Dr Mark Mc Auley

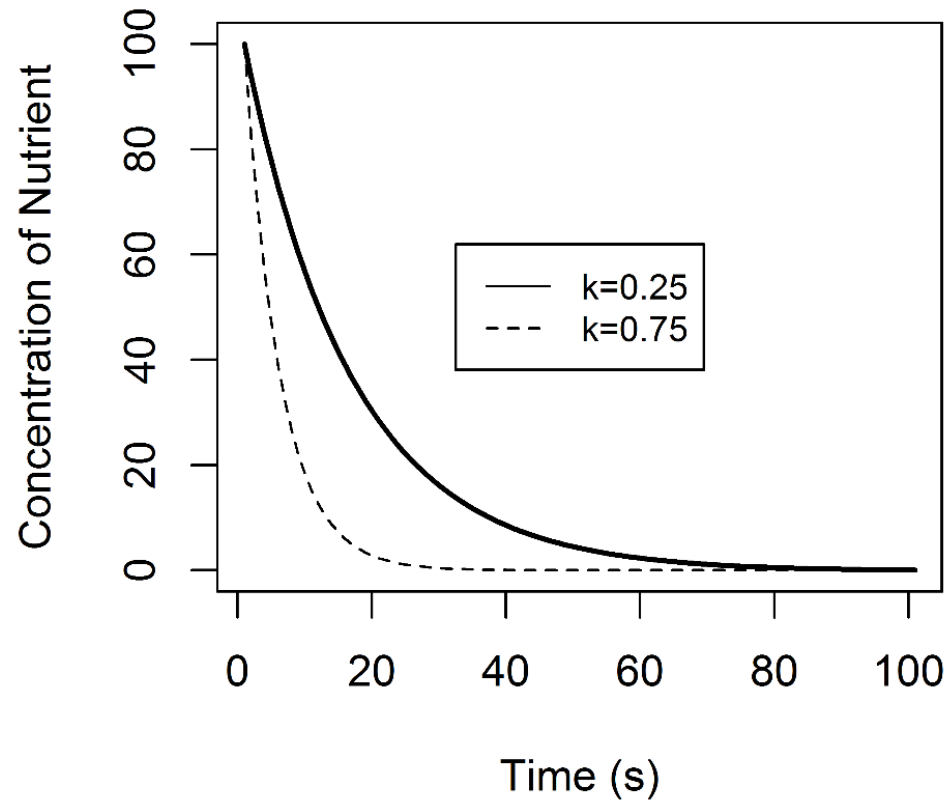## Mathematical Anxiety Among Engineering & Science Students

Why am I Interested in Mathematical Anxiety?

Who do I teach?

What do I teach that can provoke Mathematical anxiety?

$$\frac{-[dN]}{dt} = k[N]$$

$$\frac{[dN]}{[N]} = -kdt$$

$$\int \frac{[dN]}{[N]} = \int -kdt$$

$$\int \frac{1}{[N]} d[N] = -k \int dt$$

$$\ln[N] = -kt$$

$$\ln[N] \int_0^t = -kt \int_0^t$$

$$\ln[N]_t - \ln[N]_0 = k(t - 0)$$

$$\ln[N]_t = -kt + \ln[N]_0$$

How do I Spot Mathematical Anxiety?

IS THIS GOING TO BE ON THE EXAM?

What do I do to help students with Mathematical Anxiety?

What do I do to help students with Mathematical Anxiety?
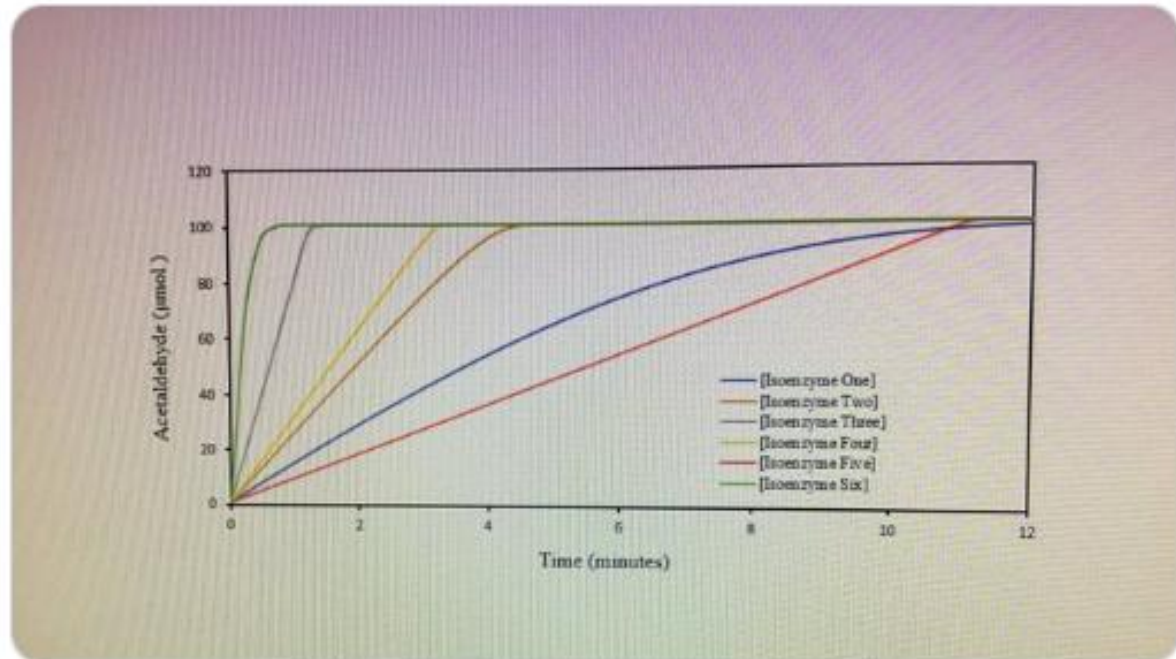

Mark Tomás Mc Auley

Computer Modelling for Nutritionists

Springer

Dr Mark Tomás Mc Auley @MarkMcAuley76 · 14 Dec 2019

Had my last session yesterday with the 1st yrs. Enzyme kinetics is more understandable when exploring different Km values of the isoenzymes of alcohol dehydrogenase computationally. This old biochem paper supplied the parameters doi.org/10.1016/0091-3.... Some nice plots produced

What have I found out about Mathematical Anxiety- My Action Research Project.

Table 3. Student responses to 'prior maths experience'

Prior Maths Experience	Strongly Agree %	Agree %	Uncertain %	Disagree %	Strongly Disagree %
I am apprehensive when the subject material in biology/nutrition/health includes mathematics.	0	47	8	39	6

What have I found out about Mathematical Anxiety- My Action Research Project.

- Main statistically significant finding was the mathematical content of an undergraduate course could be an important determinant of course choice for females but not males.

- A tentative finding- very low number of participants.