

Course Outline

625.661: Statistical Models and Regression

This outline provides an overview of the course and assignments by week. Please remember to check the calendar for specific due dates.

Each course module runs for a period of seven (7) days, i.e., one week. Due dates for readings and other assignments are referred to by the day of the module week in which they are due. For example, if the module starts on Wednesday (Day 1) and a reading assignment is to be completed by Day 3, then the reading assignment should be completed by Friday. Please note that two modules are covered in each week marked in blue.

Module	Dates	Module Title	Assignments
Module 1, Module 2	Wed 09/02/20– Tue 09/08/20	Introduction of Regression Modeling, Simple Regression	<ul style="list-style-type: none">• Module 1 Discussion• Module 2 Discussion• Module 1-2 Assignment
Module 3	Wed 09/09/20– Tue 09/15/20	Multiple Regression	<ul style="list-style-type: none">• Module 3 Discussion
Module 4	Wed 09/16/20– Tue 09/22/20	Multiple Regression	<ul style="list-style-type: none">• Module 4 Discussion• Module 3-4 Assignment
	Wed 09/23/20– Tue 09/29/20	Test 1	
Module 5	Wed 09/30/20– Tue 10/06/20	Polynomial Regression, Indicator Variables	<ul style="list-style-type: none">• Module 5 Discussion
Module 6	Wed 10/07/20– Tue 10/13/20	Indicator Variables	<ul style="list-style-type: none">• Module 6 Discussion• Module 5-6 Assignment
	Wed 10/14/20– Tue 10/20/20	Test 2	
Module 7, Module 8	Wed 10/21/20– Tue 10/27/20	Model Adequacy Checking, Transformation and Weighting, Model Diagnostics	<ul style="list-style-type: none">• Module 7 Discussion• Module 8 Discussion• Module 7-8 Assignment• Course project begins
Module 9	Wed 10/28/20– Tue 11/03/20	Model Building with Variable Selection	<ul style="list-style-type: none">• Module 9 Discussion• Module 9 Assignment
Module 10	Wed 11/04/20– Tue 11/10/20	Model Building with Variable Selection and Model Validation	<ul style="list-style-type: none">• Module 10 Discussion• Module 10 Assignment
	Wed 11/11/20– Tue 11/17/20	Test 3	
Module 11, Module 12	Wed 11/18/20– Sun 11/22/20	Generalized Linear Models	<ul style="list-style-type: none">• Module 11 Discussion• Module 12 Discussion• Module 11-12 Assignment



Module	Dates	Module Title	Assignments
November 23 – 29, Thanksgiving Holidays			
Module 11, Module 12	Mon 11/30/20– Tue 12/01/20	Generalized Linear Models	<ul style="list-style-type: none"> • Module 11 Discussion • Module 12 Discussion • Module 11-12 Assignment
Module 13, Module 14	Wed 12/02/20– Tue 12/08/20	Nonlinear Regression, Nonparametric Regression	<ul style="list-style-type: none"> • Module 13 Discussion • Module 14 Discussion • Module 13-14 Assignment
	Wed 12/09/20– Tue 12/13/20	Course Project (Due 12/13/2020)	

