



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

MTM410053 Probability and Markov Processes

Pre-requisite: MTM410027 Measure and Integration

Weekly lesson hours: 06h

Discipline syllabus: Chapters 1, 2 and 3 of Textbook 1 and Chapter 15 of Textbook 2, covering the axiomatic definition, tools and basic results in Probability Theory and the fundamental results in the study of Markov Chains.

BIBLIOGRAPHIC REFERENCES

Text book:

1. James, B. R.; Probabilidade: um curso em nível intermediário. 3a ed., IMPA, Rio de Janeiro, 2004.
2. Feller W.; An introduction to probability theory and its applications vol.1. 3a ed., Wiley, New York, 1967.

COMPLEMENTARY BIBLIOGRAPHY

1. Feller W.; An introduction to probability theory and its applications vol.2. 3a ed., Wiley, New York, 1971.
2. Grinstead, C. M., Snell, J. L.; Introduction to Probability 2nd ed. American Mathematical Society, Rhode Island, 1997.
3. Hoel, P. G.; Introduction to Mathematical Statistics. 3 ed. Wiley, New York, 1962.
4. Meyer, P. L.; Probabilidade: aplicações à estatística. 2a ed., Livros Técnicos e Científicos, Rio de Janeiro, 1983.
5. Ross, S. M.; Introduction to Probability Models. 6 ed, Academic Press, San Diego, 1997.
6. Stroock, D. W.; An introduction to Markov processes. Springer-Verlag, New York, 2005.