

SAMPLE SYLLABUS

Regression/Forecasting Models

STAT-UB 9003

NYU London: Spring 2022

Instruction Mode: In-person

If you are enrolled in this course 100% remotely and are not a Study Away student at NYU London, please make sure that you've completed the online academic orientation via Brightspace so you are aware of site specific support structure, policies and procedures. Please contact nyul.academics@nyu.edu if you have trouble accessing the Brightspace site.

Instructor Information

- Lecturer's name: Dr Faiza Tabassum
- Office Hours: will be announced later

Course Details

- Class meeting day/time:
L01: Tuesdays: 10:30 – 11:45 AM
L02: Tuesdays: 2:30 – 3:45 PM
- All times are [Time Zone] (Daylight Saving Time ends 31 October).
- Location: Classrooms are provided in Albert.
- Remote Participants: Zoom links are provided in Brightspace.
- Seat Assignments: If you are attending in person, you will be assigned a seat on the first day and are expected to use that seat for the entire semester due to NYU COVID-19 safety protocol.

Prerequisites

Statistics for Business Control or an introductory statistics class that covered simple descriptive statistics, some distribution theory including the normal distribution, and basic inference up to testing a hypothesis about a mean.

Course Description

The course introduces the concepts of linear regression and correlation to the students. Both regression and correlation are used in Business Studies, economics and social sciences. The basic purpose of these techniques is to understand the relationship between various variables. For the practical experience, Minitab package will be used to analyze the data.

Course Objectives

Upon Completion of this Course, students will be able to:

- Differentiate between simple linear regression and multiple linear regression;
- Understand and apply the concept of correlation;
- Perform regression analysis using Minitab on various data sets from the real world;
- Interpret the results critically obtained from the regression analysis and to make a sense of them.

Assessment Components

If you are an NYU London study-away student, you are expected to attend in person. If you are accessing the class remotely, you must attend synchronously.

Assignments / Activities	Description of Assignment	% of Final Grade	Due
Class participation	Participation in discussion during the lectures	10%	The whole length of the course
Assignment 1	Details will be provided later, covering pre-Midterm lectures.	15%	29/03/22
Midterm	A 70 minutes long exam	20%	22/03/22
Assignment 2	Will be based on the lectures after the Midterm	15%	9/05/22
Final Exam		40%	TBC

Class participation

Class participation counts for 10% of the grade. For learning Statistics, it is vital to participate in class discussion and by asking questions to me. Alternatively, I may call you by name for you to ask me questions. I expect you to speak up especially, if you are not understanding well something. Nevertheless, your active class participation will also be crucial for me in picking up the points which may need some further explanation from me and it may also help me in improving my teaching techniques.

Assignments

You will be given a chance to analyze real world data by applying the regression and correlation techniques covered in this course. The details pertaining to the format of Assignments will be provided later.

Penalties of late submission:

- Work submitted within 5 weekdays after the submission time without an agreed extension receives a penalty of 10 points on the 100 point scale;
- Work submitted more than 5 weekdays after the submission date without an agreed extension can, at faculty discretion, be given a failing grade or a zero.

Informal Assessment

Informal or Formative Assessment supporting students' learning and comprises of: homework, lab sessions and in lecture practice questions. Such kind of assessment is not assessed or graded rather for you a chance to practice various statistical concepts covered in this course.

Assessment Expectations

Letter Grade	Grade Percentage	Description
A-range	A = 93-100% A- = 90-92%	The student has demonstrated an outstanding understanding of the course by fully achieving its goals
B-range	B+ = 87-89% B = 84-86% B- = 80-83%	The student has demonstrated an excellent understanding of the course by achieving most of its goals
C-range	C+ = 77-79% C = 74-76% C- = 70-73%	The student has demonstrated very good understanding of the course by achieving some of its goals
D-range	D+ = 67-69% D = 65-66%	The student has demonstrated a good understanding of the topic, and has achieved some of the goals of the course
F	F = below 65%	The student has not demonstrated enough understanding of the topic and/or has not achieved enough goals of the course

Course Materials

The course material including the lecture notes, homework and Assignment will be available to download from the course website. It is to be noted that, the lectures will often contain more information than what is on the slides. The textbook should be considered as supplementary reading. You are required to keep checking the course website for announcements, updates and the course material from [Brightspace](#). The textbook should be considered as a supplementary reading for the lecture notes. **Students are expected to come to class prepared having read text and assigned readings prior to class.**

Required Text(s) & Materials

- Textbook: McClave, Benson, and Sincich, Statistics for Business and Economics, 13th Edition, Prentice Hall, 2016, ISBN 9781292227085. Pearson Education
- Minitab (Statistical software to be accessed via the NYU London computers)

Resources

- **Access your course materials:** [Brightspace](#)
- **NYU London and Living in London Info:** [LDN](#)
- **Databases, journal articles, and more:** [Bobst Library](#)
- **Assistance with strengthening your writing:** [NYU Writing Center](#) (nyu.mywconline.com)
- **Obtain 24/7 technology assistance:** [IT Help Desk](#)

Course Schedule

Links to join class Zoom meetings will all be available in Brightspace.

