

Week One

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Introduction to Logistic Regression

During our first week of the course, we will begin a basic introduction to logistic regression analysis. We will start the week by identifying characteristics specific to logistic regression models and procedures associated with fitting the logistic regression model. We will progress to understanding differences between least squares and maximum likelihood estimation, and the reasoning for using maximum likelihood estimation for logistic regression modeling. Finally, we will end with some examples of logistic regression modeling utilizing the STATA software.

Please be sure to visit the [Download STATA](#) page and check out some of the tutorial websites listed there to begin familiarizing yourself with STATA.

*Please be advised that you will be **unable** to install STATA without the software license code until after we email them on or around Thursday, May 14. They will be sent to the email address you use for logging into Coursera.*

You'll have the opportunity to begin the week one homework on or around Thursday, May 14th.

Lectures

Please click on the links below to access the video lectures for this first week

- [Introduction and Course Highlights](#)
- [Introduction to Logistic Regression - Part 1](#)
- [Introduction to Logistic Regression - Part 2](#)
- [Fitting the Logistic Model](#)
- [Maximum Likelihood Estimation](#)
- [Logistic Regression Examples](#)
- [Using STATA and Week One Homework](#)

Lecture Material

Please click on the link below to download the slides of the first week

Introduction to Logistic Regression Analysis

Conversations

Please join in the conversations around regression analysis in our [community forums](#) area. You can ask and answer questions and discover insights and help for yourself and others as we come together to encourage each other in our exploration.

Key Terms

Below are definitions of some important terms covered this week:

- **Logistic Regression:** A type of modeling that is used to predictor a binary response from one or more predictor variables.
- **Logit** *[Math Processing Error]*: Has many desirable properties of the linear regression model. It may be continuous and is linear in parameters with a potential range between *[Math Processing Error]* and *[Math Processing Error]*.
- **Maximum Likelihood:** This is the method that is used to estimate regression parameters for logistic regression analysis. It is the method of finding the estimates for model parameters that maximize the likelihood of the known distribution.

Homework

Navigate to the [Week One Homework](#) page to view and download the homework for this week.

Please visit the [Download STATA](#) page to learn more about the statistical software that will be demonstrated in our course homework starting in week two.

You can visit the [homework page](#) to also learn more.

Quiz

After you've gone through the materials for this week please be sure to visit the [quizzes area](#) to complete this week's quiz.



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