

# Problem Set – Seasonality

- Problem 1 (5 points)
  - Consider seasonal influenza whereby a different strain of influenza infects the population each year.
  - Consider an SEIR model with a temporally forced transmission rate
  - Find parameter values associated with seasonal influenza for your model
  - Use your model to show annual influenza outbreaks over five years
- Problem 2 (5 points)
  - Reflect on the effects of evolution, cross-immunity, temperature, and ‘the school year’ on seasonal outbreaks of an infectious disease