P4 State Equations

```
function [dx] = P4stateEqn(t, x)

%P4stateEqn contains state eqn for MAE5803 HW1 P4
%
dx = zeros(2,1);
dx(1) = -x(2);
dx(2) = x(1) - (1-x(1)^2)*x(2);
```

??

Here is the the Van der Pol Equation, according to one definition: "It is an equation describing self-sustaining oscillations in which energy is fed into small oscillations and removed from large oscillations." - http://mathworld.wolfram.com/vanderPolEquation.html

$$\dot{x}_1 = x_2$$

$$\dot{x}_2 = -x_1 + (1 - x_1^2)x_2$$

Published with MATLAB® R2016a