

Department of Mathematics and Statistics
Dr. R.A. Mollin

PMAT 427: L01: MWF @ 12:00 in MS 431

Prerequisite: Pure Mathematics 315 or consent of the Division.

Required Text: Fundamental Number Theory with Applications,
SECOND EDITION, R.A. Mollin, Chapman& Hall/CRC Press, Taylor
and Francis Group, Boca Raton, New York, London, Tokyo (2008), ISBN#:
9781420083286.

Suggested Reading: Advanced Number Theory with Applications,
R.A. Mollin, Chapman& Hall/CRC Press, Taylor and Francis Group, Boca
Raton, New York, London, Tokyo (2009), ISBN#: 1-4200-6659-5.

Syllabus

Topics

Chapter One — Arithmetic of the Integers
Chapter Two — Modular Arithmetic
Chapter Three — Primitive Roots
Chapter Four — Quadratic Residues
Chapter Five — Continued Fractions
Chapter Six — Additivity
Chapter Seven—Diophantine Equations
Additional material from new book ADNT.

Tutorials: Tutorials are held each Thursday at 13:00 in MS 325.

Grading: There will be 6 in-tutorial tests (and the best 5 out of 6 will be selected) worth 10% each, and a final exam worth 50%. There will be no mid-term. The following schedule, applies for the exams and tests:

TEST#	Date	Place	Time
1	September 24	MS 325	13:00
2	October 8	MS 325	13:00
3	October 22	MS 325	13:00
4	November 5	MS 325	13:00
5	November 19	MS 325	13:00
6	December 3	MS 325	13:00

Note that there is no tutorials on Sept. 10th or 17th.