

Spring 2009

CEG 726-01: Pattern Recognition

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CEG-726 Pattern Recognition

Spring 2009

CRN: 39057	Lecture: 2:15 – 3:30, T, R,	Location: 150 RC
Instructor: A. Goshtasby	Office Location: 495 Joshi	Phone: 937-775-5170
Email: agoshtas@wright.edu	Office Hours: 1:00 – 2:00 PM, M, T, W, R or by appoint.	

No. Units: 4

Prerequisites: A course in probability theory and knowledge of programming

Textbook:

Pattern Recognition, 4th Edition
S. Theodoridis and K. Koutroumbas
Academic Press, 2009

Contents:

1. Introduction and Preliminaries
2. Clustering Basics
3. Hierarchical Clustering Algorithms
4. Sequential Clustering Algorithms
5. Bayesian Decision Theory
6. Feature Selection
7. Feature Generation
8. Template Matching
9. Pattern Recognition Applications

Purpose of Course:

This course will discuss fundamentals of Pattern Recognition, including supervised learning and clustering.

Learning Goals:

Students will learn theory as well as practice in this course. Some of the materials learnt in class will be practiced through computer implementation.

Projects:

3/20/2009

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There will be three projects and four quizzes. Each project will require implementation of a pattern recognition/classification method.

Grading Policy:

The projects will worth 60 points and the quizzes will worth 40 point. Grades will be assigned as follows. A: [91..100], B: [81..90], C: [71..80], D: [61..70], F: [0..60].

Calendar:

Project 1	Handed out: 4/15	Due: 4/29
Project 2	Handed out: 5/8	Due: 5/22
Project 3	Handed out: 5/27	Due: 6/5

Quizzes will be on 4/16, 4/30, 5/14, and 5/28.