Topics & Assignments

The indicative content and schedule of the course is given below:

Week/Date	Topic	Reading	Assignment Due
Session 1 25/01/2022	Introduction to Simple Linear Regression (SLR)	Ch 11: 11.1 & 11.2	TBC for the 'Informal Homework'
Session 2 01/02/2022	SLR: Fitting the model: Least square approach	Ch 11: 11.2	
Session 3 08/02/2022	SLR: assumptions & inference	Ch 11: 11.3 & 11.4	

Week/Date	Topic	Reading	Assignment Due
Session 4 15/02/2022	SLR: practical session using Minitab		
Session 5 22/02/2022	Coefficient of correlation and determination	Ch 11: 11.5	
Session 6 01/03/2022	Using model for estimation and model fit	Ch 11: 11.6	
Session 7 08/03/2022	Multiple regression; basic concepts	Ch 12: 12.1, 12.2	
Session 8 Midterm 22/03/2022	No Lecture		Midterm
Session 9 29/03/2022	Multiple regression inference	Ch 12: 12.2, 12.3	Assignment 1
Session 10 05/04/2022	Model fit and prediction	12.4	
Session 11 12/04/2022	Multiple Regression model building	12.5	
Session 12 19/04/2022	Multiple regression with qualitative variables	12.7	
Session 13 26/04/2022	Multiple regression with both quantitative and qualitative variables	12.8	
Session 14 03/05/2022	Revision	Ch 11 & 12	
Reading Day 10/05/2022	No lecture		Assignment 2 on 9/05/2022

Week/Date	Topic	Reading	Assignment Due
Final Assessment May11-May16	Finals Week		TBC

Course Policies

Classroom Etiquette

- I strongly encourage you to ask me questions during the lecture, you can raise your hand or call me with my name 'Faiza'.
- Cell phones should be turned off or in silent mode during class time.
- Please do not eat during class and minimize any other distracting noises (e.g. rustling of papers and leaving the classroom before the break, unless absolutely necessary)
- If deemed necessary by the study away site (ie COVID related need), synchronous class sessions may be recorded and archived for other students to view. This will be announced at the beginning of class time.
- Students should be respectful and courteous at all times to all participants in class.
- Exceptions will be made for students with academic accommodations from the Moses Center

Final exams

Final exams must be taken at their designated times. Should there be a conflict between your final exams, please bring this to the attention of the London Academics team (nyul.academics@nyu.edu). Final exams may not be taken early, and students should not plan to leave the site before the end of the finals period.

Academic Honesty, Plagiarism and Late Work

Students at Global Academic Centers must follow the [University and school policies](#). You can find details on these topics and more on this section of our NYUL website (<https://www.nyu.edu/london/academics/academic-policies.html>) and on the Policies and Procedures section of the NYU website for students studying away at global sites (<https://www.nyu.edu/academics/studying-abroad/upperclassmen-semester-academic-year-study-away/academic-resources/policies-and-procedures.html>).

Attendance

Key information on NYU London's absence policy, how to report absences, and what kinds of absences can be excused can be found on our [website](#) (<http://www.nyu.edu/london/academics/attendance-policy.html>)

To ensure the integrity of the academic experience, class attendance is required and expected promptly when class begins. These rules apply to class excursions and activities as well.

Members of any religious group may, without penalty, excuse themselves from classes when required in compliance with their religious obligations, but must follow NYU London's absence reporting procedure. Please note that an absence is only excused for the holiday but not for any days of travel that may come before and/or after the holiday. See also [University Calendar Policy on Religious Holidays](#)

Moses Accommodations Statement

Academic accommodations are available for students with documented and registered disabilities. Please contact the Moses Center for Student Accessibility (+1 212-998-4980 or mosescsd@nyu.edu) for further information. Students who are requesting academic accommodations are advised to reach out to the Moses Center as early as possible in the semester for assistance.

Inclusivity Policies and Priorities

NYU's Office of Global Programs and NYU's global sites are committed to equity, diversity, and inclusion. In order to nurture a more inclusive global university, NYU affirms the value of sharing differing perspectives and encourages open dialogue through a variety of pedagogical approaches. Our goal is to make all students feel included and welcome in all aspects of academic life, including our syllabi, classrooms, and educational activities/spaces.

Pronouns and Name Pronunciation (Albert and Zoom)

You can edit your pronoun and name pronunciation information on your Albert account, making it visible for faculty and staff. Information on how to do this can be found on the [Pronouns and Name Pronunciation web page](#), and for more information on how to make these changes in Zoom, please see the [Personalizing Zoom Display Names website](#).

Bias Response

The New York University Bias Response Line provides a mechanism through which members of our community can share or report experiences and concerns of bias, discrimination, or harassing behavior that may occur within our community. For more information, including how to report an incident, visit the [Bias Response Line website](#).

Your Lecturer

My name is Faiza Tabassum, I prefer to be called Faiza. I have obtained PhD in Social Statistics from University of Southampton, UK. I have worked at various universities including University College London (UCL) and Southampton University, UK. I am passionate about teaching Statistics in such a way to generate interests in students. In the past, I have presented TV programs on Statistics and written down chapters for Statistics books. I also have involved in

various research activities. My areas of research are: lifecourse epidemiology, ageing, society, socioeconomic factors and health status. My research has been published in renowned international journals and one of my articles has got a huge publicity around the world. BBC Radio has conducted a number of interviews with me regarding this article and a number of news articles were published based on my research. If you are interested in reading it, the link is [here](#). In my free time, I like reading, travelling, gardening and cooking. I am a friendly person and I am here to help you. I welcome you to be part of this course and looking forward of meeting you soon.