## STATISTICS 3: MULTIPLE CORRELATION AND REGRESSION

## **DESCRIPTION:**

This module covers statistics commonly used to describe the relationship between three or more numerically-scaled variables (correlation and regression).

**Tutorial:** 35 slides

**Problem Sets:** 4 problem sets; 28 questions

**Average Time:** New Module – No data

**Problem Sets** 

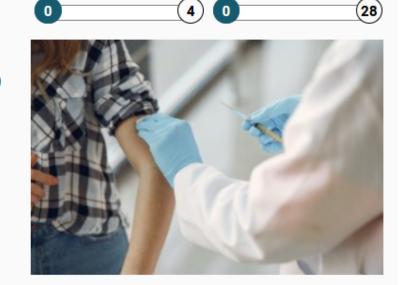
## Sample question from problem set:

Course: Faculty Access (All Modules in Alphabetical Order)

Module: Statistics 3: Multiple Correlation and Regression / Problem Set ID: 11138

Paul wanted to find out if Covid vaccination protected against likelihood of death, so he decided to try to design a multiple regression model to help with his analysis. He chose to collect data for all 50 states plus the District of Columbia (Washington DC) consisting of the death rate per thousand people, the vacination rate (%), the percentage of people in urban areas (%), and the median age (in years). He decided his first step would be to create a correlation table which is shown below:

	Deaths Per 100K	% Fully Vaccinated	% Urban	Median Age
Deaths Per 100K	1			
% Fully Vaccinated	-0.48	1		
% Urban	0.03	0.38	1	
Median Age	0.05	0.35	-0.31	1



**Total Questions** 

## Based on Paul's description, what is the dependent variable?:

- 1. Deaths per 100K people
- 2. % Fully vaccinated rate
- 3. % Urban
- 4. Median age
- 5. None of the above

