## 201-922-DW (Introduction to Statistical Methods)

## TEST 2 - STUDY GUIDE

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|  | Topic | Suggested exercises |
| :---: | :---: | :---: |
| Computations \& permutations | - Compute probabilities using combinations and permutations <br> - Know the definitions and formulas for permutations and combinations | - class notes \& examples <br> - p. 37-39 \#1-25 (official text) <br> - in-class assignment \#2 |
| Discrete probability distributions | - Define a discrete probability distribution <br> - Compute $\mu$ and $\sigma$ for a discrete probability distribution | - class notes \& examples <br> - p. 45 \#19-23 (official text) <br> - quiz \#1 |
| Total variation SS(X), sample variance $s^{2}$, sample standard deviation s | - Formulas for total variation, variance and standard deviation <br> - Use a calculator to compute <br> statistics for a given sample | - class notes \& examples <br> - calculator quiz exercises (obeymath.org) |
| Population mean and standard deviation ( $\mu$ \& $\sigma$ ) vs. sample mean and sample standard deviation | - Understand the difference between population mean and sample mean and population standard deviation and sample standard deviation | - class notes \& examples |
| Binomial Probability Distribution | ```- Binomial experiments, computing \mu & \sigma for a bionomial probability distribution``` | - p.50-51 \#1-14 (official text) <br> - P. 148 - guided practice 3.43-3.47 (alternate text) |

