Suggested books for additional material.

Varadhan. Stochastic Processes. CIMS/AMS Lectur Notes

Stroock-Varadhan Multidimensional Diffusion Processes. Springer

Stroock Lectures on stochastic analysis: diffusion theory. London Mathematical Society Student Texts, 6.

Durrett: Stochastic Calculus. A practical introduction. Probability and Stochastics Series. CRC Press, Boca Raton,