

CSCE 317 Spring 2018
QUIZ 5
Assigned Thursday, 18-04-19

State Little's Law for open systems, using the average number of jobs in a system, the arrival rate, and the average time jobs spends in a system. Use standard notation.

Answer: $E[N] = \lambda E[T]$

Also acceptable (cf. Theorem 6.3): $\bar{N}^{TimeAverage} = \lambda \bar{T}^{TimeAverage}$

A professor takes 2 Ph.D. students per year on average. The average time to graduate is 5 years. How many students does the professor have on average?

Answer: $E[N] = 2 * 5 = 10$ students