخ ٢٠١٦/٥/٢٣

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Total of ٢٠ Credit hours to be studied by the student: (١٧ Compulsory + ٣ Selective = ٢٠)

### COURSES OF LEVEL 2 SEMESTER 2:

Desert Land Reclamation and Cultivation Program					
Compulsory (Obligatory) Courses:					
Department & Code	Course Name	Unit	Theoretical	Practical	Pre-requisite
AE ١١٠٧	Agricultural Structure Planning for Desert Zones	٣	٢	٢	AE ١١٠١
DS ١٣٠١	Dairy Science	٣	٢	٢	AC ٠٩٠٨
PD ١٤٠١	Plant Pathology	٣	٢	٢	AB ٠٨١٠
AP ٠٣١٣	Camel, Sheep and Goat Production	٣	٢	٢	AP ٠٣٠١
CJ ١٢٠٧	Effective Communication Skills	-	٢	٠	EE ٠٦٠٢
Selective (Optional) Courses (one course to be selected):					
DS ١٣٠٣	Dairy By-products and Fermented Milk	٣	٢	٢	DS ١٣٠١
SO ٠٥١٢	Soil Chemistry	٣	٢	٢	None
EE ٠٦٢٩	Environmental Extension	٣	٢	٢	EE ٠٦٠٢
Departmental Codes:					
Soil and Water Science (SO) - Agricultural Biochemistry (AC) - Animal Production (AP) - Plant Protection (PP) – Agronomy (AG) – Horticulture (HO) - Agricultural Engineering (AE) - Agricultural Economics and Extension (EE) -					



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الكلية معتمده بالقرار (١٥٤) بتاريخ ٢٣/٥/٢٠١٦



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Food Science (FS) - Dairy Science (DS) - Plant Pathology (PD) - Genetics and Genetic Engineering (GE) – Agricultural Botany (AB) - Common/Joint (CJ).

Total of ١٥ Credit hours to be studied by the student: (١٢ compulsory + ٣ Selective = ١٥)

### COURSES OF LEVEL 3 SEMESTER 1:

Desert Land Reclamation and Cultivation Program					
Compulsory (Obligatory) Courses:					
Department & Code	Course Name	Unit	Theoretical	Practical	Pre-requisite
SO ٠٥١١	Desert Water Resources	٢	٢	٢	SO ٠٥٠١
AP ٠٣٠٦	Animal & Poultry Nutrition	٢	٢	٢	AC ٠٩٠٩
AE ١١٠٨	Irrigation Systems in Desert Lands	٢	٢	٢	None
GE ١٠١٠	Desert Plant Breeding	٢	٢	٢	GE ١٠٠١
HO ٠٢١٠	Desert Fruit Production	٢	٢	٢	None
Selective (Optional) Courses (one course to be selected):					
AP ٠٣٠٩	Animal & Poultry Genetic Improvement	٢	٢	٢	GE ١٠٠١
AE ١١١١	Field Irrigation Management	٢	٢	٢	AE ١١٠١
FS ٠٧١٣	Food Preservation and Packaging	٢	٢	٢	AC ٠٩٠٩
DS ١٣٠٤	Dairy Chemistry & Chemical Analysis	٢	٢	٢	AC ٠٩٠٩
Departmental Codes:					
Soil and Water Science (SO) - Agricultural Biochemistry (AC) - Animal Production (AP) - Plant Protection (PP) – Agronomy (AG) – Horticulture (HO) -					



Agricultural Engineering (AE) - Agricultural Economics and Extension (EE) - Food Science (FS) - Dairy Science (DS) - Plant Pathology (PD) - Genetics and Genetic Engineering (GE) – Agricultural Botany (AB) - Common/Joint (CJ).

Total of ١٨ Credit hours to be studied by the student: (١٥ compulsory + ٣ Selective = ١٨)

### **COURSES OF LEVEL 3 SEMESTER 2:**

<b>Desert Land Reclamation and Cultivation Program</b>					
<b>Compulsory (Obligatory) Courses:</b>					
<b>Department &amp; Code</b>	<b>Course Name</b>	<b>Unit</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Pre-requisite</b>
AG ٠١٠٨	<b>Pasture &amp; Fodder Production in Desert lands</b>	٣	٢	٢	AG ٠١٠٧
AP ٠٣١٠	<b>Poultry Production under Desert Environment</b>	٣	٢	٢	AP ٠٣٠١
AE ١١٠٩	<b>Power &amp; Farm Machinery for Desert Lands</b>	٣	٢	٢	AE ١١٠١
PD ١٤٠٢	<b>Desert Plant Diseases</b>	٣	٢	٢	PD ١٤٠١
AP ٠٣١١	<b>Desert Fish Farming</b>	٣	٢	٢	None
<b>Selective (Optional) Courses (one course to be selected):</b>					
PP ٠٤٠٩	<b>Desert Integrated Pest Control</b>	٣	٢	٢	PP ٠٤٠٢
FS ٠٧٢٧	<b>Technology of Cereal, Oil and Sugar.</b>	٣	٢	٢	AC ٠٩٠٩
EE ٠٦٠٥	<b>Technology Transfer &amp; Diffusion</b>	٣	٢	٢	CJ ١٢٠٧
PD ١٤٠٤	<b>Desert Integrated Plant Diseases Control</b>	٣	٢	٢	PD ١٤٠١



**Departmental Codes:**

Soil and Water Science (SO) - Agricultural Biochemistry (AC) - Animal Production (AP) - Plant Protection (PP) – Agronomy (AG) – Horticulture (HO) - Agricultural Engineering (AE) - Agricultural Economics and Extension (EE) - Food Science (FS) - Dairy Science (DS) - Plant Pathology (PD) - Genetics and Genetic Engineering (GE) – Agricultural Botany (AB) - Common/Joint (CJ).

