



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

**MTM410030 Theory of Non-Commutative Rings**

Pre-requisite: Theory of Rings and Modules

Weekly lesson hours: 06h

**Discipline syllabus:** Chapters 2, 4 and 7 of textbook 1, ie Jacobson's radical, primeval rings, primitive rings and local rings. Chapter 2 of textbook 2, that is, graduated rings and modules and chapters 1 and 2 of textbook 3, that is, essential extensions, singular modules, and maximum quotient rings.

**BIBLIOGRAPHIC REFERENCES**

Text book:

1. T. Y. Lam – A first course in noncommutative rings – Springer-Verlag 2001.
2. D. S. Passman – A course in ring theory – AMS Chelsea Publishing 2004.
3. K. R. Goodearl – Ring theory – Nonsingular rings and modules – Marcel Dekker 1976.

**COMPLEMENTARY BIBLIOGRAPHY**

1. J. G. Raftery – On strongly prime rings and modules – Durban 1986.
2. L. H. Rowen – Ring theory – Academic Press 1988.