

WEEKLY COURSE OUTLINE (as of 2/13/2017)

Monday	Topics	Wednesday	Topics	Deadlines
1/9	Class overview, requirements, assignments, basic image manipulations.	1/11	Image Processing Overview (slides posted)	
1/16	MLK Holiday - no class - USF closed	1/18	Basic image manipulation (gray scale, color, smoothing, implementation details)	
1/23	Basic image manipulation (general smoothing, Gaussian smoothing, various methods for reducing blurring effect)	1/25	Basic image manipulations: basic thresholding methods, image histogram for thresholding, adaptive thresholding algorithm.	
1/30	Brightness interpolation. Histogram processing	2/1	Histogram equalization and modification,	
2/6	Histogram modification. Color images and color coordinates.	2/8	Color images and color coordinates.	Hw 1 due (2/6/2017)
2/13	Median filter, General Filters	2/15	Quiz 1 review and discussions, Edge Detection	
2/20	Quiz 1	2/22	Libraries: OpenCV	Hw 2 due (2/22/2017)
2/27	Morphological filters	3/1	Hough Transform	
3/6	Hough Transform	3/8	Feature and boundary extraction	Hw 3 due (3/8/2017)
3/13	Spring Break	3/15	Spring Break	
3/20	Example Application: Medical Image Analysis.	3/22	Boundary and region representations	Hw 4 due (3/22/2017)
3/27	Boundary and region representations	3/29	Advanced Topics	
4/3	Quiz 2 review and discussion	4/5	Quiz 2	
4/10	Software: 3D-Slicer	4/12	Laboratory Session I	
4/17	Object Recognition paradigms, Concluding Discussion	4/19	Laboratory Session II	
4/24	Laboratory Session III	4/26	Laboratory Session IV	Lab reports due 5/3/2017

March 25 - last day to drop with a "W"

Consolidated Lab Report is due in lieu of Final Exam, due date 5/3/2017 1pm (preliminary)