COMR 398 – Final Exam Guidelines

Your exam is in class and paper based. We will give you an exam on which you will write your answers. You are allowed to bring in a cheat sheet, one piece of standard paper and you can use both sides. You can write on your cheat sheet, print etc. up to you entirely.

If you need Z tables, they will be provided with the exam.

Please see a list of topics below that you need to know well for the exam. These are areas we will very likely test you on. Your exam is mostly quantitative. Questions that do not require calculations will require to reason using concepts taught in class. You will not be asked for definitions. No multiple choice questions.

1. Basic Process Analysis
    a. Capacity of a process
    b. Bottlenecks
2. Little's Law
    a. Understand and apply little's law
    b. Understand components of the formula
    c. Why is the Law useful
3. Queue Systems
    a. Why do queues arise
    b. Tools for managers to deal with queueing systems
    c. Formulas for MM1 and MD1 systems **ONLY**. NO OTHER FORMULAS in QUEUES!
    d. Little's Law in queues
4. Inventory models
    a. EOQ
        i.   When do you use EOQ
        ii. Know to use formula to calculate optimal quantity
        iii. Calculate Fixed costs, Holding costs and Total cost
        iv. Understand Inventory dynamics in EOQ
    b. Newsvendor Model (single period only)
        i.   When to use
        ii. Calculate optimal quantity
             1. Components needed to do this
        iii. Normal, Uniform and discrete distributions. NO Poisson in Newsvendor
5. Risk Pooling
    a. How does Risk Pooling reduce Variability: Understand calculations from lecture
    b. Applications of Pooling
6. Cases
    a. Details of the cases will NOT be tested.
    b. Key learning points from cases may appear in short answer questions. But this will be very high level if asked.