LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
01	12-06-13	Introduction:	I			
		Aspects of digital				
		Image processing				
		Uses of digital Image				
02	13-06-13	processing, funda-				
		mental steps in				
		Digital Image proc-				
03	17-06-13	essing, components				
		of an Image proc-				
		essing system, Digital				
04	19-06-13	Image fundamentals				
		Elements of visual				
		perception, Light				
		and Electromagnetic				
05	20-06-13	Spectrum, Imaging				
		Sensing and Acqui-				
		sition, Image Sam-				
		pling and quantiza-				
06	20-06-13	tion. Some basic re-				
		lationships between				

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
07	22-06-11	pixels. An Introduction to the mathematical tools used in Digital Image processing.				
08	24-06-11	Image Transforms: Need for Image transforms, Spatial				
09	25-06-11	frequencies in Image processing, Introduction to fourier				
10	26-06-11	transform. Discrete fourier transform.				
11	29-06-11	fast fourier transform and its algorithm. Properties of fourier transform				
12	01-07-11	Sampling Theorem. Discrete cosine transform, Discrete				

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No	Teaching Methodology	Remarks	Corrective Action Upon Review
13	04-07-13	Sine transforms, Walsh transforms, Hadamard transforms,				
14	05-07-13					
15	06-07-13	Haar transforms,				
16	09-07-13	Slant transforms,				
17	10-07-13	SVD and KL Transforms or Hotelling Transforms.				
18	11-07-13					
19	13-07-13	Intensity Transformations and Spatial filtering: Background	II			
20	16-07-13	Some basic Intensity transformation functions				
21	17-07-13	Histogram processing fundamentals of Spatial filtering, Smoothing Spatial filters,				
22	18-07-13	Sharpening Spatial filters, Combining Spatial Enhancement				

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
		Methods, windowing				
23	20-01-13	Techniques & Applicability Transformations and Spatial filtering				
		filtering in the frequency domain.	III			
24	22-01-13	Preliminary concepts Sampling and the fourier Transform of Sampled functions.				
25	23-01-13	The Descrete fourier Transform (DFT) of one variable. Extension functions of two Variables, Some properties of the 2-D Descrete fourier Transform. The				
26	24-01-13	Basics of filtering in the frequency domain Image Smo				

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
27	25-04-13	Using frequency do-				
		main filters, Selective				
		filters, Selective filte-				
28	27-04-13	ring, Implementation				
29	30-04-13	Image Restoration and	IV			
		Reconstruction: model				
		of the Image degra-				
		dation / Restoration				
30	31-04-13	process. Noise models,				
		Restoration in the pre-				
		sence of Noise only-				
		Spatial filtering, Peri-				
31	01-05-13	odic Noise reduction				
		by frequency domain				
		filtering, Linear,				
		position - Invariant				
32	02-05-13	degradations, Estima-				
		tion the degradation				
		function, Inverse				
		filtering, Minimum				

LESSON PLAN

Period	Date (Tentative)	Topic	Unit No.	Teaching Methodology	Remarks	Corrective Action Upon Review
		Mean Square Error (Wiener) filtering.				
		Constrained least Squares filtering,				
33	03-08-12	Geometric mean filter, Image re-construction from projections				
34	13-08-12	Color Image processing: color fundamentals,				
35	14-08-12	Color models, Pseudo				
36	15-08-12	Color Image processing				
37	17-08-12	Basics of full color Image processing,				
38	20-08-12	Color transformations Smoothing and Sharpening. Image				
39	21-08-12	Segmentation based on color, Noise in				
40	22-08-12	Color Images, color Noise in color Images, color Image compression				write Complete Lesson plan Anna 5/7/13