

## MATH 344: Regression Analysis

### *Fall 2018 Course Syllabus*

**NJIT Academic Integrity Code:** All Students should be aware that the Department of Mathematical Sciences takes the University Code on Academic Integrity at NJIT very seriously and enforces it strictly. This means that there must not be any forms of plagiarism, i.e., copying of homework, class projects, or lab assignments, or any form of cheating in quizzes and exams. Under the University Code on Academic Integrity, students are obligated to report any such activities to the Instructor.

### COURSE INFORMATION

**Course Description:** This course introduces the methods for fitting and interpreting regression models. Topics include ordinary least squares, inference for the Normal regression model, model diagnostics and test of fit, transformation of data, qualitative predictors, effects of measurement error, and model selection.

**Number of Credits:** 3

**Prerequisites:** Math 341 with a grade of C or better and Math 333 with grade of C or better

**Course-Section and Instructors**

Course-Section	Instructor
Math 344-001	Professor Y. Fang

**Office Hours for All Math Instructors:** [Fall 2018 Office Hours and Emails](#)

**Required Textbook:**

Title	<i>Applied Linear Regression Models</i>
Author	Kutner, Nachtsheim and Neter
Edition	4th
Publisher	McGraw-Hill
ISBN #	0-072386916

**University-wide Withdrawal Date:** The last day to withdraw with a **W** is **Monday, November 12, 2018**. It will be strictly enforced.

### POLICIES

**DMS Course Policies:** All DMS students must familiarize themselves with, and adhere to, the [Department of Mathematical Sciences Course Policies](#), in addition to official [university-wide policies](#). DMS takes these policies very seriously and enforces them strictly.

**Grading Policy:** The final grade in this course will be determined as follows:

Assignments	30%
Midterm Exam	30%
Final Exam	40%

Your final letter grade will be based on the following tentative curve.

A	90 - 100	C	50 - 59
B+	80 - 89	D	40 - 49
B	70 - 79	F	0 - 39
C+	60 - 69		

**Attendance Policy:** Attendance at all classes will be recorded and is **mandatory**. Please make sure you read and fully understand the [Math Department's Attendance Policy](#). This policy will be strictly enforced.

**Exams:** There will be one midterm exams (in-class part plus take-home part) during the semester and one comprehensive final exam (in-class part plus take-home part). Exams are held on the following days:

Midterm Exam I	October 22, 2018
Final Exam Period	December 15 - 21, 2018

The final exam will test your knowledge of all the course material taught in the entire course. Make sure you read and fully understand the [Math Department's Examination Policy](#). This policy will be strictly enforced.

**Makeup Exam Policy:** There will be **NO MAKE-UP QUIZZES OR EXAMS** during the semester. In the event an exam is not taken under rare circumstances where the student has a legitimate reason for missing the exam, the student should contact the Dean of Students office and present written verifiable proof of the reason for missing the exam, e.g., a doctor's note, police report, court notice, etc. clearly stating the date AND time of the mitigating problem. The student must also notify the Math Department Office/Instructor that the exam will be missed.

**Cellular Phones:** All cellular phones and other electronic devices must be switched off during all class times.

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## **ADDITIONAL RESOURCES**

**Math Tutoring Center:** Located in the Central King Building, Lower Level, Rm. G11 (See: [Fall 2018 Hours](#))

**Further Assistance:** For further questions, students should contact their instructor. All instructors have regular office hours during the week. These office hours are listed on the Math Department's webpage for [Instructor Office Hours and Emails](#).

All students must familiarize themselves with and adhere to the Department of Mathematical Sciences Course Policies, in addition to official university-wide policies. The Department of Mathematical Sciences takes these policies very seriously and enforces them strictly.

**Accommodation of Disabilities:** Disability Support Services (DSS) offers long term and temporary accommodations for undergraduate, graduate and visiting students at NJIT.

If you are in need of accommodations due to a disability please contact Chantonette Lyles, Associate Director of Disability Support Services at [973-596-5417](tel:973-596-5417) or via email at [lyles@njit.edu](mailto:lyles@njit.edu). The office is located in Fenster Hall

Room 260. A Letter of Accommodation Eligibility from the Disability Support Services office authorizing your accommodations will be required.

For further information regarding self identification, the submission of medical documentation and additional support services provided please visit the Disability Support Services (DSS) website at:

- <http://www5.njit.edu/studentsuccess/disability-support-services/>

**Important Dates** (See: [Fall 2018 Academic Calendar](#), Registrar)

Date	Day	Event
September 4, 2018	T	First Day of Classes
September 10, 2018	M	Last Day to Add/Drop Classes
November 12, 2018	M	Last Day to Withdraw
November 20, 2018	T	Thursday Classes Meet
November 21, 2018	W	Friday Classes Meet
November 22 - 25, 2018	R - Su	Thanksgiving Recess
December 12, 2018	W	Last Day of Classes
December 13 & 14, 2018	R & F	Reading Days
December 15 - 21, 2018	Sa - F	Final Exam Period

## Course Outline

Week	Monday	Topic	Thursday	Topic	Notes
1	Sep 3	Labor Day	Sep 6	Introduction to linear reg	
2	Sep 10	Introduction to R	Sep 13	Introduction to R (cont'd)	
3	Sep 17	Chapter 1 (I)	Sep 20	Chapter 1 (II)	
4	Sep 24	Chapter 2 (I)	Sep 27	Chapter 2 (II)	
5	Oct 1	Chapter 2 (II)	Oct 4	Chapter 2 (IV)	
6	Oct 8	Chapter 3 (I)	Oct 11	Chapter 3 (II)	
7	Oct 15	Chapter 3 (III)	Oct 18	<b>MIDTERM EXAM REVIEW</b>	
8	Oct 22	<b>IN-CLASS MIDTERM EXAM</b>	Oct 25	Chapter 5 (I)	<b>MIDTERM EXAM</b>
9	Oct 29	Chapter 5 (II)	Nov 1	Chapter 5 (III)	
10	Nov 5	Chapter 6 (I)	Nov 8	Chapter 6 (II)	
11	Nov 12	Chapter 7 (I)	Nov 15	Chapter 7 (II)	
12	Nov 19	Chapter 8 (I)	Nov 20*	Chapter 8 (II)	<b>THANKSGIVING</b>
13	Nov 26	Chapter 9 (I)	Nov 29	Chapter 9 (II)	
14	Dec 3	Chapter 10 (I)	Dec 6	Chapter 10 (II)	
15	Dec 10	<b>FINAL EXAM REVIEW</b>	Dec 13	Reading day	
16	Dec 17		Dec 20		<b>EXAMS DEC 15 - 21</b>

