

M339J: Topics for In-Term Three

☐ The Poisson-gamma mixture.

☐ The binomial distribution.

☐ Poisson "thinning" with conditioning.

☐ The $(a, b, 0)$ class.

☐ Aggregate loss models: expectation and variance.

☐ Aggregate loss models with a normal approximation.

☐ Aggregate loss models: the pmf of aggregate losses.

☐ Aggregate loss models: the cdf of aggregate losses.

☐ Stop-loss insurance.

☐ Interpolation theorem.

☐ Compound Poisson with stop-loss insurance.

☐ Compound Poisson with a probability calculation.

☐ Aggregate losses with an ordinary deductible per-loss.

☐ Maximum-likelihood estimation: First principles.

☐ Maximum-likelihood estimation: Individual unmodified data.

☐ Maximum-likelihood estimation: Grouped data.

☐ Maximum-likelihood estimation: Truncation and censoring.

☐ Maximum-likelihood estimation: Discrete distributions.
