

MXB344 Week 1 Slides

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Welcome

MXB344 Lecture 1

Modelling Non-Normal Data with Generalised Linear Models

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Personal Introductions |About me. About you.

About this unit

- ▶ This is The capstone unit for statistics -it is the first time it has run in this form.
- ▶ It contains W.I.L - Work Integrated Learning
- ▶ You will engage with an industry partner whilst undertaking a realistic industry project: Credit Risk Modelling



Figure 1:

Introduction to GLMs

Hello old friend | A linear model

```
##
```

```
## Call:
```

```
## lm(formula = mpg ~ cyl + wt + am, data = mtcars)
```

```
##
```

```
## Residuals:
```

```
##      Min       1Q   Median       3Q      Max
```

```
## -4.1735 -1.5340 -0.5386  1.5864  6.0812
```

```
##
```

```
## Coefficients:
```

```
##              Estimate Std. Error t value Pr(>|t|)
```

```
## (Intercept)  39.4179      2.6415  14.923 7.42e-15 ***
```

```
## cyl         -1.5102      0.4223  -3.576 0.00129 **
```

```
## wt          -3.1251      0.9109  -3.431 0.00189 **
```

```
## am           0.1765      1.3045   0.135 0.89334
```

```
## ---
```

```
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1
```