

LECTURE SUMMARY 13

TUESDAY, AUGUST 2, 2016

COMPETING MODEL

1. Recall Natural Growth model, $x' = kx$, and Logistic Model $x' = kx(1 - \frac{x}{L}) = x(k - \frac{kx}{L}) = x(k - ax)$, here $a = \frac{k}{L}$.

2. Competing Model

$$\begin{cases} x' = x(k_1 - a_1x - b_1y) \\ y' = y(k_2 - a_2x - b_2y) \end{cases}$$

3. An example of how to find equilibrium points and assess their stability.

FINAL REVIEW

1. Final test may have the form of multiple choice + written questions.

2. We have office hours during the exam preparation period. See announcements on Blackboard for hours and location will be IC 404.

3. Final test may be much longer than the midterm and most materials will be relatively new to the audience, make sure you do enough practice before you go to the exam.(e.g. Problem sets and similar questions.)