

MATH 858V: Selected Topics in Analysis: Asymptotic Methods with Applications
Department of Mathematics, UMCP
Spring 2026
Handout: Optional bibliography

NONE of the following texts is required for MATH 858V. The books are listed here only in case you are interested in pursuing further study. A highly recommended text (to be followed closely) is the one by M. H. Holmes.

Recommended textbooks (from a general perspective of applied or formal analysis):

0. M. H. Holmes, *Introduction to Perturbation Methods*, Springer, 2nd Ed.
1. M. Masujima, *Applied Mathematical Methods in Theoretical Physics*, 2nd Edition, Wiley-VCH, 2009.
2. H. Cheng, *Advanced Analytic Methods in Applied Mathematics, Science, and Engineering*, Luban Press, 2005.
3. C. M. Bender and S. Orszag, *Advanced Mathematical Methods for Scientists and Engineers*, Springer, 1999.
4. I. Stakgold, *Green's Functions and Boundary Value Problems*, 3rd Edition, Wiley, 2011.
5. G. F. Carrier, M. Krook, and C. E. Pearson, *Functions of A Complex Variable: Theory and Technique*, Hod Books, 1983.
6. E. J. Hinch, *Perturbation Methods*, Cambridge University Press, 2002.
7. W. Wasow, *Asymptotic Expansions for Ordinary Differential Equations*, Dover, 2002.
8. F. G Tricomi, *Integral Equations*, Dover, 1985.