Total of ١٨ Credit hours to be studied by student: (١٥ compulsory + ٣ Selective = ١٨)

**COURSES OF LEVEL 4 SEMESTER 1:**

Desert Land Reclamation and Cultivation Program					
Compulsory (Obligatory) Courses:					
Department & Code	Course Name	Unit	Theoretical	Practical	Pre-requisite
SO ٠٥٠٨	Booster Amendments For Desert Lands	٣	٢	٢	SO ٠٥٠٧
HO ٠٢٠٩	Desert Vegetable Production	٣	٢	٢	AB ٠٨١٠
CJ ١٢١٠	Meat and Dairy Products	٣	٢	٢	AP ٠٣٠١
CJ ١٢٠٨	Graduation Project	٣	٢	٢	None
Selective (Optional) Courses (one course to be selected):					
AE ١١١٢	Renewable Energy in Desert Zones	٣	٢	٢	AE ١١٠١
HO ٠٢١٢	Desert Timbre Plantation	٣	٢	٢	SO ٠٥١١
AG ٠١١٠	Desert Crop Breeding	٣	٢	٢	AG ٠١٠٧
FS ٠٧٢٨	Food Quality Control	٣	٢	٢	FS ٠٧١٣
Departmental Codes:					
Soil and Water Science (SO) - Agricultural Biochemistry (AC) - Animal					



Production (AP) - Plant Protection (PP) – Agronomy (AG) – Horticulture (HO) - Agricultural Engineering (AE) - Agricultural Economics and Extension (EE) - Food Science (FS) - Dairy Science (DS) - Plant Pathology (PD) - Genetics and Genetic Engineering (GE) – Agricultural Botany (AB) - Common/Joint (CJ).

Total of ١٥ Credit hours to be studied by student: (١٢ compulsory + ٣ Selective = ١٥)

### **COURSES OF LEVEL 4 SEMESTER 2:**

<b>Desert Land Reclamation and Cultivation Program</b>					
<b>Compulsory (Obligatory) Courses:</b>					
<b>Department &amp; Code</b>	<b>Course Name</b>	<b>Unit</b>	<b>Theoretical</b>	<b>Practical</b>	<b>Pre-requisite</b>
AG ٠١٠٤	<b>Biostatistics &amp; Experimental Design</b>	٣	٢	٢	
EE ٠٦٢٣	<b>Feasibility Studies &amp; Project Evaluation</b>	٢	٢	٢	EE ٠٦٠٢
SO ٠٥١٠	<b>Desert Land Reclamation &amp; Rehabilitation.</b>	٣	٢	٢	None
CJ ١٢٠٨	<b>Graduation Project</b>	٣	٢	٢	CJ ١٢٠٢
CJ ١٢٠٩	<b>Agricultural Entrepreneurship</b>	٣	٢	٢	EE ٠٦٠٢
<b>Selective (Optional) Courses (one course to be selected):</b>					
AP ٠٣٠٨	<b>Animal Husbandry in Desert Zones</b>	٣	٢	٢	None
PD ١٤٠٣	<b>Desert Soil-borne Diseases</b>	٣	٢	٢	PD ١٤٠١
AE ١١١٠	<b>Post-harvest Processing</b>	٣	٢	٢	None
AB ٠٨١٣	<b>Organic Farming</b>	٣	٢	٢	None





**Departmental Codes:**

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Total of ١٨ Credit hours to be studied by the student: (١٥ compulsory + ٣ Selective=١٨)

**APPENDIX 2.**

Distribution of Total Credit Hours (١٣٩ Crdt Hrs ) for the ٤-year BSc. Desert Reclamation & Cultivation Program.

Level (L) & Semester (S)	Compulsory	Selective	Total
L <sup>١</sup> S <sup>١</sup>	١٧	٣	٢٠
L <sup>١</sup> S <sup>٢</sup>	١٢	٣	١٥
L <sup>١</sup> Total	٢٩	٦	٣٥
L <sup>٢</sup> S <sup>١</sup>	١٧	٣	٢٠
L <sup>٢</sup> S <sup>٢</sup>	١٢	٣	١٥
L <sup>٢</sup> Total	٢٩	٦	٣٥
L <sup>٣</sup> S <sup>١</sup>	١٥	٣	١٨
L <sup>٣</sup> S <sup>٢</sup>	١٥	٣	١٨
L <sup>٣</sup> Total	٣٠	٦	٣٦
L <sup>٤</sup> S <sup>١</sup>	١٢	٣	١٥
L <sup>٤</sup> S <sup>٢</sup>	١٥	٣	١٨
L <sup>٤</sup> Total	٢٧	٦	٣٣
٤-Year Grand Total credit hours	١١٥	٢٤	١٣٩



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الكلية معتمده بالقرار (١٥٤) بتاريخ ٢٠١٦/٥/٢٣



Benha University

## اللائحة الداخلية

### لبرنامج

### إستصلاح و استزراع الأراضي الصحراوية

### DESERT LAND RECLAMATION AND CULTIVATION PROGRAM

برنامج ساعات معتمدة باللغة الإنجليزية مشترك بين الأقسام العلمية

لطلاب مرحلة البكالوريوس

(برنامج كلية)

يونيو ٢٠١٧