



**UNIVERSIDADE FEDERAL DE SANTA CATARINA
CENTRO DE CIÊNCIAS FÍSICAS E MATEMÁTICAS
PÓS-GRADUAÇÃO EM MATEMÁTICA PURA E APLICADA**

MTM510056 Elements of Spectral Theory

Pre-requisite: MTM410029 Functional Analysis

Weekly lesson hours: 06h

Discipline syllabus: Calculation of Vector Functions; Spectral Analysis of Linear Operators; Fractional Powers.

BIBLIOGRAPHIC REFERENCES

Text book:

- 1) Taylor, E., Lay, D. C. - Introduction to Functional Analysis, John Wiley & Sons, 1980.
- 2) Pazy, A. - Semigroups of Linear operators and Applications to Partial Differential Equations, Springer, 1983.
- 3) Henry, D. - Geometric Theory of Semilinear Parabolic Equations, 1981.

COMPLEMENTARY BIBLIOGRAPHY

- 1) Conway, J. B. - Functions of One Complex Variable I, Springer 1978.
- 2) Yosida, K. - Functional Analysis, Springer 1980.
- 3) Kato, T. - Perturbation Theory for Linear Operators, Springer 1980.
- 4) Dunford, N. e J. T. Schwartz - Linear Operators-Part I: General Theory, John Wiley & Sons, 1957.