

Badawi-MTH733-Syllabus

MTH 733: Spring 2025, MW: 18—19:15, Nab 06

Ayman Badawi, and Office Hours: Nab 262, from 14 to 15:15 MW, and TR from 12:40--13:40. Others are available by appointment. Please email me at abadawi@aus.edu.

HWS (TBA, 22%), Exam one (22%, TBA); Exam two(22%, TBA); and Final (34%, TBA)

Covers prime ideals and their generalizations, integral elements, modules and matrices over commutative rings, exact sequence, primary decomposition, and Noetherian and Artinian rings.

Required:

Class notes are the primary source.

M. Atiyah and I. Macdonald (2018). Introduction to Commutative Algebra. CRC Press. Book ISBN 978-0-4294-9363-8

T. W. Hungerford (2012). Algebra, Springer, eBook ISBN: 10.1007/978-1-4612-

6101-8

sources.

$A \geq 90$,

$86 \leq A^- < 90$

$81 \leq B^+ < 86$,

$76 \leq B < 81$,

$71 \leq B^- < 76$,

$66 \leq C^+ < 71$,

$61 \leq C < 66$,

$F < 61$.

It is considered an academic integrity violation to represent the output of a generative artificial intelligence tool as your own work.