

(TENTATIVE) LIST OF TOPICS FROM [1]

1.1 Equally likely outcomes .....  
1.3 Distributions .....  
1.3 .....  
1.4 Conditional probability and independence .....  
1.5 Bayes' rule .....  
1.6 Sequences of events .....  
2.1 Binomial distributions .....  
2.2 Normal approximation .....  
2.4 Poisson approximation .....  
2.5 Random sampling .....  
3.1 Random variables .....  
3.2 Expectation .....  
Probability generating function .....  
3.3 Standard deviation and normal approximation .....  
3.4 Discrete distributions .....  
3.5 The Poisson approximation .....  
Review I .....  
**MIDTERM I** .....  
4.1 Probability densities .....  
4.2 Exponential and Gamma distributions .....  
Moment generating function .....  
4.3 Hazard rates .....  
4.4 Change of variable .....  
4.5 Cumulative Distribution Functions .....  
4.6 Order statistics .....  
5.1 Uniform distributions .....  
Spring break .....  
5.2 Densities .....  
5.3 Independent Normal variables .....  
5.4, 5.5 Operations .....  
6.1 Conditional distributions: discrete case .....  
6.2 Conditional expectation: discrete case .....  
6.3 Conditioning: density case .....  
Review II .....  
**MIDTERM II** .....  
6.4 Covariance and correlation .....  
6.5 Bivariate normal .....  
Chi-square .....  
Chi-square .....  
Chi-square .....  
Other topics and final review .....

**FINAL EXAM** .....

REFERENCES

- [1] Jim Pitman, Probability, Springer texts in statistics.