MATH 724, Semidualizing Modules, 3 credits, Fall 2009

MWF 11:00-11:50 AM, Dolve Hall 10

INSTRUCTOR: Sean Sather-Wagstaff OFFICE: Minard Hall 310D

E-MAIL: Sean.Sather-Wagstaff@ndsu.edu PHONE: 231-8105

OFFICE HOURS: to be determined PREREQUISITE: MATH 721, 724

USEFUL WEBPAGES:

Course webpage: http://math.ndsu.nodak.edu/faculty/ssatherw/fa09/724/

Instructor webpage: http://math.ndsu.nodak.edu/faculty/ssatherw/

Anonymous evaluation form: http://math.ndsu.nodak.edu/faculty/ssatherw/ssw-eval.html

Math department webpage: http://math.ndsu.nodak.edu/

NDSU webpage: http://www.ndsu.edu

NDSU blackboard site: https://bb.ndsu.nodak.edu/

NDSU webpage on academic responsibility/conduct: http://www.ndsu.nodak.edu/policy/335.htm

TEXT: Course notes will be available on the course website. You may also consider purchasing:

"Gorenstein Dimensions" by Christensen

"Cohen-Macaulay Rings" by Bruns and Herzog

"Commutative Ring Theory" by Matsumura

"An Introduction to Homological Algebra" by Rotman

COURSE DESCRIPTION: An introduction to the theory and applications of semidualizing modules. Topics will include semidualizing basics, Foxby classes, totally C-reflexive modules, G_C -dimension, applications, examples, semidualizing complexes.

COURSE GRADES: Student grades are based on biweekly homework assignments, attendance and participation. Weights are summarized in the following table along with grade ranges.

		A	85100%
Homework Attendance and Participation	90%	В	70 – 84.9%
		$^{\mathrm{C}}$	55 – 69.9%
	1070	D	40 – 54.9%
		F	0-39.9%

I will update your grades throughout the semester at the NDSU Blackboard site.

HOMEWORK: I will assign homework on a biweekly basis. Exercises will be assigned in class on Fridays and solutions will be due at the beginning of class on the Friday two weeks later. Assignments will also be listed on the course webpage. Each section of homework will be worth the same amount. Late homework will only be accepted under extreme circumstances. If you have a conflict with any of the homework due dates, make alternative arrangements with me beforehand.

Students are encouraged to work on assignments in small groups, but each member of the class is required to turn in a neatly written, organized set of solutions. Students will receive no credit for solutions with no work or justification. I reserve the right to deduct points for messy papers. You may even consider using LATEX to typeset your solutions.

With permission of the instructor, students may give a 50-minute in-class presentation in place of a homework assignment. The date and topic of each such presentation must be chosen in consultation with the instructor.

ATTENDANCE: While attendance is not explicitly required, it is worth 10% of your grade. I will take attendance each class period. Officially excused absences will not be counted against you, but you must document such situations with me personally.

COURSE NOTES: I will be typing course notes during the semester. I will periodically update the notes on the course webpage. I will give extra credit to people who find typos in the notes; credit will be given to the first person who tells me about a given typo.

TENTATIVE SCHEDULE:

Labor Day holiday (no class)

KUMUNU (no class)

Instructor travel (no class)

Fri 19 Sep

Fri 16 Oct

Instructor travel (no class)

Fri 30 Oct

Veteran's Day holiday (no class)

Wed 11 Nov

Thanksgiving holiday (no class) Thu 26 Nov-Fri 27 Nov

Classes end Fri 11 Dec

ANNOUNCEMENTS: Periodically, I will send course announcements to your ndsu.edu email account. It is your responsibility to check this email account regularly.

INSTRUCTOR FEEDBACK: At the course webpage, there will be a link to an anonymous evaluation form where students can submit comments or suggestions for me at any time during the semester.

ADA STATEMENT The Americans with Disabilities Act requires that reasonable accommodations be provided for students with physical, cognitive, systemic, learning and psychiatric disabilities in order to ensure their equal access to course content. If you have a documented disability and require accommodations, please let your instructor know as soon as possible. For more information, please contact Disability Services at 231-7671 or go to http://www.ndsu.edu/counseling/disability.shtml.

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. Violations of this policy in this course will result in a 0 for the quiz or exam on which academic misconduct occurred. You can read the Senate Policy at http://www.ndsu.nodak.edu/policy/335.htm.