### Syllabus for the Datamining Class

Gener Avilés R2017-02-22

#### Contents

1	Introduction	5
2	Principal Components Analysis	7
	Canonical Correlation Analysis (CCA) 3.1 What is CCA?	<b>9</b>

4 CONTENTS

#### Chapter 1

#### Introduction

#### Chapter 2

#### Principal Components Analysis

#### Chapter 3

# Canonical Correlation Analysis (CCA)

#### 3.1 What is CCA?

- Seeks the weighted linear composit for each variate (sets of D.V. or I.V.) to maximize the overlap in their distributions.
- Labeling of DV and IV is arbitrary. The procedure looks for relationships and not causation.
- Goal is to **maximize the correlation** (not the variance extracted as in most other techniques).
- Lacks specificity in interpreting results, that may limit its usefulness in many situations.

CCA helps us answer the question: What is the best way to understand how the variable sin two sets are related?, mathematically speaking: what linear combinations of the X variables (u) and the Y vairables (t) will maximize their correlation?

This chapter is under construction.



Figure 3.1:

## Bibliography