Course: Pattern Recognition, Winter 2009.

ENCE 4800, (4 QH)
ENCE 3830, (3 QH)

Schedule:
Lecture: MW 5:00pm-6:50pm

Final Exam: March 12, 2010, 4:00pm-5:50pm

Instructor: Dr. Mohammad H. Mahoor
Office: CMK 306, Phone: (303) 871-3745
E-Mail: mmahoor@du.edu

Office Hours: MW 1:00pm-2:00pm, and by appointment

Prerequisites The course assumes previous programming experience and some familiarity with linear algebra and statistics (normally obtained through undergraduate coursework).

Required Textbook:

Recommend Textbook:
- Statistical Pattern Recognition, 2nd Edition

Course Objective: This class provides an introduction to classical pattern recognition. Pattern recognition is the assignment of a physical object or event to one of several prescribed categories. Applications include automated object recognition in image and videos, face identification, and optical character recognition. Major topics include:

- Bayesian decision theory.
- Parametric estimation and supervised learning.
- Linear discriminant functions.
- Nonparametric methods.
- Feature extraction for representation and classification.
- Support Vector Machines.
**Grading:**

Grading will be based on two exams, homework assignments, and a project assignment (only graduate students who register for ENCE 4800 are required to do a final project).

<table>
<thead>
<tr>
<th>Undergraduate Students</th>
<th>Graduate Students</th>
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<tbody>
<tr>
<td>30% Homework</td>
<td>25% Homework</td>
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<tr>
<td>35% Mid-term Exam</td>
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<td>35% Final Exam</td>
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