COURSE SYLLABUS
MATH 724
FALL 2010

Welcome to Math 724, my name is Jim Coykendall, and I will be your instructor for this course. My office is 310A Minard Hall. My office hours this semester will be from 10:00am-11:00am and from 12:00pm-1:45pm Monday through Friday. If my hours are inconvenient then email me (Jim.Coykendall@ndsu.edu) or give me a call (office 231-8079, home 297-5114). Another good resource for this course is my homepage, which can be found at

https://www.ndsu.edu/pubweb/∼coykenda/

In general, you may consider my office an "open door, and I strongly recommend that you come and see me if you are having any trouble in class (or if you find that you are not being challenged enough). Come by...I enjoy seeing my students.

COURSE DESCRIPTION: This course will be a "topics" course in the theory of arithmetic rings and integrality conditions. Some of the topics covered will be valuations and valuation domains, Dedekind and Prüfer domains, integrality, alomost integrality and some generalizations, and prime decmpostion in Prüfer domains. The course will be motivated by examples and some applications and connections will be given whenever possible.

GOALS: To impart an appreciation and a hands-on working knowledge of this field of mathematics is the major goal of this course. This course will provide essential tools for students specializing in algebra as well as give a broad understanding to the non-specialist.

TEXTBOOK: There is no required text for this course, but some good references are *Multiplicative Ideal Theory* by R. Gilmer, *Commutative Rings* by I. Kaplansky. I am creating course notes (perhaps quite sketchy) and will try to keep up.

HOMEWORK: Homework will be collected (approximately) weekly to bi-weekly. Your homework average will be 100% of your grade.

EXAMS: There will be no formal exams in this class.

GRADES: Here is a breakdown of the quizzes/exams/final:

Homework Average...100%

If you get the following scores (out of 100) you will receive:

90-100...A
80-89...B
70-79...C
60-69...D

SPECIAL NEEDS: Any students with disabilities or other special needs, who need special accommodations in the course, are invited to share these concerns or requests with the instructor as soon as possible.

ACADEMIC HONESTY: All work in this course must be completed in a manner consistent with NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct (http://www.ndsu.nodak.edu/policy/335.htm).

I wish you the best of luck in this course, please stop by and keep me posted on how you are doing.