

Reading for Chemistry 8541
“Dynamics”
Fall Semester 2015

Instructor: Donald G. Truhlar

Textbooks:

“A Course in Mathematical Methods for Physicists”, Russell L. Herman (CRC Press, Boca Raton, 2014).

“Classical Mechanics,” John R. Taylor (University Science Books, Sausalito, 2005).

Other reading, recommended:

“Mathematical Methods for Scientists and Engineers,” D. A. McQuarrie; University Science Books, Sausalito, CA, 2003.

"Mathematical Methods in the Physical Sciences," 3rd ed., Mary L. Boas; John Wiley, New York, 2006.

“Classical Mechanics,” 5th edition, T. W. B. Kibble and F. H. Berkshire; Imperial College Press, London, 2004, available in paperback.

“Classical Mechanics,” J. W. Leech; Methuen & Co. and Science Paperbacks, London, 1965.

Other reading, the classics:

"Methods of Theoretical Physics," P. M. Morse and H. Feshbach; McGraw-Hill, New York, 1953. (two volumes)

"Mathematical Methods for Physicists," 6th edition, G. B. Arfken and H. J. Weber; Elsevier, Amsterdam and Boston, 2005.

“Classical Mechanics,” 3rd edition, H. Goldstein, C. Poole, J. Safko; Addison Wesley, San Francisco, 2002. Older editions are just as good, if not better.

“Mechanics,” L. D. Landau and E. M. Lifshitz; Pergamon, Addison-Wesley, Reading, MA, 1960.