

Course Schedule

MATH135 Mathematics for life sciences, Fall 2019

- 1 Ch 1. Basic Descriptive Statistics
- 2 Ch 2. Visual Display of Data
- 3 Ch3.1-3.3 Bivariate Data and Linear Regression (Least square)
- 4 Ch 3.3-3.4 Least square, Interp/Extrap, Correlation
- 5 Ch 4.1-4.2 Exp/log functions (review properties)
- 6 Ch 4.3-4.4 half life/doubling time, Allometrics, Rescaling, log-log/semi-log graph

- 7 Ch 5.1-5.3 Sequence (explicit/recurrence), Difference equation
- 8 Ch 5.3-5.6 Geometric & Arithmetic sequence, Linear Difference Equation with Constant Coefficients
- 9 Review for Midterm 1
- 10 Ch 6.1-6.3 Vector algebra
- 11 Ch 6.3-7.2 Vector dynamics, Matrix algebra
- 12 Ch 8.1-8.3 Equilibrium, Eigenvectors
- 13 Ch 8.3 Eigenvectors, Stability
- 14 Ch 9.1-9.2 Leslie Matrix Models, Eigenvalues (Long-term growth rate)
- 15 Ch 9.2-9.3 Eigenvalues, Eigen-decomposition (Long-term population structure)

- 16 Ch 10.1-10.2 Sample space, Events, Probability
- 17 Ch 10.3-10.4 Combinations, Permutations, Binomial
- 18 Review for Midterm 2
- 19 Ch 11.1-11.2 Compound events, Probability of compound events
- 20 Ch 11.2-11.3 Probability of compound events, etc.
- 21 Ch 12.1 Conditional probability, Independence
- 22 Ch 13.1 Partition Theorem
- 23 Ch 13.2 Bayes' Theorem
- 24 Ch 14.1 Hardy-Weinberg
- 25 Ch 14.2 Hardy-Weinberg + Midterm 3 review
- 26 General review

Week	quiz	Tue		Thr	
1		27-Aug	1	29-Aug	2
2	Q1	3-Sep	3	5-Sep	4
3	Q2	10-Sep	5	12- Sep	6
4	Q3	17-Sep	7	19- Sep	8
5	Q4	24-Sep	9	26-Sep	Midterm 1
6		1-Oct	10	3-Oct	11
7	Q5	8-Oct	12	10-Oct	13
8	Q6	15-Oct	14	17-Oct	15
9	Q7	22-Oct	16	24-Oct	17
10	Q8	29-Oct	18	31-Oct	Midterm 2
11		5-Nov	19	7-Nov	20
12	Q9	12-Nov	21	14-Nov	22
13	Q10	19-Nov	23	21-Nov	24
14	Q11	26-Nov	25	28-Nov	Thanksgiv.
15		3-Dec	26	5-Dec	Midterm 3
			11-Dec	Final	