# Assignment 4 - Logistics Regression on Titanic Data

*The purpose of this assignment is to use R/Python to practice logistic regression*

This assignment provides you with an opportunity to demonstrate the achievement of the following course learning outcomes:

* Understand and apply Python programming language
* Understand and apply logistic regression
* Understand what feature categories are suitable for logic regression analysis

## Key Information

* **Type:** *Individual*
* **Weight:** 6.25%
* **Delivery:** Course website upload
* **Due Date:** End of lab session

## Expectations

You are expected to complete this assignment individually.

Respect for academic integrity is crucial to your success. Make sure you understand what constitutes acts of academic dishonesty in the page: [What is Academic Dishonesty?](http://mcmaster.ca/academicintegrity/students/whatis.html)

## Instructions

*Using R/Python, you are to complete the following questions.* ***Please submit your answers (CODE USED AND OUTPUT) as Either iPYNB or PDF* *files to the course website submission folder. If it is a pdf, please make sure that all outputs are exported to the pdf- not just the code.***

*Upload Titanic dataset*

*Define Survived column as TARGET variable*

*Select features that can be predictive of the survival stuatus*

*Drop features that you think are not predictive and explain why they are being dropped*

*Transform selected categorical features with Dummy values*

*Import logistic regression function, train and test function from sklearn library*

*Apply logistic regression on the split train/test dataset*

*Compute your model’s accuracy using accuracy\_score*

## Rubric

To achieve full marks on this assignment, you must have answered all questions above correctly with code submitted that has no errors.