

Methods of Theoretical Physics Foundations of Wave Phenomena  
Physics 3750  
Fall 2017

Syllabus

Matrices and Vector Spaces (selected topics)  
Fourier Series  
Integral Transforms  
Ordinary Differential Equations (review)  
Eigenfunctions, Eigenvalues, Green's functions  
Special Functions  
Partial Differential Equations  
Calculus of Variations  
Integral Equations

Grading:

Midterms (2) 60 %

Final Exam 40%

Textbook: Essential Mathematical Methods by K. F. Riley and M. P. Hobson,  
Cambridge Univ. Press.

USU welcomes students disabilities. If you have or suspect that you may have a physical, mental, or learning disability that may require accommodations in this course, please contact the Disability Resource Center (DRC) as early in the semester as possible (University Inn #101, 435)797-2444, [drc@usu.edu](mailto:drc@usu.edu)). All disability related accommodations must be approved by the DRC. Once approved, the DRC will coordinate with faculty to provide accommodations.