

ISM 6423: DATA ANALY/DECIS SUPP Spring 2016

Instructor	Praveen Pathak– praveen@ufl.edu Department of ISOM, Warrington College of Business Administration
Class Time	TTh: period 3-4
Class Location	STZ 103
Office	STZ 339
Office Hours	Tuesday 12:45 – 1:45 pm or by appointment
TA	
TA Office Hours	

COURSE DESCRIPTION

Data is always an imperfect shadow of the real world. Data analytics is a methodology that allows a direct dialogue between real world and managerial insights; it allows us to think in rigorous way about vast amounts of searchable data we observe. Extensive interviews with executives from successful firms find that companies today require decision makers who understand the value of analytics, can identify opportunities and know how best to apply data analytics to enhance business performance.

ISM 6423 will focus on five broad issues: (1) regression analysis, (2) collaborative filtering, (3) fixed effects models, (4) survival analysis, and (5) social network analysis. Students will know the basics of data analytics and how they can be applied to interact effectively with CTOs, expert data miners, and business analysts.

TEXTBOOK AND READINGS

Required Textbook Data Mining Techniques, Third Edition by Michael Berry and Gordon Linoff, Wiley, 2011, ISBN: 978-0-470-65093-6.

Prerequisite: ISM 6405

Class Website Announcements, assignments, course schedule, additional readings, and other information are available on Canvas at <https://ufl.instructure.com/>.

You will also need the data analysis and statistical software, STATA.

WORKLOAD

Welcome to the Warrington College of Business Administration, where everyone admitted – including you – is a top student. In order to challenge you and truly add to your education, the Warrington College of Business Administration is committed to rigorous, cutting-edge classes. This means that you can expect a substantial workload.

Our goal is to help you go beyond being a top student. Our vision is that you will become a productive employee, an effective project leader, a future division leader, perhaps a future CEO. Some of you will

work in traditional companies; some will work for nonprofits; some will become professional business consultants; some will grow a family business or start your own successful business. All these career paths have something in common: to succeed in a constantly changing business world, you must constantly seek new information from the environment, make sense of it with your colleagues and business partners, and act on it to develop and implement your business strategy. You must be able to think critically.

In order to think critically, you need a knowledge base. A significant part of ISM6423 involves reading, learning, and practicing. Learning these base concepts will give you a foundation for thinking critically and solving real business problems. The goal of ISM6423 is to deliver learning that will serve you in the future, both at UF and in your career.

EVALUATION OF YOUR PERFORMANCE

The final letter grade in the class will be based on a curve. You may expect the following grade distribution: approximately 40-45% will receive an A- or above, about 5% will receive a C+ or below, and 45-60% will receive a B+, B, or B-. However, the grade distribution and the average could change if the overall class performance exceeds the instructor's expectations.

The breakdown of your final grade is as follows:

Deliverable Detail	Points
Assignments (3 assignments)	15
Exams (2 exams)	60
Group Project (Proposal + Presentation + Final Paper)	25
Total Points	100

1. Assignments

IT skills for individual productivity will be a necessity for any business professionals in their careers. To help students master basic data analytics skills, there are 3 homework assignments. Those assignments will simulate real-life tasks and ask students to solve them by using the designated tools. Specific details for these assignments will be posted on Canvas.

2. Exams

There are **two** in-class exams (see Course Schedule for details). An exam review session will be provided before each exam. Exams will combine multiple-choice and essay format questions. Unless under significantly extreme circumstances, make-up exams will NOT be arranged. ***The extreme emergency must be approved by the instructor BEFORE the exam date.***

3. Group Project

The class will have a group project. A group of up to **FIVE** students can work together on the project. The detailed description for this project will be given later in the module.

4. Changes

This course will be very dynamic, so EXPECT changes. Changes in schedules will be posted on course website. It is the student's responsibility to keep up with the changes that are posted on course website.

POLICIES

Fairness, Deliverable Deadlines, and Time Management

Deliverables are assigned because work outside of class supplements and reinforces learning. Deliverables are also due at designated times and in specific formats, all of which will be described in assignment criteria. To be fair to everyone in class and to get assignments graded and returned in a timely fashion, we have to have deadlines. Please turn things in on time.

- Deliverables handed in *after* but *within 24 hours* of the due date/time will receive half credit.
- Deliverables will not be accepted more than 24 hours after the due date.

Classroom policy

Please also **turn off** your mobile phones and other electronic devices to avoid disturbing. Please arrive on time and leave after class ends. Remember that your classroom citizenship will be considered in your in-class participation grades.

Using Email for Official Correspondence to Students

Email is recognized as an official mode of university correspondence; therefore, you are responsible for reading your email for university and course-related information and announcements. You are responsible for keeping the university informed about changes to your email address. You should check your email regularly and frequently – I recommend daily– to stay current with university-related communications, some of which may be time-critical.

Documented Disability Statement

Students requesting accommodation for disabilities must first register with the Dean of Students Office (<http://www.dso.ufl.edu/drc/>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams.

Accommodations are not retroactive, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations.

ISOM Department Policy on Honor Code Violations

For any academic class activity, students must follow the University of Florida Student Honor Code (<http://www.dso.ufl.edu/students.php>). Any violation of the code will automatically results in a failing grade (E) for this course and you will be reported to the Office of the Dean of Students. The Dean of Students might impose further sanctions, such as suspension or expulsion.

ISM 6423 Class Schedule – Praveen Pathak
Where to find the readings: Ch.#: Textbook chapters
 This schedule is subject to change.

Wk	Date	Class	Readings	Deliverables
1	Oct 24	Course Introduction		
2	Oct 26	Data Visualization and Regression Analysis	Ch. 4, Ch. 6	
	Oct 31			
	Nov 2	Hypothesis testing (Assignment 1)	Ch. 4, Ch 6	Group formation due in hard copy at the beginning of class
3	Nov 7	Limited Dependent Variable Models and Exam #1 Review	Ch. 6	
	Nov 9			
4	Nov 14	Exam #1		
	Nov 16	Fixed Effects Models (Assignment 2)	Ch. 10	Assignment 1 due in hard copy at the beginning of class
5	Nov 21	Link Analysis (Social network analysis)	Ch. 16	One-page proposal due at the beginning of class
	Nov 23			
6	Nov 28	Wisdom of Crowds and collaborative filtering Exam #2 Review	Ch. 9	Assignment 2 due in hard copy at the beginning of class
	Nov 30			
	Nov 30	Project Presentation		
7	Dec 5	Project Presentation		Final paper due in hard copy at the beginning of class
	Dec 7	Exam #2		