



ENQ410033 – Transport Phenomena

Mass, momentum, energy and chemical species conservation equations. Transport properties. Solving problems involving heat, mass and momentum transfer in permanent and transient regimes.

Bibliografia:

BIRD, R. Byron; STEWART, Warren E.; LIGHTFOOT, Edwin N. Transport Phenomena revised 2nd Edition. 2006.

WELTY, James; RORRER, Gregory L.; FOSTER, David G. Fundamentals of momentum, heat, and mass transfer. John Wiley & Sons, 2020.

CUSSLER, Edward Lansing; CUSSLER, Edward Lansing. Diffusion: mass transfer in fluid systems. Cambridge university press, 2009.

CHORIN, Alexandre Joel; MARSDEN, Jerrold E.; MARSDEN, Jerrold E. A mathematical introduction to fluid mechanics. New York: Springer-Verlag, 1990.

FLEISCH, Daniel A. A student's guide to vectors and tensors. Cambridge University Press, 2011.

CRANK, John. The mathematics of diffusion. Oxford university press, 1979.