# CAP6411 - Computer Vision Systems Spring 2006

## Monday Wednesday 4.30pm-5.45pm

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**Notice:** The University Golden Rules will be observed in this class. Copying or Plagiarism is violation of the UCF Golden Rules.

### Coarse Objectives:

This course is advanced level. It will cover advanced machine vision topics and requires introductory knowledge on computer vision.

- Object representations
  - o Points, primitive regions, contours, skeletal
- Image segmentation
  - o Mean-shift,
  - Graph-Cut: Min-Cut, Normalized Cut
  - Active contours
- Object detection
  - Support vector machines
  - Adaptive boosting
- Object tracking
  - o Point trackers,
  - o Region trackers,
  - Active contour trackers,

**Prerequisites:** A good background in calculus, geometry, linear algebra, programming in MATLAB or C, as well as introductory knowledge on Computer Vision.

### Grading:

The final grades will be given in the form of a+, a-. The conversion table is given below.

100	95	a+
94	90	a-
89	80	b+
79	70	b-
69		С

### **Grading Policy**

Class Assignment:	%20
Programming Assignment:	%25
Programming Project:	%35
Pop Up Quiz: %20 (Undisclose	ed days, at the end of class)
Total:	%100