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

MTM410064 Ergodic Theory and Information

Pre-requisite: MTM410027 Measure and Integration

Weekly lesson hours: 06h

Discipline syllabus: Chapters 1 to 7 of the Textbook, covering the fundamental notions and tools in the study of ergodic theory and deinforcement of abstract and topological dynamic systems.

BIBLIOGRAPHIC REFERENCES

Text book:

1. Walters, P.; An Introduction to Ergodic Theory. Springer-Verlag, 1982.

COMPLEMENTARY BIBLIOGRAPHY

1. Birkhoff, G. D.; Dynamical Systems. American Mathematical Society, Rhode Island, 1966.
2. Brin, M., Stuck, G.; Introduction to Dynamical Systems. Cambridge University Press, New York, 2002.
3. Denker, M., Grillenberger, C., Sigmund, K.; Ergodic Theory on Compact Spaces. Springer-Verlag, 1976.
4. Hirsch, M. W., Smale, S.; Differential Equations, Dynamical Systems and Linear Algebra. Academic Press, San Diego, 1974
5. de Melo, W., van Strien, S.; One-Dimensional Dynamics.
6. Katok, A., Hasselblatt, B.; A Moderna Teoria de Sistemas Dinâmicos. Ed. Fundação Calouste Gulbenkian, Lisboa, 2005.
7. Lind, D. A., Marcus, B.; An introduction to symbolic dynamics and coding. Cambridge University Press, New York, 1995.
8. Mañe, R. Teoria Ergódica. Projeto Euclides. IMPA, Riode Janeiro, 1983.
9. Parry, W.; Topics in ergodic theory. Cambridge Tracts in Mathematics, Cambridge University Press, Cambridge, 1981.