

# AT731 – Spring 2024 – Homework #2

Due by February 12, 2024 @ 6:00PM EST (UNIX 1707778800)

- Using Makeham's Law with parameters

$$A=0.0001234; B=0.000004; c=1.122$$

for this and later homework problems (so save your work!):

- Construct a table that shows  $\mu_x$ ,  $p_x$ ,  $q_x$ , and  $\ell_x$ , for all integral ages 20 to 120.
  - Use  $\ell_{20}=1,000,000$  as the starting value for the  $\ell_x$ .
- Determine the curtate life expectancy,  $e_x$ , for all ages.
  - Use  $\omega=120$  in your calculation of life expectancy
- You can use any software to perform this calculation, but I recommend Excel.