

Republic of Iraq

The Ministry Of Higher Education

& Scientific Research

بسم الله الرحمن الرحيم



University: Diyala

College: Agriculture

Department: Soil and water resources department

Stage: 4

Lecturer name: Dr. Ahmed

B. Khalaf

.Qualification: PhD

Place of work: Coll. Of Agriculture

Flow up of implementation celli pass play

Course Instructor	Assis.Prof.Dr.Ahmed Bahjat Khalaf				
E-mail	ahmedkhalaf@uodiyala.edu.iq				
Title	Remote Sensing				
Course Coordinator	Second Course				
Course Objective	Teaching students the most important foundations, applications, and modern programs in remote sensing techniques to serve them in the agricultural field. The student's ability to use different software to process, interpret, and analyze satellite images. The student will learn how to distinguish and compare between different ground targets. Learn about geographic information systems (GIS) and their uses.				
Course Description	The course includes an introduction to the history of remote sensing and terrestrial targets, electromagnetic energy and parts of the electromagnetic spectrum, types and characteristics of aerial, space and satellite images, analysis, processing, interpretation and classification of satellite images, distinction between soil, plants and water through spectral reflectivity. Geographic information systems, their .components and their use				
Textbook	<ol style="list-style-type: none">1. Al-Mashhadani, Ahmed Saleh and Ahmed Madloul Al-Kubaisi. (2014). Remote Sensing Science. Ministry of Higher Education and Scientific Research. University of Baghdad. College of Agriculture. University House for Printing, Publishing and Translation.2. Khalaf, Ahmed Bahjat. (2021). Processing, analyzing and interpreting satellite images using the ERDAS IMAGINE program. Central Printing Press. University of Diyala.				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	(20%)	(15%)	(5%)		(60%)
General Notes	Type here general notes regarding the course				

بسم الله الرحمن الرحيم

Republic of Iraq
The Ministry Of Higher
Education
& Scientific Research



University: Diyala
College: Agriculture
Department: Soil and water
resources department
Stage: 3
Lecturer name: Dr. Ahmed
B.Khalaf
Qualification: : PhD.
Place of work: Coll. Of
Agriculture

Flow up of implementation celli pass play

week	Date	Topics Covered	Practical Part
1		Introduction: History of remote sensing and targets	Applications on aerial imagery interpretation and map preparation
2		Electromagnetic energy and electromagnetic spectrum parts	Satellite images and spectral bands
3		Electromagnetic energy reactions	How to Import and Export Satellite Images Using Erdas Program
4		Spectral reflectivity and the factors influencing it	Integrate spectral beams and spatial optimization
5		Aerial photography and its stages of development	Displacement of the regular and irregular satellite image of the areas under study
6		the characteristics of the aerial images	Applications on methods of improving and processing spatial images, radiometric and spectral improvement
7		Rules for classification of aerial images and their applications	Interpretation of space data: visual interpretation
8		recipes and platforms in the world	Interpretation of satellite data: mechanical interpretation
9		Sensors: their characteristics	Image classification: unsupervised classification
10		Satellite images: I and her qualities	supervised classification
11		Improved space images	Use of natural indexes, indexes of vegetation, water, minerals, soil
12		Methods of classification of space images	Applications on satellite images
13		Applications in remote sensing	Applications on satellite images
14		GIS and its applications	Applications on satellite images