بسم الله الرحمن الرحيم

Republic of Iraq

The Ministry Of Higher Education

& Scientific Research

University: Diyala
College: Engineering
Department: Computer
Stage: Fourth
Lecturer name: Dr. Ali J. Abboud
Qualification: Ph.D.
Place of work: Computer Dept.

Course Instructor	Dr. Ali J. Abboud				
E-mail	Ali.j.abboud@gmail.com				
Title	Digital Image Processing				
Course Coordinator	Dr. Ali J. Abboud				
Course Objective	To teach students the concepts of digital image processing				
Course Description	Students will learn the basics of computerized imaging including enhancement, restoration, Fourier and Wavelets Transforms, compression, morphological operation, segmentation.				
Textbook	**Digital Image Processing by Gonzales** **Computer Vision and Image Processing.**				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	As(٣٠%)	As(٠%)	As(١٠٪)	-	As(٦٠٪)
General Notes					

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Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
١	٢٣/٠٩/٢٠١٤	Overview of Computer Imaging		
٢	٣٠/٠٩/٢٠١٤	Computer imaging Systems		
٣	٠٧/١٠/٢٠١٤	Sampling and Quantization		
٤	١٤/١٠/٢٠١٤	Representation of Images		
٥	٢١/١٠/٢٠١٤	Spatial and Frequency Resolutions		
٦	٢٨/١٠/٢٠١٤	Description of Images/video in software and hardware		
٧	٠٤/١١/٢٠١٤	Image analysis introduction		
٨	١١/١١/٢٠١٤	Pre-processing		
٩	١٨/١١/٢٠١٤	Image Algebra		
١٠	٢٥/١١/٢٠١٤	Spatial Filters		
١١	٠٢/١٢/٢٠١٤	Image Quantization		
١٢	٠٩/١٢/٢٠١٤	Fourier Transform		
١٣	١٦/١٢/٢٠١٤	Short-Time Fourier Transform		
١٤	٢٣/١٢/٢٠١٤	Cosine Transform		
١٥	٣٠/١٢/٢٠١٤	Wavelet Transform		
١٦	٠٦/٠١/٢٠١٥	End Term Exam		
Half – year break				
١٧	١٧/٠٢/٢٠١٥	Image Smoothing		
١٨	٢٤/٠٢/٢٠١٥	Image Sharping		
١٩	٠٣/٠٣/٢٠١٥	Image Compression		
٢٠	١٠/٠٣/٢٠١٥	Image Redundancy		
٢١	١٧/٠٣/٢٠١٥	Lossless Compression		
٢٢	٢٤/٠٣/٢٠١٥	Huffman Coding and run length coding		
٢٣	٣١/٠٣/٢٠١٥	Lossy Compression		
٢٤	٠٧/٠٤/٢٠١٥	Quantization and Predictive Coding		
٢٥	١٤/٠٤/٢٠١٥	Transform Coding		
٢٦	٢١/٠٤/٢٠١٥	Image Enhancement		
٢٧	٢٨/٠٤/٢٠١٥	Basic Gray Level Transform		
٢٨	٠٥/٠٥/٢٠١٥	Histogram Processing		
٢٩	١٢/٠٥/٢٠١٥	Smoothing Spatial Filters		
٣٠	١٩/٠٥/٢٠١٥	Sharping Spatial Filters		
٣١	٢٦/٠٥/٢٠١٥	Combining Different Filters		

٣٢	٠٢/٠٦/٢٠١٥	End Term Exam		

INSTRUCTOR Signature: **Dean Signature:**