DEPARTMENT OF MATHEMATICS,

UNIVERSITY OF KARACHI,

Course Outline

MATH 605: MEASURE THEORY - I

Course contents:

Outer and inner measures. Measurable and non-measurable sets and functions. Uniform convergence and convergence in measure. Functions of bounded variation. Absolute continuity.

Books Recommended:

1. Halmos, P. R., Measure Theory, Van Mostrand, Springer Pub., 1978.

2. Kestelman, H., Modern theories of Integration, Second Edition, Dover Pub., 1980.

3. Goffman, C. and Pedrick, G., First course in Functional Analysis, Prentice Hall, 1997.

4. Halsey Royden, Real Analysis, Third Edition, Prentice Hall, 1988.

5. Donald L. Cohn, Measure Theory, Suffolk University, 1997.