SFWR ENG 4E03

Fall 2015  
Note: material covered in [Stats 3Y03 Summary](https://drive.google.com/file/d/0BxW61uJyyN8TNy1iUFE0ZlRMLTg/view) will not be covered in this summary  
  
**Expected Value** [μ]: definition of expected (NOT RIGHT!!)

**Poisson parameter** [λ]: throughput, out-rate

**Exponential distribution**: not always for time

**Probability Distribution Function (PDF)**:

**Cumulative Distribution Function (CDF)**:

**Uniform Distribution**: no memoryless property

**Exponential Distribution**:

* Memoryless
* Either CDF or PDF of original equation F = 1 – e–λx

*Think chemistry, i.e. cancelling units*

**Device** [i]:

[k]: total number of devices

**Utilization** [ρ]: ratio that the time is busy

**Service Time** [S]: time to complete specific time

**Expected Value** [E]:

**Time in system** [T]: expected time the job is in the system

**Visitation** [V]: given or projected visits/jobs (closed system); cannot be calculated

[E(V)]: calculated visit/job ratio

**Demand** [D]: total service demand





**Response Time** [r]:

[N]: number of jobs

**Think time** [Z]: time it takes the user to put a request in and start

**Job rate** [X]: jobs / hour



