

Welcome

ST552 Lecture 1

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Hello, my name is Charlotte

- ▶ I'm from New Zealand, but I've also lived in Ireland and California
- ▶ I have a husband and two cats
- ▶ I really enjoy playing indoor soccer at the Corvallis Sports Park.
- ▶ I like making, building and fixing things.

Today

- ▶ General Overview
- ▶ Syllabus
- ▶ Getting to know you and what you already know

ST552 is Linear Models

a.k.a Regression models (of the linear kind)

One type of model that describes the relationship between a continuous response variable and one or more explanatory variables.

Three pronged attack:

- ▶ Theory of linear regression models (first half)
- ▶ Linear models in practice (second half)
- ▶ R for linear models, data exploration and simulation (everywhere)

Textbook

Linear Models with R, Second Edition by J. Faraway (Chapman & Hall/CRC Texts in Statistical Science)

This is available to read online through the OSU library.

There is a hard copy in the Statistics Department library.

I will post specific sections to read as part of homework, but you should be following along independently.

Syllabus

My style

I tend to use slides. I will post them at stat552.cwick.co.nz by noon the day of lecture.

I'll leave blanks for derivations, question answers, or sketches.

Sometimes we might do actual analyses in class, and a laptop will be handy, I'll let you know when to bring it.

I expect you to ask questions!

What do you know about simple linear regression?

Simple linear regression: one continuous response variable, a single explanatory variable.