64572-793 DIGITAL IMAGE PROCESSING

Suggested Schedule

Dates	Section	Section content	Assignment	Due date	Weight
27 Jul - 4 Aug	6.1	Color fundamentals	[1] Colour Processing	14-Aug	10%
	6.2	Color models			
5 Aug - 7 Aug	3.1	Background	[2] Point transformations & Spatial Filtering	28-Aug	20%
	3.2	Intensity transformations			
	3.3	Histogram equalization			
10 Aug - 14 Aug	3.4	Spatial filtering fundamentals			
	3.5	Smoothing masks			
	3.6	Sharpening masks			
17 Aug - 21 Aug		4.1 - 4.6 will be replaced by NOTES ON FOURIER ANALYSIS (This is revision for those who took AM 364, and more work for those who know little Fourier Analysis.)			
24 Aug - 28 Aug	4.7	Filtering in the frequency domain	[3] Frequency Filtering	11-Sep	20%
	4.8	Image smoothing (Ideal, Butterworth, Gaussian)			
31 Aug - 4 Sep	4.9	Image sharpening			
	4.10	Selective filtering			
7 Sep - 11 Sep	5.1	Model of image degradation	[4] Restoration (Wiener filtering)	02-Oct	10%
	5.2	Noise models			
	5.3	Restoration of images with noise - Spatial filte			
	5.8	The Wiener filter			
14 Sep - 18 Sep		**HOLIDAYS**			
21 Sep - 25 Sep	9.1	Introduction to morphological filtering	[5] Morphological Processing	16-Oct	20%
	9.2	Erosion and dilation			
	9.3	Opening and closing			
28 Sep - 2 Oct	9.4	The hit-or-miss transform			
	9.5	Morphological algorithms			
	9.6	Gray scale morphological filtering			
5 Oct - 9 Oct	10.2	Point, Line and Edge detection (especially Canny)	[6] Segmentation & Fourier descriptors	03-Nov	20%
	10.3	Thresholding			
12 Oct - 23 Oct	11.2.3	Fourier descriptors			
	6.7	Color segmentation			
					100%